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STUDIES ON SOUTH ASIAN ARCHITECTURE AND URBAN ENVIRONMENTS

MEHRDAD SHOKOOHY

VOLUME 2

PUBLISHED ARTICLES TO BE CONSIDERED TOGETHER WITH THE UNPUBLISHED MATERIAL AND OTHER PUBLISHED WORK

submitted for the degree of Doctor of Science at

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Tughluqabad, the Earliest Surviving Town of the Delhi Sultanate

By Mehrdad Shokoohy and Natalie H. Shokoohy

(Plates I–XVI)

Tughluqabad1 is the first of many sultanate and Mughul towns which were purposely planned and constructed on previously uninhabited sites. Built early in the fourteenth century, Tughluqabad was to serve as the capital of the newly established Tughluq dynasty. There were, of course, three earlier Muslim capitals in the vicinity, the first the Delhi of Rāī Pithūrā,2 converted to an Islamic town after the Ghurid conquest in 588/1192–3; the second Jalāl al-dīn Khaljī’s Shahr-i naw, which was founded by Mu‘izz al-dīn Kāī Qubād (685–8/1286–9) at Kīlukhari (or Kīlugharī) but left incomplete at the time of his death,3 and the third Sīrī, built by ‘Alā al-dīn Khaljī between 698/1298–9 and 700/1300–1 in the fields outside the walls of the older Delhi,4 but nothing has remained from these towns except parts of the fortification walls and some isolated monuments. The ruins of Tughluqabad, on the other hand, are enshrined in a time capsule. Built between 1320 and 1325 by Ghiyāth al-dīn Tughluq, the town had a brief life, and within a generation was abandoned and its population reduced to the size of a small village. As a result, most of its remains are datable to the short period of its duration in the first half of the fourteenth century. The only exception, as we shall see, are the remains of a small settlement which continued to exist around the old town centre, and in the late Mughal period also occupied the citadel.

Tughluqabad is situated about 15 km. south-east of the centre of New Delhi, yet in spite of its historical and archaeological importance it has not yet been fully studied, nor has any serious excavation been carried out there. The only monument in Tughluqabad which is well preserved and is known to specialists and laymen alike is the tomb of Tughluq Shāh outside the town,5 but the earlier studies concerning Tughluqabad itself have been limited to a report by Alexander Cunningham6 in 1862–3, and two surveys: an aerial survey of the town together with a detailed study of ‘Adilābād, a later fortified outflank added by Muhammad b. Tughluq at the south-east corner of the town,7 and a study of the sophisticated waterworks which provided a great artificial lake at the east of the town.8 The remains of Tughluqabad are

1 The present work is a preliminary report of a survey carried out in three seasons in 1986, 1990 and 1992 of the remains which could be seen above ground in Tughluqabad. The field-work has been supported by the British Academy. In the first stage a town plan was produced based on the surviving features on the ground, and with the help of an earlier published aerial photograph. The plan was then checked and amended on site and finally the main structures were surveyed in some detail. The final drawings were made in London with the help of Bahram Leissi, who also made a separate visit to the site.


3 Diwā’ al-dīn Barnī, Tūrīkh-i Firuz Shāhī (Calcutta: Bibliotheca Indica, Asiatic Society of Bengal, 1862), 176.

4 Ibid., 301–2.


6 Archaeological Survey of India Reports (Cunningham series) (ASIR), i, 1862–5, 212–17, pl. 35; also see Journal of the Asiatic Society of Bengal, xxxii, 1864, lxix–lxxiv; ASIR, iv, 1871–2, 77.

7 Hilary Waddington, ‘Adilābād, a part of the fourth Delhi’, Ancient India, 1, 1946, 60–76.

deteriorating rapidly,9 and with the growth of modern Delhi, Tughluqabad is now in the process of being transformed into one of the less prosperous suburbs of Delhi. Most of the new houses in the site are built partly or wholly with stones salvaged from the old ruins, and as a result, within the past two decades the size of the small settlement, which previously occupied only the area around the Jāmi' of Tughluqabad, has now spread over almost all of the south-east area of the town. At the time of our last surveying season in 1992 new houses were under construction close to the east gate of the fort, and the Jāmi' Masjid, the earliest of the grand mosques of the Tughluqs, was reduced to the piers of three of the chambers of its prayer hall and the platform of its minaret.

