

TIMURID ARCHITECTURE IN SAMARKAND

by Mark Dickens

THE LIFE OF TIMUR¹

Asia has long been the birthplace of would-be conquerors of the world. One of the greatest of these was a man who commanded both fear and awe in Asia and Europe during the fourteenth century: Tamerlane. This name, by which he was known in Europe, is actually a corruption of his name in Persian, Timur-i-Leng, meaning "Timur the Lame." The word Timur is Turkic for "iron": it was an appropriate name for the man who, in his lifetime, rose from being a prince in a small Turko-Mongol tribe to become the ruler of an expanding empire that stretched from Delhi to Anatolia. His life was, in the words of one modern scholar, "one long story of war, butchery and brutality unsurpassed until the present century."²

Timur was born in Kesh, also known as Shahr-i-Sabz, "The Green City" (located about fifty miles south of Samarkand) in 1336. He was the son of a chief in the Barlas tribe, one of the many Mongol tribes which had made up the hordes of Chingiz Khan (1162³-1227) and which had been subsequently Turkicised as a result of the strong Turkic element in the Mongol armies. Upon the death of the great Khan in 1227, his massive empire was divided up amongst his sons, each of whom received an allotment of territory, called an *ulus*. The Khan's second son, Chagatay (d.1242), received the territories then known as Transoxiana ("The Land Across the Oxus") and Moghulistan (present-day Semirechye and Sinkiang). Along with other Turko-Mongol tribes, the Barlas settled in Transoxiana, between the two major rivers in the region: the Oxus (Amu Darya) and the Jaxartes (Syr Darya).

By the time of Timur, Mongol power in the Chagatay *ulus* was severely weakened. The Chingisids only ruled the area in name. Minor chieftains exerted varying degrees of control over different parts of Transoxiana. Despite having been wounded in his right leg and arm during his mid-twenties, an event which left him lame for the rest of his life, Timur was able to move into this power vacuum and slowly build up for himself an army of loyal followers. Together with his brother-in-law, Amir Husayn, he headed up the defense of the area against the Chingisids, who repeatedly attacked from their power base in the northern steppe area of Semirechiye in an effort to regain control of Transoxiana. As a result of both shrewd military

¹ Two good accounts of Timur's life: Harold Lamb, *Tamerlane: The Earth Shaker* (Garden City, NY: Garden City Publ. Co., 1928); Hilda Hookham, *Tamburlaine the Conqueror* (London: Hodder and Stoughton, 1962).

² Wilfrid Blunt, *The Golden Road to Samarkand* (London: Hamish Hamilton, 1973), 138.

³ Actually, historians are uncertain about Chingiz Khan's date of birth: two other possible dates are 1155 and 1167.

strategy and subsequently turning against and defeating Husayn, he became the sole ruler of Transoxiana in 1369, establishing his capital at Samarkand, an event recorded by Marlowe in his famous work, *Tamburlaine the Great*:

Then shall my native city, Samarcanda...
Be famous through the furthiest continents,
For there my palace-royal shall be placed,
Whose shining turrets shall dismay the heavens,
And cast the fame of Ilion's tower to hell.⁴

From his new royal capital, the lame conqueror set out to subjugate the rest of the world. The first areas to be added to his domain, during the 1380's, were the regions of Khwarezm (modern-day Turkmenistan), Khorasan (northern Afghanistan), and Persia, all lands which had formerly been part of the Mongol Empire. Although he never expanded his empire proper further north than Tiflis (Tbilisi) in the Caucasus, his campaigns into the Russian steppe resulted in the defeat of his arch-rival, Toktamish, khan of the Golden Horde, in 1395 and severely weakened Mongol power in that region. At one time, Timur was almost at the gates of Moscow, but he never besieged the city.

One of the main motives behind Timur's empire-building efforts was the desire to control the lucrative trade routes which linked East and West. His capture of Delhi in 1398 and subsequent proclamation as Emperor of Hindustan furthered this goal, as did his defeat of the Mamlukes in Syria in 1400, and his destruction of Baghdad the following year. His western campaign continued with the invasion of Anatolia in 1402, which resulted in the defeat of the Ottoman Sultan, Bayezid I, at the Battle of Ankara that same year. The European monarchs were genuinely relieved that Timur had so effectively crippled the Turks who were continually threatening their domains. However, they were also aware that this new Asian conqueror could also pose a threat to them. Therefore, they were eager to establish diplomatic contact with the great "Tamburlaine." One of these envoys, Ruy Gonzalez de Clavijo (d. 1412), was sent as an ambassador of the King of Castile. It is from his memoirs,⁵ along with those of various Muslim biographers, such as the Persian Ali Sharaf ad-Din and the Arab Ahmad ibn Arabshah, that we have been able to reconstruct the story of Timur's life. Clavijo was present in Samarkand for the victory celebrations after the defeat of the Ottomans, as the conqueror prepared for what was to be his greatest exploit yet, the conquest of China. Around the time when Timur was beginning his rise to power, in 1368, the Mongol Yuan dynasty had been overthrown and the Ming dynasty had

⁴ Marlowe, *Tamburlaine the Great*, IV iv, cited in Blunt, 143.

⁵ For an English translation of Clavijo's memoirs, see Clements R. Markham, trans., *Narrative of the Embassy of Ruy Gonzalez de Clavijo to the Court of Timour, at Samarcand, A.D. 1403-6* (London: Hakluyt Society, 1859).

been established. Timur was eager to show the Ming emperor, who looked on him as a vassal and had demanded tribute from him, who was the true master of Asia. However, this goal was never to be realized. In 1405, at the outset of his last and greatest campaign, the Iron Limper died in Otrar on the Jaxartes River, 250 miles north of Samarkand.

THE TIMURID DYNASTY

The empire that Timur had built could not be kept together by his descendents, none of whom shared the same iron will that he had possessed. As had happened with Chingiz Khan's empire, factions soon developed, and vassals on the periphery of the Timurid domains quickly seized their chance to assert their independence. Shortly after Timur's death, little was left of the former empire except for Transoxiana and Afghanistan. However, although the size of the Timurid empire was drastically reduced, his successors went on to usher in the Muslim equivalent of the European Renaissance, centered in the cities of Samarkand and Herat.

