

Restoration of the Sultan Tekesh Mausoleum at Kone Urgench

There is a legend that Kone Urgench, sitting at the crossroads of the ancient Silk Road, was destroyed and rose again seven times. It's a story that has some basis in fact. The trading post was conquered by Arab invaders in 712, and rose to greatness as a cultural center after becoming the capital of the Khorezm civilization in 995. The city survived a sacking by Genghis Khan's armies in 1221, only to be devastated again by Timur in 1388, its people sold into slavery and its master craftsmen shipped off to Samarkand. The last inhabitants departed when the Khivian khans moved the city to New Urgench, now over the border in Uzbekistan, during the 17th century.

Yet somehow, a collection of extraordinary monuments managed to survive the ravages of time and conquest. Towering above them all is the Kutlug Timur Minaret, at 62 meters the tallest such tower in Central Asia, built by King Kutlug Timur who reigned from 1321 to 1336. Adjacent to it, soaring 30 meters, with an unmistakable conical blue tiled roof, is the mausoleum of Sultan Tekesh, who ruled Khorezm from 1172 to 1200 and greatly expanded its reach as far as northern Iran. A lover of music and culture, Tekesh built a library, a mosque and a madrasa in the city, contributing to its fame as a cultural center as described by the Arab traveler Ibn Battuta, who visited in 1333.

With the minaret, several mausoleums and a number of other monuments still standing, the area was declared a Turkmenistan State Historical and Cultural Park in 1985, and receives about 100,000 visitors a year. The Sultan Tekesh Mausoleum is one of the most significant monuments at the site, and is an outstanding example of pre-Mongolian Central Asian architecture. One of its unusual features is its conical hipped roof rising above a coffered drum divided into 24 bays. The roof is supported by an inner dome and was originally surrounded by a frieze of inscriptions from the Quran. Only fragments survive.

Although the foundations and walls were reinforced in the early 1990s, the restoration of the dome presented particular problems. The height of the roof, the complex task of rebuilding



the dome and the recreation of decorative tiles matching the originals presented conservators with problems that had not previously been addressed in Turkmenistan.

Between the ravages of time and an inept 1928 restoration attempt, the dome was in a state of near-total collapse. In such an extensive complex with many monuments requiring restoration, resources were not available to tackle the problem. Through a grant from the U.S. Ambassador's Fund for Cultural Preservation to the Turkmenistan government's historical preservation administration, the dome was rebuilt and

repairs were done to the walls of the mausoleum. In the process, conservation staff gained valuable experience and knowledge to continue restoration projects throughout the complex.

As part of the project, the internal arch structure was rebuilt prior to reconstruction of the outer dome. Bricks were baked on site, but early experiments to match the blue glaze failed to achieve a permanent color. Majolica imported from Russia has since been used to color the bricks. During the project, students from the Turkmenistan State Academy of Arts were trained in restoration skills.

Restoration work at the shrine of Seyit Jamal ad-Din

The shrine of Seyit Jamal ad-Din, which lies east of Ashgabat, has been a place of pilgrimage since the 15th century as the burial site of a popular saint and teacher.

Immediately behind the tomb once stood a mosque whose portico contained a highly unusual feature—a mosaic over the entrance depicting two golden dragons, a surprising inclusion given the Islamic ban on the depiction of living creatures. Legend has it that the dragons appeared to protect the site when it was under attack, centuries ago.

The mosque sustained calamitous damage when a severe earthquake hit the region in 1948, destroying the capital city. The mosque adjacent

this region was Zoroastrianism, whose adherents built small triangular-shaped towers of stones. This practice has reemerged and in addition to a small mosque behind the ruin, there are hundreds of such small structures in the area, some of which had morphed into more stable rectangles or symbolic structures. Other examples of unconventional contemporary practices can be seen, such as shrines for parents praying for the birth of children. The shrine is also used as a place of remembrance by relatives of the more than 100,000 people who lost their lives in the earthquake.

But the rubble around the shrine and on the portico made it difficult for visitors to pay their



to the shrine was devastated, with only some walls left partly standing.

The tomb of Seyit Jamal ad-Din was buried beneath rubble, and the portico collapsed from the base of the arch. The mosaic was shattered, its pieces mixed with the rubble covering the tomb. The remnants of decorative patterns made of inlaid blue tiles, still visible on the ruined walls, give a sense of the beauty that was lost.

One particularly interesting feature of the site today is the way in which traditional beliefs continue to be expressed alongside Islam. For example, one of the 15th century religions of

respects. A grant to the Turkmenistan government's historical preservation administration from the U.S. Ambassador's Fund for Cultural Preservation in 2001, paid for the rubble to be cleared from the forecourt. Visitors can now be seen touching their palms and forehead to the tomb of Seyit Jamal ad-Din before circumambulating it.

At the same time, pieces of the mosaic were rescued from the rubble and the work of art was partly reassembled. It is now on prominent display in the National Fine Arts Museum, along with paintings depicting the mosque as it stood before the earthquake.