**TUGHLUQABAD**

Following the assassination of Mubārak Shāh Khaljī and the brief reign of his murderer, Khusrau Khan, the impostor sultan was defeated by Malik Ghāzī Tughluq, who brought his army from Dibālpūr to Delhi, and was enthroned as Sultan Ghiyāth al-dīn in 720/1320–21. As appears from Barni’s10 account, the construction of Tughluqabad started soon after his enthronement, and was funded by the revenue which he confiscated from those who had benefited from Khusrau Khan’s handouts from the Khaljī treasury.11 Ibn Baṭṭūţā12 records that the construction of Tughluqabad had been in the mind of Ghiyāth al-dīn from the time he was in the court of Qutb al-dīn Mubārak Shāh:

One day Tughluq was accompanying Qutb al-dīn and (pointed to the site and) said: ‘O Lord of the world (khwānd-i ‘alam) how good it would be if a city could be built there’. The sultan replied sharply, ‘Build it when you are the sultan.’ As God willed it he did become the sultan and built the city, naming it after himself.

However, there may have been other reasons for the construction of Tughluqabad. Not only by this time had construction of a new capital become a trend among the sultans of India, Tughluqabad could also be seen as a mark of the establishment of a new dynasty. From this point of view its founding is comparable to that of Kilugharī which marked the establishment of the Khaljīs.

The town seems to have been built during the first two years of the reign of Ghiyāth al-dīn, as Barnī13 informs us that in the events of 721/1321–2 the

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10 Barnī, 442.

11 Ibid., 432–3.


public audience was still held in the Khaljî palace of Sirî, but, a year later, Muhammed b. Tughluq's conquest of Arankal (Warangal) was celebrated both at Sirî and at Tughluqabad, and in the same year it was made the capital (dîr al-mulk). The architect of Tughluqabad was Ahmad b. Ayâz, a nobleman (malik zâda) of Anatolian origin (rûmi),14 expert in geometry and in charge of the royal buildings. At the time of Muhammad b. Tughluq he rose to the rank of grand vizier, with the title Khwaja Jahân, but Ibn Baṭṭûta15 accuses him of being responsible for the death of Ghiyâth al-dîn Tughluq, which occurred when a pavilion collapsed over the sultan's head during the review of the troops on his return from the Lakhnauti campaign at the end of Rajab 725/12 July 1352. The pavilion was designed and constructed in three days by Ahmad b. Ayâz under the order of Muhammad b. Tughluq. The formal accounts of the Tughluq court,16 although tainted with suspicion, are unanimous that the event was merely an accident. After Ghiyâth al-dîn's death, his body, and that of his other son Mahmûd who died with him, were brought to his famous tomb and buried there, and Muhammed b. Tughluq was enthroned in the audience hall of Tughluqabad.

At first glance it seems difficult to believe that a city of the size of Tughluqabad could have been built in two years, or at the most the four years and two months of the total reign of Ghiyâth al-dîn. Some scholars have indeed claimed17 that Tughluqabad could not have been fully populated by the time of Ghiyâth al-dîn's death, but this seems not to be the case. Barnî18 records that before Ghiyâth al-dîn's departure for Lakhnauti Tughluqabad was already the capital, and 'the emîrs, the nobles (mulâkî), the learned (ma'ârîfî), and the gentry (akâbîrî) together with their wives and children had built their houses there, and had occupied them'. Ibn Baṭṭûta,19 who saw the city when it was no longer the capital, also speaks of Tughluqabad as a living city and notes:

'Tughluq's treasury and palaces are located there,'20 and in it is the greatest palace, covered with golden brick, which, when the sun shines reflects dazzling light, preventing the eyes from looking at it for long. He collected great wealth in its treasures, and it is said that he built there a cistern (shîrij) and filled it with gold, all of which was spent by Muhammed Shah when he came to power.