Two of the Amir's four sons had died before their father: Jahangir (1355-1375) and Umar Shaykh (1355-1394). His second son, Miran Shah (1366-1408), passed away shortly after his father, leaving only the youngest, Shah Rukh (1377-1447) as an heir. In fact, Timur had appointed his grandson, Pir Muhammad to succeed him, but he also died shortly after his grandfather, in 1406. In 1409, Shah Rukh seized power, making Herat his capital. His eldest son, Ulugh Beg (1394-1449) was appointed governor of Samarkand, while his second son, Baysunghur (1399-1433) served as his *wazir* in the capital. None of these rulers had inherited Timur's passion for conquest, but they *did* share his interest in building and played a major role as patrons of the arts and sciences. A chronicler of the time wrote that "From the time of Adam until this day no age, period, cycle or moment can be indicated in which people enjoyed such peace and tranquility."⁶ Under their patronage, music, calligraphy, Persian miniature painting, literature, and various scientific pursuits flourished.

Ulugh Beg, who ruled over the empire during the two years between his father's death and his own, was one of the greatest astronomers that the world has ever seen. He built a magnificent observatory in Samarkand and the calculations that he made with it gained him fame in Europe as an eminent scholar.⁷ Unfortunately, he was murdered in 1449 by his son Abdul Latif, who was alarmed at the secular pursuits of his father. A year after the murder, Abdul Latif also died. In 1452, Abu Sa'id (1424-1469), a grandson of Miran Shah, brought the Timurid domains, still consisting of Transoxiana, Afghanistan and northern Persia, under his control. He was followed

⁶ Cited in Blunt, 165.

⁷ In fact, his calculation of the length of the year was only out by one minute!

by Sultan Husayn Bayqara (1438-1506), a grandson of Umar Shaykh, who began his rule of nearly four decades in 1468. "It was under his beneficent direction that Herat achieved the zenith of its glory as a centre of art, literature and scholarship."⁸ It was at Husayn's court that the poet Mir Ali Shir Nava'i, who popularized Chagatay, the classical Turkic language, as a literary medium, rose to prominence, along with the miniature painter Bihzad and the poet Jami. However, at the same time, the ruler also continued the pursuit of pleasure which had been a mark of most of the Timurid dynasty and which had resulted in more than a few of Timur's descendants dying from too much alcohol or other forms of debauchery.

Timurid power in Central Asia came to an end with the advent of another Turkic tribe from the north: the Uzbeks. These former nomads who had converted to Islam while members of the Golden Horde had become disaffected with a life of riding and raiding and were intent on settling in Transoxiana and adopting a sedentary way of life on the the trade routes that ran through Central Asia. In 1500, under their leader, Muhammad Shaibani Khan (1451-1510), they captured Samarkand from Zahiruddin Babur (1483-1530), a great-great-great-grandson of Timur and the ruler of Ferghana, who had himself captured the city in 1497. Babur recaptured Samarkand in 1501, only to lose it to Shaibani again in 1505. Herat fell to the Uzbeks shortly after, in 1507. Babur made one more attempt to regain Samarkand in 1511, but he was unsuccessful and was forced by the Uzbeks to flee south in the following year. However, his career as a ruler was not over, as he subsequently went on to found the Moghul dynasty, which ruled India until the British took over the country in the early nineteenth century. The Shaibanid Uzbeks established an empire in Transoxiana which lasted until the end of the sixteenth century.

SAMARKAND⁹

Samarkand, Timur's royal city, celebrated its 2500th anniversary in 1970. It is an ancient site, located on the Zarafshan River, in modern-day Uzbekistan, whose exotic reputation has prompted stanzas from poets as diverse as Milton, Keats, Oscar Wilde, and the Persian Hafiz. Although Firdausi, another great Persian poet, speaks of its foundation in the mythical past, the Soviets maintain that it was founded in 530 B.C. We know little of its history prior to the fourth century B.C., but we do know that Alexander the Great (356-323 B.C.) passed through the city, then called Maracanda, in 328 B.C. in the process of subduing Central Asia. The city rose to become a major staging post on the Silk Route from China to the West. In the mid-seventh century A.D., Sa-mo-kien, as the Chinese called it, was visited by the

⁸ Blunt, 173.

⁹ For a more detailed account of the history of Samarkand, see Blunt.

Buddhist monk Hsuan-tsang (602-649 A.D.), whose memoirs give us a good idea of what life was like in the area prior to the advent of Islam. At this time, the residents of the city were mostly Zoroastrians, although Buddhism was not unknown and Nestorian Christianity had also been introduced into the area. In fact, the Nestorian patriarch had raised it to the rank of metropolitan see, possibly as early as the beginning of the fifth century and certainly by the early seventh century.

Without a doubt, the most significant invasion of the area came in the late seventh century, when the armies of the Arab caliph invaded, bringing the religion of Islam to Mawarannahr ("The Land Beyond the River"), as the Arabs called the area. The Arab general, Qutayba ibn Muslim, launched a *jihad* (holy war) against Transoxiana from Merv (in present-day Turkmenistan, south of the Oxus) in 705: Bukhara finally fell in 709, to be followed by Khiva in 711. In that same year, the armies of Islam succeeded in capturing Samarkand. The city soon developed into a major centre of Islamic scholarship under the Arabs. Among other things, Samarkand was the first place where the Arabs experimented with making paper, a skill they learnt from the Chinese after defeating them at the Battle of Talas (751). The power of the caliph was subsequently replaced by a succession of dynasties: the Samanids¹⁰ (875),¹¹ the Qarakhanids (999), the Seljuks (1073), the Qarakhitai (1141), and the Khwarezmians (1210). During this time, Samarkand was no mean city: it has been estimated that its population in the tenth century was over half a million.¹²