Restoration of the Ak Saray Ding Tower near Dashoguz

The Ak Saray Ding Tower stands about 14 meters high surrounded by graves and cotton fields in a remote part of northern Turkmenistan, five kilometers from the Uzbekistan border. The only archeological survey of the monument, in the 1950s, dated the tower to the 11th or 12th century, and speculated that it might have been a watchtower for a vanished city.

According to Turkmen legend, the tower was built by a local rich man, whose daughter died before she was able to marry. When the girl came to him in a dream and asked him to build a kejebe, a saddle with a canopy traditionally placed on a bride's camel during Turkmen wedding processions, he built over her grave the Ak Saray Ding Tower, unique in its kejebe appearance.

Thus, the tower has long been revered by locals for its associations with tragedy, a father's love for his daughter and the purity traditionally associated with a young girl. A cemetery has sprung up around it, attracting pilgrims, particularly women who come to pray for marriage or children.

At the beginning of the 12th century, a respected religious leader noticed that the tower was close to ruin and urged people to try to save it. Not knowing what else to do, they piled mud around the bottom tier, which was in danger of collapse.

The building went into rapid decline again after the 1980s, and the Institute of History under the Cabinet of Ministers of Turkmenistan in Ashgabat received a grant from the U.S. Ambassador's Fund for Cultural Preservation in 2005 to restore the tower, excavate the site and disseminate information about its history.

Excavation began in 2006, and the structure that was uncovered led archeologists to believe that it may have been an entrance to a caravanserai, a traveler's rest stop, on the Silk Road, with the high tower serving as a guide for caravan drivers and a lookout post. But evidence of alterations also suggests that the function of the structure might have changed over the centuries.

Conservation efforts began with complete reconstruction of the bottom tier after careful removal of the mud buttress, as it was discovered that the tower had been built without a proper foundation. About 20,000 mud bricks matching the originals were baked for the project and cut to size at the site, and a type of earth believed to have been used for the original structure was used to make the mortar.

The middle tier of the tower will be left in its original condition as far as possible, while the double dome will be partly rebuilt. Ilyas Paltayev, a history teacher from the area, says that local people are thrilled with the project. "I also bring my students here to teach them about their history, and to show them how tradition can be preserved," he says.

Conservation and restoration techniques at the National Carpet Museum, Ashgabat

We have a saying, "Spread your carpet and I'll tell you what you have in your heart," says Tuvakbibi Durdieva, director of Turkmenistan's National Carpet Museum. "All the wisdom and art of the Turkmen people is represented in Turkmen carpets. Carpets are valued as more than just floor coverings, but as expressions of our history."

Turkmen carpets are considered to be among the finest in the world, with a dense symbolism using over 2,000 motifs to convey concepts such as tribal history, geography and philosophy. Seven major colors are used, with red, the predominant color, appearing in more than 200 shades.

With the desert country's population consisting largely of nomadic tribes until relatively recently, carpet production was a key aspect of domestic life, with carpets used for flooring, insulation and furnishing in traditional Turkmen huts, as well as for saddle bags, prayer rugs and gifts on ceremonial occasions such as weddings. Different regions gave rise to individual schools, with the water-rich areas of the Caspian Sea and Amu Dariya River making strong use of greens and blues.

The carpet museum, one of the few of its kind in the world, is housed in a converted shopping center in Ashgabat, and is home to about 2,000 carpets, including the oldest known Turkmen carpet woven 400 years before the current era. Many important old carpets damaged in a 1948 earthquake were collected by the museum, but the expertise and resources to restore them have been lacking.

A grant from the U.S. Ambassador's Fund for Cultural Preservation in 2005 enabled the museum to research traditional techniques for carpet restoration, to train in-house restorers and to build a facility to wash and dry the carpets.

Traditional expert weavers advised the restor-



ers to collect a desert herb called chogan and boil it in rainwater that had been allowed to stand for three days. This produced a Ph-neutral detergent that could be used to wash the carpets without causing further damage. Laundry and drying areas were constructed and several experts have been trained in restoration, a painstaking process of re-weaving damaged rugs at a rate of about half a square centimeter per day.

The museum has restored about 70 carpets, nearly half of them under the grant project. With 500-600 carpets in need of restoration, the task has barely begun. Among the carpets so far restored is one of the oldest pieces in the collection, a 13th century torba, or wall bag, from

the Ahal Teke tribe.

"We say carpet weaving is like digging a well with a needle. So you can imagine, restoration is much harder," says Durdieva. "A small piece can take four months."

Funds from the grant were also used to produce a website and a book about the collection in Turkmen, Russian and English. The museum used funds to purchase a microscope to enable researchers to document carpets according to the density of their weave; carpets in the museum's collection average between 200,000 and 340,000 knots per square meter.

Interest in carpet weaving is undergoing a revival, partly due to a resurgence of national pride



since independence and partly because weaving is one of the few sources of income in rural areas. But carpet conservation techniques were little known, and in danger of being lost. Durdieva is confident that the restoration of carpets is now on a more solid footing, with a further 12 students having received basic training from the museum's experts. She also hopes to hold classes for the general public.

"I'm confident that these skills are safe now," she says. "Our ancestors conveyed this golden heritage to us, and it would be a great shame for us to lose such art."