

## Mamluks

by the "Nile" . . . . The buildings of this town are made of iwad or clay like the walls of the gardens of Damascus. This consists of building two thirds of a cubit (approximately 30 cm) in clay, then leaving it to dry, then building above it in the same way . . . and so on until it is complete. The roofs are of wood and reeds and are generally domed or conical, in the form of cupolas of camel-backs, similar to the arch-shaped openings of vaults.'

Ibn Battuta's description of 1353 is not so full although he does indicate that he reached the city by boat and that it had a separate quarter for white merchants. He then describes the king's palace in some detail, in particular the audience hall which may be the same as that built by Abu Ishaq al-Saheli a decade or two earlier. The audience hall is contained within the palace and consists of a square domed chamber with triple-arched windows in each side. The windows are filled with wooden lattice work or grilles covered in silver and gold leaf (*mashrabiyya*?). Ibn Khaldun probably describing the same building notes that it was 'solidly built and faced with plaster; because such buildings are unknown in his [the sultan's] country'. Obvious parallels for this building can be found in the architecture of fourteenth-century North Africa and Spain (compare for example the *Salón del Trono* in the Alhambra). Next to the palace was a large open area used as a mosque or place of prayer.

The location of Mali's capital is unknown although it may be the site of Niani-en-Sankrani in Guinea occupied between the sixth and seventeenth centuries. Archaeological work at the site has revealed a large complex with a fortified royal compound, several residential areas, a metal-working centre and many cemeteries. A possible mosque site and Muslim cemetery have been identified near the royal complex which consists of a large square courtyard (20 m per side) and a smaller circular structure. The residential structures at the site consist of roundhouses built of mud with stone foundations.

**See also:** Djenné, Manding, West Africa

### Further reading:

H. Haselberger, 'Architekturskizzen aus der Republic Mali Ergebnisse der DIAFE 190709 des Frobenius Institut', *International Archives of Ethnography* 50(1): 244–80, 1966.

J. Hunwick, 'The mid-fourteenth-century capital of Mali', *Journal of African History* 14(2): 195–206, 1973.

## Mamluks

*Term applied to the architecture of Greater Syria and Egypt between 1250 and 1516. During this period the area was ruled by the Mamluk sultans based in Cairo.*

The word 'mamluk' is an Arabic term for slave and was applied to soldiers who, although non-Muslim by birth, had been captured as children, converted to Islam and trained to fight on behalf of their owners. The Mamluk sultanate had its origins in such slave soldiers, usually of Turkic or Mongol origin, who were used as guards by the Ayyubid sultans and princes. Gradually the Mamluks increased their power and by 1250 their position was so strong that they were able to depose and appoint sultans. In 1260 one of these soldiers, Baybars, became the first Mamluk sultan starting a tradition that was to endure for the next 250 years.

The Mamluk sultanate can be divided into two periods; the first lasted from 1250 to 1382 and is known as the Bahri (sea-based) Mamluk period because the dominant Mamluks were based on Roda island in the Nile delta. The second period from 1382 to 1517 is known as the Burji Mamluk period because those in power came from the Citadel in Cairo (*burj* is Arabic for tower). This period is sometimes also called the Circassian period, as most of the sultans were of Circassian origin.

The Mamluks were able to seize and retain power primarily through their superior military organization and training. This was demonstrated in 1260 when Sultan Baybars was able to halt the westward advance of the Mongols at the battle of 'Ayn Jalut in Palestine. Similarly the Mamluks continued to fight the Crusaders who by this time were confined to the coast of Syria. The main battles against the Crusaders took place under Sultan Qalaoun and his son Khalil, who in 1291 captured the cities of Acre, Tyre, Sidon, Beirut and Tripoli ending the Crusader presence in the Levant.

Mamluk architecture reflects the confidence derived from its military successes and is one of the most distinctive Islamic styles of building. The main source for Mamluk architecture was the buildings of the Ayyubids and in some senses the Mamluk style is simply a development of that of the Ayyubids. However, the Mamluks were also

influenced by other styles, in particular Italian and Andalusian architecture.

As with Ayyubid architecture there is a significant difference between Syrian and Egyptian Mamluk architecture, which can be explained by the availability of materials and differing traditions of building. In Egypt brick remained an important material of construction up until the fifteenth century, whereas in Syria it was seldom used. Other differences can be detected in decorative details such as the type of arch used in muqarnas mouldings (in Egypt they are angular points whereas in Syria they have a rounded profile). Another factor which created different styles was Cairo's position as capital city which meant that its buildings tended to be grander and more highly decorated than those of Syria. Jerusalem is interesting in this respect as its position midway between Damascus and Cairo made it susceptible to influences from both Syria and Egypt.

There are, however, several features which are characteristic of buildings throughout the area under Mamluk control. These can be considered under three headings: surface decoration, layout and planning, and structural elements.