The next major event in the life of Samarkand occurred in 1221: the armies of Chingiz Khan captured the city from Shah Sultan Muhammad, the Turkic ruler of the Khwarezmian empire, who had made it his capital. In return for the Shah's resistance to the great Khan, the city was sacked and looted, its soldiers killed and its artisans carried off into slavery. However, although Samarkand was largely abandoned, its history was not over yet. We have accounts of the city by various travellers through the area, including Marco Polo (1254-1324), who, although he did not actually visit Samarkand, passed through the area in 1272-73, and the Moor Abu Abdullah ibn Battuta (1304-1377), who, in 1333, described it as "one of the largest and most perfectly beautiful cities in the world."¹³

It was under Timur, the Mongols' "successor," that Samarkand went on to become one of the most glorious capitals in the then-known world. The city was given a new location, south of its previous site on the mound of Afrasiyab, which had been largely destroyed by the Mongols. Under the Amir, as Timur was known, it had

¹⁰ The Samanids were the only Persian rulers in Transoxiana after the Arab conquest and prior to the Mongol conquest; all the other dynasties mentioned were Turkic.

¹¹ The dates given indicate when Transoxiana came under the rule of each dynasty.

¹² Edgar Knobloch, *Beyond the Oxus: Archaeology, Art & Architecture of Central Asia* (London: Ernest Benn Ltd., 1972), 107.

¹³ Cited in Blunt, 136.

become "a thriving city which netted half the commerce of Asia"¹⁴: in its markets could be found leather, linen, spices, silk, precious stones, melons, grapes, and a host of other goods. It was also a city of great architectural monuments, skilled artisans and scholars. Even though Timur's successor, Shah Rukh, moved the Timurid capital to Herat, Samarkand continued to prosper under Ulugh Beg. As Timurid power in Transoxiana faltered after the deaths of Shah Rukh and Ulugh Beg, the city ceased to be as important as it had been. In 1447, it was sacked by the Uzbeks, who were to return half a century later to set up yet another Turkic dynasty in the area.

After the demise of Timurid rule in Central Asia, Samarkand came under a succession of Persian, Turkic, and even Chinese rulers. The city was eventually captured by the Russians in 1868 as this new power from the north expanded into Turkestan ("Land of the Turks"), as the area was known at that time. It is today a major city in the Uzbek Soviet Socialist Republic, one of the fifteen constituent republics of the USSR.

THE TIMURIDS AS BUILDERS¹⁵

Timur was not only a great conqueror; he was also a great builder. Whenever he laid waste to a city that stood in the path of his army, he would bring back the artisans to build *his* royal city of Samarkand. "There were sculptors, stone-masons and stucco-workers from Azerbaijan, Isfahan and Delhi; Mosaic-workers from Shiraz; weavers, glass-blowers and potters from Damascus - in such numbers that 'the city was not big enough to hold them.'"¹⁶ During the few brief times when he was not off on a military campaign, he was busy overseeing his building projects. Perhaps the main thing that strikes one about Timur's monuments is the sheer grandeur of them. They are statements about the man who made the earth shake in his day, as is evidenced by an Arab proverb quoted on one of his buildings: "If you want to know about us, examine our buildings."¹⁷

Although Timur concentrated his architectural efforts on Samarkand, he also erected buildings in other cities, such as Shahr-i-Sabz, where he constructed a magnificent *Aq Saray* (White Palace), and Turkestan, where he erected a mosque and mausoleum in honor of Hoja Ahmed Yasavi (d. 1166), a famous poet and Sufi sheikh. The first of these structures was almost entirely destroyed by the Uzbeks in the sixteenth century, but the ruins still remain. The second has been preserved in quite good condition and apparently still functions as a "holy place" to which devout

¹⁴ Blunt, 143.

¹⁵ For a detailed description of Timurid architecture, see Lisa Golombek and Donald Wilber, *Timurid Architecture of Iran and Turan*, Vol. 1 (Princeton: Princeton University Press, 1988), 44-217.

¹⁶ Blunt, 144.

¹⁷ Cited by Lisa Golombek, lecture, University of Victoria, Feb. 25, 1988.

Muslims make periodic pilgrimages, although this is not encouraged by the Soviet government, of course. However, probably the most impressive architecture that remains from this period can be found in Samarkand. Timur filled his capital with both secular and religious monuments, as well as a plethora of gardens, which featured stone walls and floors with elaborate patterns and palaces outfitted with gold, silk and carpets. Most of these structures have not survived to the present. Such is the case with his magnificent four-story palace, which Babur describes in his memoirs. However, a number of significant buildings *have* survived and can still be seen today.

There are also still extant examples of buildings erected by subsequent Timurid rulers. As noted above, although they did not share his passion for territorial expansion, they *did* inherit his love of fine architecture. Interestingly enough, one of the principle Timurid builders was Gawhar Shad, Shah Rukh's wife, who was responsible for a magnificent mosque at Meshed (built between 1405 and 1418) and a mosque-madrasah-mausoleum complex in Herat (1417-1437). Unfortunately, these structures are mostly in ruins today, largely as a result of war and earthquakes over the last two centuries. As can be imagined, the transition of the Timurid capital to Herat also moved the architectural focus from Samarkand to that city. However, the Timurids still continued to build in their founder's capital, especially Ulugh Beg, who was governor of the city under his father, Shah Rukh.

The preponderance of elaborate decoration on Timurid monuments, much of it involving various pottery techniques, especially glazed tilework, reflects the advances made in this artform during this period. "The old use of lead glazes which oxidized quickly, from pre-Mongolian times was replaced by durable glazes stained with colouring oxides.... A mosaic design of single-coloured tiles had the advantage of being simple to produce, but the ornamental design was limited to geometrical patterns based on the shape of the tiles... This difficulty was then overcome by the technique of 'inlaid mosaic' composed of variously coloured small units."¹⁸

There are too many Timurid monuments in Samarkand to examine in one paper.¹⁹ However, we can look at some of the more significant ones that remain to this day. There are three major structures still standing in Samarkand which Timur himself was responsible for building: the *Gur-i Amir*, the Bibi Khanum mosque, and the *Shah-i Zindeh* mausoleum complex (although this had been originally begun in pre-Timurid times, Timur was responsible for most of its present form). In addition, there are two important examples of Timurid architecture from the period after Timur: the *madrasah* and observatory of Ulugh Beg. It is these structures which will form the focus of this paper.

¹⁸ Edgar Knobloch and Milos Hrbas, *The Art of Central Asia* (London: Paul Hamlyn, 1965), 20.

¹⁹ For a list of Timurid monuments still standing in Samarkand, see Appendix I.

THE GUR-I AMIR²⁰

The fabulous *Gur-i Amir*²¹ ("The Great Prince") is a mausoleum which was originally designed to house the body of Timur's favorite grandson, Muhammad Sultan (1375-1403), who was buried there after being killed on one of Timur's campaigns. Timur's body also rests in this complex, as do those of several other members of his family, including Umar Shaykh, Miran Shah, Pir Muhammad, Shah Rukh, and Ulugh Beg. Timur was the principle builder of this structure and the initial complex, minus the mausoleum, was probably finished by 1401. The mausoleum itself was completed by 1404. According to Clavijo's account, when Timur returned from a campaign to discover that the mausoleum was, in his estimate, too low, he ordered it rebuilt in ten days. As Clavijo recounts, "Without delay the rebuilding was set in hand, day and night the work went on... The chapel had now been completely rebuilt within the appointed ten day's time, and it was a wonder how so great a building could have been put up and completed within so brief a space."²² Whether or not the rebuilding was actually carried out in so short a period of time is debatable. Later on, Ulugh Beg also worked on it, adding an eastern gallery in 1424.

The original complex included three buildings clustered around a square courtyard: the actual mausoleum (to the south), a *madrasah* (to the east), and a *khanaqah* (to the west). The north side of the the court contained an entrance portal. There was a minaret at each corner of the courtyard. "The importance of this complex is that it represents the earliest standing evidence for ensemble planning that was to become so popular in the Timurid period and later."²³ The only parts of the complex which remain intact are the mausoleum, the entrance portal, and one of the minarets. Excavations have unearthed the foundations of the *madrasah*, but there is not enough left to reconstruct the plan of the *khanaqah*. It appears that the *madrasah*, the earliest Timurid example of one, "had a central court with two axial *ivans* and a niche facade, from which the students' cells could be entered. In the four corners were larger rooms, lecture halls, and probably a small *masjid*."²⁴ As noted above, the entrance portal still stands. It is adorned with tilework (some of which has been restored) and *muqarnas* elements, both of which exhibit Iranian influence. This is not surprising, since the architect, Muhammad ibn Mahmud al-banna' al-Isfahani, came from Isfahan.

²⁰ The physical description of this structure, as well as the others dealt with in this paper, has been taken primarily from Golombek and Wilber, Vol. 1.

²¹ For pictures of the *Gur-i Amir*, see Golombek and Wilber, Vol. 2, plates VI, 79-87, figure 27; V. Voronina, *Architectural Monuments of Middle Asia: Bokhara, Samarkand* (Leningrad: Aurora Publishers, 1969), plates 51-53; Knobloch and Hrbas, plates 78-80.

²² Cited in Golombek and Wilber, Vol. 1, 263.

²³ Golombek and Wilber, Vol. 1, 261.

²⁴ Golombek and Wilber, Vol. 1, 261.

The mausoleum proper is the focus of the complex and, since it remains largely intact, the part about which we know the most. Its exterior is octagonal in shape, whereas the interior is square (10.2 meters to a side), with a rectangular bay in each wall. Along the eastern side of the building is the gallery that Ulugh Beg added. The large dome over the main chamber rests on a tall drum. The zone of transition is accomplished by a squinch. Although the inner dome is, as usual, shallower than the outer one, it still has a steep slant. The external dome, the tip of which is 37 meters from the ground, was rebuilt and redecorated in the 1950's, after most of it had fallen down.

The external octagon has been finished in light blue glazed tiles that feature the names Allah and Muhammad. Around the base of the drum, also in tilework, runs a white-lettered inscription in kufic script: "God is immortality." The rest of the drum is elaborately decorated in various geometric patterns of both glazed and plain tiles, with dark and light blue colors playing a prominent role. Finally, the bulbous, fluted external dome, with 64 ribs, continues the same geometric patterns that were used on the drum, creating an overall visual impression of a vast expanse of azure and turquoise. This type of ribbed dome can also be seen in the shrine which Timur built to commemorate Ahmed Yasavi.

Inside the chamber, the decoration is ornate. The dado features hexagonal tiles of onyx and its upper boundary is marked by a slight *muqarnas* cornice, above which (about 2 meters from the floor) is a green inscription band with gold letters. Another band, featuring geometric patterns painted on plaster, is located 3.7 meters above the floor. Above this, the walls are decorated with star designs, whereas the bays employ *muqarnas*, originally covered with blue and gold pressed paper. Finally, just below the zone of transition, another inscription band, with letters of gold, runs around the four walls. The squinch and the inner dome were also originally covered with elaborate patterns on pressed paper. Not surprisingly, the *papier-mache*, which is the earliest instance of this artform in the area, soon deteriorated and is only now being restored.

The bodies lie in an underground crypt, which is accessed by a stairway in the southeast corner of the main chamber. The tombstones are located in the chamber itself. Timur's cenotaph is a massive slab (the largest in the world) of nephrite (dark green jade) which was brought back from Mongolia by Ulugh Beg in 1425 and subsequently broken in half in the eighteenth century when the invading Persian ruler, Nadir Shah, tried to remove it from the chamber. On the tombstone is the following inscription in Arabic: "When I rise from the dead the whole world will tremble." On the very day that the Soviet archaeologist, Professor M.M. Gerasimov, exhumed the skeleton of Timur from the crypt in which it lay (which, incidently, confirmed that the

Amir had indeed been limp), June 22, 1941, Hitler's armies invaded Russia.²⁵ As one author has pointed out, "Possibly the greatest butcher the world has ever known could have been more fittingly commemorated by the ingenuous inscription on an anonymous tomb in an anteroom of the Gur-i-Mir: 'If I were alive, people would not be glad.'"²⁶ Both this tombstone and the one covering his actual grave in the crypt have inscriptions on them that trace Timur's genealogy back to both Chingiz Khan and 'Ali, the fourth caliph of Islam. By so doing, Timur was making an indirect claim to be the rightful heir of not only the Mongol Empire, but also the Muslim one. Another reminder of the regal aspirations of Timur and his dynasty is the large white stone slab, called the *kok-tosh* ("green stone"), upon which the Timurid coronation ceremonies took place, which is located in the courtyard outside the mausoleum.