### *Surface Decoration*

The most characteristic feature of Mamluk architecture (and art in general) is the use of heraldic blazons. These are usually round discs divided into three fields with various emblems (e.g. cup, horn, disc, etc.) set into the middle. Each sultan and group of Mamluks had their own blazon which would be applied to any objects belonging to the group including buildings. As well as providing dating evidence these blazons give a useful insight into how the Mamluk regime operated. Another related decoration employed on buildings was monumental calligraphy in Naskhi script, this would usually state the name and rank of a building's founder.

The usual surface for both blazons and calligraphy is ashlar masonry, although plaster and wood are also sometimes used. Other decorative motifs employed are geometric and floral patterns which are often interlaced. Ceramic tile decoration is rare, although coloured glass mosaics and inlaid marble are occasionally used for mihrabs and other places of special importance. One decorative feature to spread from Syria to Egypt is the use of ablaq

(alternating layers of different colours, or shades of masonry); this was used in Syria in Ayyubid times but is not found in Egypt until 1300 (it is possible that this idea may have Italian origins). Mashrabiyya screens of turned wood were also used for interiors.

### *Structural Elements*

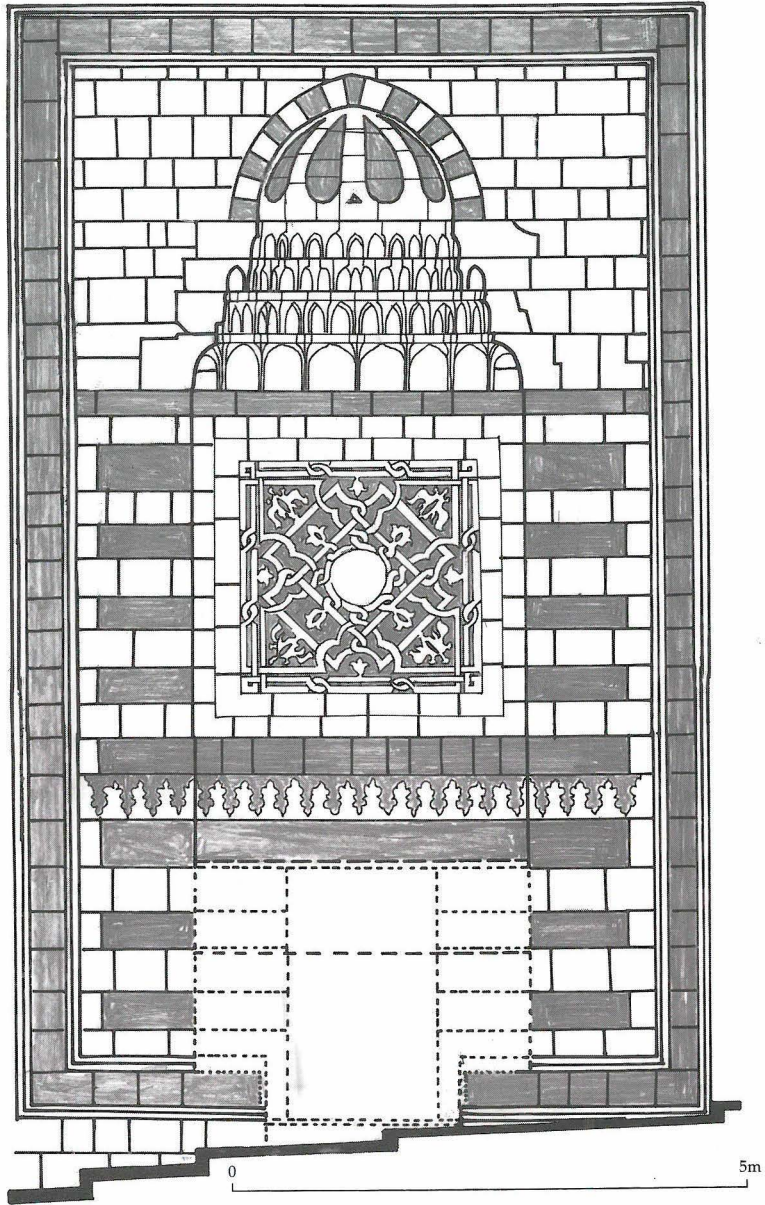
In addition to surface decoration many structural elements were developed into decorative features. Openings, in particular doorways, became subjects for elaboration and frequently consisted of a monumental frame or panel and a recessed niche for the door covered with a muqarnas vault. Another example of such elaboration is the joggled voussoir where the stones of an arch were cut so as to interlock and provide increased strength to the arch. Usually the effect is enhanced by using ablaq techniques. Sometimes this becomes purely surface decoration when the actual voussoirs are not intercut and there is simply an interlocking façade. Another decorative effect created with openings was the horsehoe arch which was introduced during this period.