THE BIBI KHANUM MOSQUE

The Bibi Khanum ("The Old Queen") mosque,²⁷ was reputedly named after Timur's favorite wife, Saray Mulk Khanum, the daughter of the puppet Chagatay khan that Timur and Husayn had installed in 1364 in order to legitimize their conquest of Transoxiana. It is properly called the *Masjid-i Jami'* (congregational mosque), but has come to be known by the name of Timur's wife. Timur built it with loot that he had brought back from India and reputedly used 95 Indian elephants to haul construction materials from the quarries: it was begun in 1398-1399²⁸ and, when completed, was "one of the most colossal monuments ever built in the Islamic world."²⁹ Apparently, as with the *Gur-i Amir*, Timur ordered part of it reconstructed in 1404-1405, but it is unclear exactly what was rebuilt and why. Clavijo tells us that, since the Amir was in ill health at the time, "it was therefore in his litter that every morning he had himself brought to the place, and he would stay there the best part of the day urging on the work."³⁰ Opposite the entrance, a *madrasah* and mausoleum, now mostly in ruins, were erected by the queen herself. The *Masjid-i Shah* in Isfahan, Iran, as well as some Moghul mosques in India, seems to have copied its basic form.

There is an interesting legend that has grown up surrounding the construction of the mosque. Apparently, while Timur was away conquering India, the architect who was in charge of the project fell in love with the queen after whom the mosque is named. Bibi Khanum, in an attempt to dissuade the young man, brought 40 painted

²⁵ Blunt, 163.

²⁶ Blunt, 258.

²⁷ For pictures of the mosque, see Golombek and Wiber, Vol. 2, plates V, 66-78, figure 26; Voronina, plates 46-50; Knobloch and Hrbas, plates 76,77,81,82.

²⁸ Here and elsewhere, approximate dates are given, since the inscriptions on the monuments employ the Islamic calendar, the years of which do not correspond directly to the years used with the Western calendar.

²⁹ Golombek and Wilber, Vol. 1, 255.

³⁰ Golombek and Wilber, Vol. 1, 259.

eggs to him, explaining that, just as all the eggs tasted the same, so it was with women. She would provide him with a beautiful maiden so that he could finish construction of the mosque, now delayed as a result of his infatuation with the queen. A week later, he brought her 40 gourds, 39 filled with water and one filled with wine, and said, "Oh Bibi Khanum, although they may all look alike only one can intoxicate me." She agreed to allow him to kiss her, with her hand separating his lips and her cheek. His passionate response penetrated through her hand to leave an indelible imprint on her cheek which the Amir was none too pleased to see when he returned. "Seeing the imprint of the lips upon his wife's cheek, he sent his elephant brigade into the great mosque and wreaked the damage that can still be seen today. His captains chased the architect to the top of a minaret, where he grew wings and flew off, never to be seen again. And Tamerlane decreed that in future all women should wear a veil, hence the origin of the Mohammedan custom of enshrouding their womenfolk."³¹

In actual fact, Timur's elephants cannot be blamed for the deterioration of the building over time. Rather, hasty construction, earthquakes (including a major one in 1897), and general neglect have resulted in only a shell of the former structure remaining today, but even this is impressive. The original structure must have been awe-inspiring. A chronicler of the time wrote, "Its dome would have been unique had it not been for the heavens, and unique would have been its portal had it not been for the Milky Way."³² The basic structure was rectangular in shape, measuring 109 by 167 meters. It featured four units, one located at each axis of the outer wall which ran around the perimeter of the structure: a large entrance portal, the main sanctuary, and two smaller side mosques. These four units were linked by hypostyle arcades, nine bays deep on the *qiblah* side and four bays deep on the other sides. At each of the four corners of the mosque was a minaret, as recorded by Sharaf ad-Din: "In each of the four corners is a minaret, whose head is directed toward the heavens, proclaiming: "Our monuments will tell about us!" which reaches to the four corners of the world."³³ The arcades were at least three stories high in places and were supported by 400-480 marble columns. Archaeological digs have uncovered some of these columns, but none remain standing. However, the four units *do* remain, albeit in ruined form, as does the minaret from the northwest corner of the perimeter.

The entrance portal is located at the east end of the mosque, and it originally projected out beyond the outer facade. The *ivan*, before it collapsed, was 19 meters tall and is supported by large pylons (10.5 meters wide), which in turn are flanked by two decagonal minarets, one on either side. The placement of the minarets is a

³¹ J.D. Ives, "Samarkand, Jewel of Central Soviet Asia," *Canadian Geographic Journal*, Vol. 82, No. 2 (1971), 73.

³² Cited in Blunt, 260.

³³ Golombek and Wilber, Vol. 1, 259.

development of the Il Khanid twin-minaret portal, which placed the minarets on top of the *ivan*. This Timurid modification gives the structure a more fortress-like appearance. The inner *ivan* of the entrance portal opens onto the courtyard. At the west end of the mosque, opposite the entrance, is the main sanctuary, its portal projecting into the courtyard. Its *ivan*, 30 meters high, is flanked by two octagonal minarets. Visible beyond the *ivan* are the ruins of the dome over the main chamber, which is square, with arched niches and a doubly-recessed *mihrab*. The two smaller side mosques, on the north and south sides of the complex, are similar to each other, but not identical. They are also square, with arched niches and topped with domes. Their *ivan* screens were originally nearly flush with the court facade. The three sphericonical domes each rest on an octagonal zone of transition which incorporates arched squinches and recumbent arches. The outer domes of the two side mosques were originally ribbed. In the center of the courtyard stands an enormous lectern which originally stood in the sanctuary; apparently, the Qur'an that it was designed to hold had six-foot high pages!

The decoration on the mosque, which originally covered all visible faces, is rich and varied, including kufic designs and *girikhs* using glazed bricks in *hazarbaf* technique, mosaic faience, tiles inset in brick and stone, incised marble and terracotta, and *haft rangi* tilework. A band of inscription separates the upper and lower sections of the *ivan* wall of the main sanctuary. The *ivan* itself was originally framed with a light blue tile spiral molding. All three domes, now in varying states of disrepair, were originally finished in light blue tile on top of a zone of *muqarnas*. The domes were covered in inscriptions in *hazarbaf* technique, the smaller ones in naskhi, the larger one in kufic. Parts of the latter are still visible. Inside, the domed chambers were decorated with painted plaster and gilt papier-mache, both of which feature the colors blue and gold; little of the latter remains to this day. Over the sanctuary *ivan* is an inscription made from carved unglazed terra cotta. Both this and the inscription over the entrance portal, little of which can still be made out, ascribe the building of the mosque to "The great sultan, pillar of the state and the religion, Amir Timur Gurgan..."³⁴

THE SHAH-I ZINDEH

The *Shah-i Zindeh*³⁵ ("The Living King") is a complex of sixteen buildings which was originally built to commemorate Qusam ibn Abbas, supposedly the cousin of Muhammad himself, who came to preach Islam in Samarkand in 676. There are several legends surrounding him: some say that he was beheaded by the locals, after

³⁴ Golombek and Wilber, Vol. 1, 258.

³⁵ For pictures of the *Shah-i Zindeh*, see Golombek and Wilber, Vol. 2, plates I-IV, 17-59, figures 14-23; Voronina, plates 65-69, 72-76; Knobloch and Hrbas, plates 56-75, 109.

which he "picked up his severed head and plunged with it into a well from which he will one day re-emerge. A prophecy, believed to date from the fourteenth century, foretold that he would arise and save Samarkand if the Russians attacked the city; but 1868 came and Qasim [sic] did not stir a finger to help, thus permanently damaging his reputation."³⁶ Another legend recounts that "he was not killed, but in saving himself from the infidels, entered a cliff which opened miraculously before him and closed again after him."³⁷

Once Islam was established in Transoxiana, the site soon became a holy shrine, the object of pilgrimage for the faithful. Ibn Battuta describes it as follows: "Outside of Samarkand is the tomb of Kussam ben Abbas. The inhabitants of Samarkand come out to visit it every Sunday and Thursday night. The Tartars also come to visit it, pay vows to it and bring cows, sheep, dirhams and dinars [coins]."³⁸ Besides Qusam himself, the bodies of several other members of Timur's family, those who either died before the *Gur-i Amir* was built or who were considered too lowly to be buried there, are also located in the *Shah-i Zindeh*. Since the complex is too extensive to document completely here, we will merely focus on some of its general features.³⁹

The *Shah-i Zindeh* is located on the mound of Afrasiyab, the site of Samarkand prior to the Mongol conquest, just north of the present city. The entrance to the complex is a massive *ivan* gate. A 70 meter-long combination stairway-walkway runs up to the top of the complex, where the tomb of the Living King himself is located. On either side of the stairway are the mausolea containing the others buried there. These tombs are actually grouped into three ensembles: one near the entrance gate, another halfway up the passageway, and the third clustered around the tomb of Qusam, at the top of the hill. Excavations have unearthed remnants of the old city of Samarkand below ground level which indicate that, prior to its use as a cemetery, the area contained mostly residential and commercial buildings. However, even at this time there were religious structures on the site. Certainly, a shrine to Qusam was erected early on in the Muslim era, and it soon became the center of a cult of worship on the site. The earliest extant structures in the complex, including the minaret near Qusam's mausoleum, were built in the eleventh century. By the twelfth century, the site was being used exclusively as a burial ground. Much of the original complex that grew up around the tomb of Qusam was destroyed by the Mongols when they sacked Samarkand in 1221, although they spared the Living King from this sacrilege. During the fourteenth century, there was a revived interest in the "cult of

³⁶ Blunt, 260.

³⁷ Knobloch, 114.

³⁸ Cited in Knobloch, 114f.

³⁹ For a complete list of structures in the *Shah-i Zindeh* dating from the Timurid period, see Appendix I.

saints," resulting in more construction on the site, and a new *Shah-i Zindeh* sprang up on the site. Part of the earlier complex is preserved in the actual mausoleum which contains Qusam, the rest of which dates from 1334-1335 and c.1460. Building on the site continued throughout the fourteenth century and into the next, with Timur merely continuing the trend. Since that time, especially in the eighteenth and nineteenth centuries, more structures have been added to the complex.

Many of the same features that can be seen elsewhere in the monuments erected by Timur and his successors are evident in the *Shah-i Zindeh*. Blue-tiled domes, some smooth and some ribbed, adorn many of the buildings. Tiled kufic inscriptions, similar to those on the *Gur-i Amir* and the Bibi Khanum mosque, circle the drums of many domes. The facades and entrance *ivans* of the mausolea are decorated with a wide selection of ornamentation, including *muqarnas*, glazed brick and tilework, mosaics, and glazed terra cotta. Horizontal and vertical inscription bands employ both kufic and thuluth script. Indeed, some of the finest decoration in Central Asia can be seen in the complex. Various patterns are used, including floral and vegetal motifs, stars, and geometric designs. The internal decoration of some of the buildings is also quite ornate, including "mosaic panels with fine gold painting on the glaze, others with landscapes (flowers, shrubs, rivulets, trees with birds, clouds), showing a remarkable Chinese influence, which may also be found in the stylised dragons and phoenixes in the wall ornaments."⁴⁰ In the words of a Soviet writer, "Not grief, but reconciliation and placidity emanated from this city of the dead, with its freshness and intensity of colour and unexpected perspectives and combinations of forms."⁴¹

THE MADRASAH OF ULUGH BEG

Ulugh Beg's *madrasah*⁴² is located on the Registan, the large square which was described in 1888 by Lord Curzon, the Viceroy of India, as "the noblest public square in the world. 'I know of nothing in the East approaching it in massive simplicity and grandeur,' he wrote, 'and nothing in Europe, save perhaps on a humbler scale the Piazza di San Marco in Venice, which can even aspire to enter the competition. No European spectacle indeed can adequately be compared with it, in our inability to point to an open space in any Western city that is commanded on three of its four sides by Gothic cathedrals of the finest order.'"⁴³

⁴⁰ Knobloch, 122.