Buildings were generally roofed with cross vaults although sometimes plain barrel vaults were used. In Jerusalem an elaborate form of vault called the folded cross vault was developed from Ayyubid military architecture. This is basically a cross vault with a large circular hole in the roof over which a wooden clerestory or other feature could be added. Domes were common in buildings of this period and could be made from a variety of materials including baked brick, wood and stone. Wooden domes were often used in houses and palaces because they were lighter and easier to build, although mausoleums tended to be covered with brick or stone domes. In fourteenth-century Cairo, masonry domes carved with arabesque designs became a fashionable method of covering tombs.

### *Layout and Planning*

The growth of cities during the Mamluk period meant that most types of building, even palaces, were located within the fabric of a city. The result of this was that buildings were often built on an irregular-shaped plot because of the shortage of space. Many Mamluk buildings which





*Doorway of Serai al-Takiyya. Mamluk period, Jerusalem (after Burgoyne)*

seem to be square and symmetrical are built on irregular ground plans. The architects were able to make the buildings appear square by a variety of techniques such as horizontal lines (ablaq) and controlled access (passageways) which distort perspective. A related problem was that narrow streets tend to detract from the visual impact of a building

façade. This was overcome by use of recessed entrances, domes, and projecting corners which have a cumulative effect of a staggered façade which can be viewed from the side.

The military nature of Mamluk rule affected society in many ways although it did not have much effect on architecture. The main reason for

this was that so many fortresses had been built by the Ayyubids and Crusaders that there was generally no need to build new castles when existing fortifications could be repaired. Also with the advance of the Mongols the nature of warfare changed so that speed and communications became more important than the defence and capture of strongholds. As a consequence of this the Mamluks invested instead in an efficient system of communication based on small forts, fire beacons and pigeon lofts. This system was kept separate from the usual trade network of khans and caravanserais and was regarded as part of the Mamluks' military organization.

### *Building Types*

Some of the most distinctive buildings of the Mamluk period are the many religious foundations. Most cities already had Friday mosques so that these were seldom built during this period. The Great Mosque in Tripoli is one exception to this and was built soon after the city was taken from the Crusaders, it has a traditional plan based around a central courtyard with single arcades on three sides and a double arcade on the qibla side. More typical of the period are the many religious institutions such as madrassas, zawiyas and khanqas built to counter the spread of Shi'ism. In Cairo these were often built to a cruciform plan which developed from the four-iwan madrasa where each iwan represents one of the schools of law. Many of these buildings also had some political purpose, thus they were often built as memorials to a particular Sultan or were used as centres for training officials. During this period it was common for the tomb of the founder to be incorporated into the building, this applied to mosques, madrassas and even hospitals.

Madrassas became a common feature in most cities and were used to train administrators. Jerusalem in particular seems to have been developed as a training ground for Mamluk clergy and officials and the area around the Haram was extensively developed (Mecca was too far from Cairo to be developed in this way and in any case was not directly under Mamluk control).

The stability provided by the Mamluk regime was a stimulus to trade and numerous suqs, khans and caravanserais can be dated to this period. The Suq al-Qattanin (Cotton Market) in Jerusalem is one of the best preserved Mamluk city markets. It

was built on the orders of Sultan al-Nasir Muhammad in 1336 as a huge complex with over fifty shop units, two bath houses and a khan. Each shop is a small cross-vaulted room opening onto the covered street with another room (for storage or accommodation) located above with a separate access. Although the highest concentration of suqs and khans was in the cities there was also an extensive network of roadside khans and caravanserais. Some of these buildings were quite large as they were not restricted by the competition for space evident in city buildings. Khan Yunis in Ghaza is a huge complex built in 1387 on the main road between Egypt and Syria. The plan comprises a huge central courtyard (perhaps with a building in the centre) with accommodation and storage units around the sides and a domed mosque with a minaret next to the gateway.

**See also:** ablaq, joggled voussoirs, mashrabiyya

### **Further reading:**

There are several books devoted to Mamluk cities; the most useful of these are:

M. H. Burgoyne and D. Richards, *Mamluk Jerusalem: An Architectural Study*, Essex 1987.

J. C. Garlin, J. Revault, B. Maury and M. Zakariya, *Palais et maisons du Caire: Époque mamelouke*, Paris 1982.

H. Salam-Liebeck, *The Architecture of Mamluk Tripoli*, Harvard 1983.

Other useful works are:

M. Abu Khalaf, 'Khan Yunnus and the khans of Palestine', *Levant* 15: 178–86, 1983.

J. C. Kessler, *The Carved Masonry Domes of Cairo*, London 1976.

J. Sauvaget, *La Poste aux Chevaux dans l'empire des Mamlouks*, Paris 1941.

## **Manda**

*Island trading port on the north Kenya coast in East Africa.*

This is the largest early Islamic complex in the Lamu archipelago and one of the largest on the coast. The earliest occupation seems to have been in the mid-eighth century and to have continued until the sixteenth when it was noted by the Portuguese.

The earliest structures at the site were made with timber posts and walls of wattle and daub. During the tenth century the settlement expanded on to an area of land reclaimed from the sea by sea walls built from huge coral blocks. Sometime in the tenth century the wooden structures were replaced with stone buildings made out of reef