⁴¹ Voronina, 36.

⁴² For pictures of the *madrasah*, see Golombek and Wilber, Vol. 2, plates VII, 88-95, figures 28, 29; Voronina, plates 55-58; Knobloch and Hrbas, plates 83,89,90.

⁴³ Cited in Blunt, 259.

As noted by Curzon, the square is bounded today on three sides by *madrasahs*. The first of these is the *madrasah* of Ulugh Beg, built by him during the period 1417-1421. The other two were built at a later time to replace the *khanaqah* and *caravansary* that had been erected under Ulugh Beg. The Shir Dor *madrasah*, basically a copy of Ulugh Beg's *madrasah*, was constructed between 1619 and 1635 and the Tilla Kari *madrasah* between 1646 and 1659. "Shir Dor" means "Bearing Lions," after the tigers painted on the facade. "Tilla Kari" means "Adorned with Gold," after the profusion of gold in that building. Since these latter two structures date from after the Timurid period, we will concentrate here on Ulugh Beg's *madrasah*.

It is perhaps fitting that Ulugh Beg, more a scholar than a military or religious leader, has left an educational institution as his primary contribution to the architecture of Samarkand. Indeed, it is the finest example of this type of building from the early Timurid period. "As a work of architecture, it is unique in its complexity and its ambitiousness. It ranks among the best work of this period."⁴⁴ The building is rectangular in shape, measuring 56 by 81 meters, and encloses a courtyard (30 meters a side) with four axial *ivans*. There are minarets at each of its four corners and a 34.7 meter tall entrance portal on the facade that faces the Registan. This enormous entrance towers over twice the height of the walls of the enclosed courtyard. In addition, there are two smaller entrances on the sides of the *madrasah*. These three entrances open onto the courtyard by way of three of the four *ivans*. Around the courtyard, on two stories, are fifty rooms, which could house one hundred students, and two lecture halls. The fourth *ivan*, opposite the entrance *ivan*, leads into a rectangular mosque, flanked by two domed chambers.

The decoration of the *madrasah*, as elsewhere in Samarkand, emphasizes the color blue, with light and dark blue tiles in *hazarbaf* technique forming various designs, including the calligraphic representation of sacred names within geometric outlines on the facade, the exterior walls, and the secondary entrances. Mosaic faience is featured above the entrance *ivan* in a star-shaped design (not surprising for an astronomer!) and in other prominent places, such as the entrance to the mosque. *Girikhs* constructed on a diagonal grid also occur and *haft rangi* is used extensively, including in the rope molding that forms the border of the *ivan* opening onto the Registan. Marble, inset with tile, is also used, especially in the dado.

It is interesting to note the inscription that Ulugh Beg placed over the portal leading into the mosque, perhaps a reflection of his desire to relate religion and science together, a desire which eventually got him killed: "This *suffeh* [i.e., portal or vaulted *masjid*] is built to resemble Paradise... in it are teachers of the truths of the

⁴⁴ Golombek and Wilber, Vol. 1, 263.

sciences useful to the religion, under the direction of the greatest of sultans..."⁴⁵ By the advent of the Soviet era, the *madrasah* was in sad shape. Since that time, the northeast minaret, which had been leaning badly, has been propped up and the mosaicwork on the main *ivan* arch has been largely restored.

ULUGH BEG'S OBSERVATORY

Ulugh Beg built his observatory⁴⁶ in 1420. Babur tells us that the circular building, 48 meters in diameter, was three storeys tall. It originally housed three gigantic astronomical instruments: a sextant, divided into degrees and minutes and featuring the signs of the zodiac; a solar clock; and a quadrant sector. The ground floor contained service rooms, above which were two stories of arcades. The arc of the sextant was oriented along the north-south axis of the building, beginning below ground level and rising to above the top of the third story. The solar clock was located on the wall parallel to the east-west axis, perpendicular to the sextant. The roof, and possibly the piers of the arcades, were marked off with bronze plates to assist in sighting heavenly bodies. The exterior of the observatory was finished with glazed brick mosaics, as were other Timurid monuments. According to a contemporary report, the service rooms were decorated: "Inside the rooms (*khaneh-ha*) he had painted and written the image (*hay'at*) of the nine celestial orbits (*aflak*), and the shapes (*ashkal*) of the nine heavenly spheres, and the degrees, minutes, seconds, and tenths of seconds, of the epicycles; the seven planets (*aflak-i tadawir*) and pictures (*suwar*) of the fixed stars, the image (*hay'at*) of the terrestrial globe, pictures (*suwar*) of the climes with mountains, seas, and deserts and related things..."⁴⁷ All that remains of this structure today is the large concave slit in the earth which used to house the sextant. It was discovered in 1908 by the Russian archaeologist Viatkin and is a major tourist attraction in Samarkand today.

CONCLUSION

Anyone who has had the opportunity to see these Timurid monuments in Samarkand can testify to the splendor that they possess, even after years of disrepair. The sheer size of them, as well as the extravagant manner in which they have been decorated, speaks of the desire of Timur and his successors to leave their impact upon the world. In his time, Timur tried to create an empire to rival that of his predecessor, Chingiz Khan, and, in doing so, to set himself up as the greatest Muslim ruler in the world at the time. His empire never did eclipse that of the Mongols and it did not last

⁴⁵ Golombek and Wilber, Vol. 1, 265.

⁴⁶ For pictures of the remains of the observatory, see Golombek and Wilber, Vol. 2, plate 96; Voronina, plate 79; for a reconstruction of the original structure, see Blunt, 166.

⁴⁷ Cited in Golombek and Wiber, Vol. 1, 266f.

nearly as long as the Arab Empire had. However, he left an indelible imprint not only on Central Asia, but indeed upon much of the Near East. Today, long after the disappearance of the mountains of human skulls which he erected after a victorious battle, the other monuments he and his dynasty erected in the cities of Central Asia remain as testimonies of his greatness.

APPENDIX I
TIMURID ARCHITECTURE REMAINING IN SAMARKAND⁴⁸

1. Shah-i Zindeh complex⁴⁹
 - a) Qusam ibn Abbas masjid (c.1460): #11C⁵⁰
 - b) Shad-i Mulk Aqa mausoleum (1371-1383): #14
 - c) Amir Husayn ibn Tughluq Tekin mausoleum (1376): #15
 - d) Amir Burunduq mausoleum (c.1390, c.1420): #16
 - e) Ahirin Bika Aqa mausoleum (1385-86): #17
 - f) Anonymous ("Ustad 'Alim") mausoleum (c.1385): #18
 - g) Anonymous ("Ulugh Sultan Begum") mausoleum (c.1385): #19
 - h) "Amirzadeh" mausoleum (1386): #20
 - i) Tuman Aqa mausoleum (1404-5): #21A
 - j) Tuman Aqa masjid (c.1404): #21B
 - k) 'Abd al-'Aziz dargah (gatehouse) (1435-36): #22
 - l) Anonymous ("Qazizadeh Rumi") mausoleum (c.1420): #23
 - m) Octagon mausoleum (first half of 15th century): #24
2. Shrine of Qutb-i Chahardehum (mid-15th century): #25⁵¹
3. Shrine of Burkhan al-Din Sagarji ("Ruhabad") (c.1404): #26
4. Saray Mulk Khanum madrasah and mausoleum (c.1397): #27
5. Masjid-i Jami' ("Bibi Khanum") (1398-1405): #28
6. Gur-i Amir madrasah (c.1400): #29A
7. Gur-i Amir khanaqah (c.1400): #29B
8. Gur-i Amir mausoleum (c.1404): #29C
9. Ulugh Beg madrasah (1417-21): #30
10. Ulugh Beg observatory (1420): #31
11. 'Abdi Darun khanaqah (c.1430): #32
12. Alikeh Kukeltash masjid (before 1439-40): #33⁵²
13. Shrine of Chupan Ata (mid 15th century): #34
14. 'Ishrat Khaneh mausoleum (c.1464): #35
15. Aq Saray mausoleum (c.1470): #36
16. Khvajeh Ahrar khanaqah (1490): #37

⁴⁸ Source: Golombek and Wilber, Vol. 1, 233-271.

⁴⁹ Only those structures within the *Shah-i Zindeh* which date from Timurid times are listed.

⁵⁰ The number is that given by Golombek and Wilber in their catalogue of Timurid monuments in the aforementioned source.

⁵¹ This structure was actually destroyed in 1880, but I have included it since Golombek and Wilber do in their catalogue.

⁵² Again, this structure is no longer standing, but Golombek and Wilber include it in their catalogue.

APPENDIX II
GLOSSARY OF TERMS⁵³

1. *caravansary*: inn for travellers, merchants, beasts of burden.
2. *dado*: the lower part of an interior wall, often ornamented.
3. *faience*: a variety of glazed pottery, usually highly decorated.
4. *girikh* (lit. Persian knots): geometric design.
5. *haft rangi* (lit. "seven colors"): patterns of up to seven colors fired on tiles; also known as majolica or cuerda seca.
6. *hazarbaf* (lit. "thousand weave"): allover patterns in brick, tile, or simulated brick.
7. *hypostyle*: having a roof or ceiling resting upon rows of columns.
8. *ivan*: open-fronted barrel-vaulted hall facing on a court or as facade feature.
9. *khanaqah*: hospice or other structure for Sufi devotion.
10. *kufic*: an angular script used in writing Arabic.
11. *madrasah*: religious seminary.
12. *masjid*: mosque.
13. *mihrab*: arched niche indicating direction of Mecca.
14. *muqarnas*: stalactite composition used in transition from polygon to circle.
15. *naskhi*: a cursive script used in writing Arabic.
16. *qiblah*: the direction of Mecca toward which prayer must be oriented.
17. *squinch*: a small stone arch or series of arches used to form a zone of transition between a square or octagonal base and a circular dome.
18. *thuluth*: a large cursive script used in writing Arabic.

⁵³ #1,4,5,6,8,9,11,12,13,14,16 from Golombek and Wilber, Vol. 1, 469-471; #2,3,7,17 from *Funk and Wagnall's Standard College Dictionary*, Canadian Edition, 1978; #10,15,18 from class notes.

BIBLIOGRAPHY

- Blunt, Wilfrid. *The Golden Road to Samarkand*. London: Hamish Hamilton, 1973.
- Golombek, Lisa and Donald Wilber. *The Timurid Architecture of Iran and Turan*, Vol. 1 and 2. Princeton: Princeton University Press, 1988.
- Hookham, Hilda. *Tamburlaine the Conqueror*. London: Hodder and Stoughton, 1962.
- Ives, J.D. "Samarkand, Jewel of Central Soviet Asia," *Canadian Geographic Journal*, Vol. 82, No. 2 (1971), 71-75.
- Knobloch, Edgar. *Beyond the Oxus: Archaeology, Art & Architecture of Central Asia*. London: Ernest Benn Ltd., 1972.
- Knobloch, Edgar and Milos Hrbas. *The Art of Central Asia*. London: Paul Hamlyn, 1965.
- Lamb, Harold. *Tamerlane: The Earth Shaker*. Garden City, NY: Garden City Publ. Co., 1928.
- Markham, Clements R., trans. *Narrative of the Embassy of Ruy Gonzalez de Clavijo to the Court of Timour, at Samarcand, A.D. 1403-6*. London: Hakluyt Society, 1859.
- Voronina, V. *Architectural Monuments of Middle Asia: Bokhara, Samarkand*. Leningrad: Aurora Publishers, 1969.