Golden bricks may be a reference to the lustre painted ceramic tiles used extensively in Iran during the thirteenth and fourteenth centuries, but such tiles have not so far been found in India. It should also be noted that the construction of a city in two or three years is not unusual, and from the

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14 Ibn Baṭṭûta, 432.
15 Ibid., 461. This was the general belief of the time and is also recorded by the Arab historian Shahâb al-dîn Abû l-'Abbas Ahmad b. Yahâyâ known as Ibn Faḍlullâh al-'Umârî (697-749/1297-1348). See a translation of his Masa'ilîk al-ḥabîr fi mamâlik al-anâsir in H. M. Elliot and J. Dowson, The history of India as told by its own historians (London, 1871), iv, 610-11.
16 Barnî, 452-3; M. Shokoohy, Haryana I. The column of Firdâs Shah and other Islamic inscriptions from the district of Hisar (London: Corpus Inscriptionum Iranicarum, 1988), Part IV, vol. XLI, 21. The date given above appears in the inscription of the column of Firdâs Shah at Fatehabad, and varies slightly from that given by Barnî and other historians; also see Yâlâyâ b. Ahmad al-Sîhrîndî, Târîkh-i Muḥârak Shahî (Calcutta, 1931), 96.
17 ASIR, 1862-3, 213; also see R. Nath, History of sultanate architecture, 52. Nath claims, without any evidence, that Tughluqabad was built to enclose an already populated area. This is not supported by any of the historical accounts.
18 Barnî, 450.
19 Ibn Baṭṭûta, 461.
20 Barnî also notes that the treasury was in Tughluqabad, and that when Muhammad b. Tughluq decided to reduce the circulation of copper coins and replace them with silver and gold mounds of copper coins were accumulated at Tughluqabad. See Barnî, 476.
records of the later historians it is clear that in other places the sultans constructed their cities in the same time span. Shams Siraj, for example, notes that Firuz Shah founded Jaunpur in six months, and left its completion to Khân Jahân, and later built Hisâr-i Firûza in two and a half years. However, as we have noted, Tughluqabad began to decline soon after Muhammad b. Tughluq came to the throne. One of his first decisions was to abandon the palaces of his father and construct some of his own. This was, of course, not unusual, and followed the precedent of his father and the sultans before him, but a passage in Barni indicates that Muḥammad was perhaps uneasy about staying in his father's palace:

As Muhammad b. Tughluq Shah was the crown prince of Tughluq Shâh he was enthroned on the royal throne of the capital Tughluqâbâd ... but after forty days he left Tughluqâbâd for the city of Delhi, and seated himself on the throne of the former sultans in the old palace by way of a good and auspicious omen.

Later he returned to Tughluqâbâd for a short period, as the royal and administrative offices were still there, but he seems to have avoided his father's citadel and constructed the new citadel of ʿAdilâbâd as an outflank of the town. ʿAdilâbâd may have housed his private apartments only, as it is not large enough to include public and private audience halls, and his elaborate civic offices, described in some detail by the Tughluq historians and by Ibn Battûta. Muhammad soon left Tughluqâbâd altogether, and a few miles to its north built a new capital, Jahânpanâh, with palaces, audience halls and civic buildings. It was at this time that Ibn Battûta came to Delhi, and recorded his vivid description of life in the cities of Delhi. He tells us of a wealthy capital with buildings and palaces faced with marble and red stone, the streets of which were hung with silk from the gate of the town to the palace for royal processions, but during the seven years of his stay in Delhi he witnessed a total change in its fortune. A harsh famine in North India, as well as the brutality of Muhammad b. Tughluq, led to chaos, and the revolt of his governors in the south made the sultan abandon Delhi in favour of Daulatabad in the Deccan. He compelled most of the people of Delhi to move south to the new capital, leaving vast areas of Delhi depopulated. Although later in his reign Muḥammad returned to Delhi, and to his palaces in Jahânpanâh, Tughluqâbâd and indeed other cities of Delhi did not recover. The third Tughluq sultan, Firuz Shâh (1351–88) was to a certain extent successful in repopulating the cities of Delhi by repairing the old buildings and constructing a number of new mosques and other public buildings, but Tughluqâbâd was not included in these grand building projects. Later he built his own new capital, Firuzâbâd, on another site in Delhi, far north of Tughluqâbâd, removing the centre of population from that area completely. Tughluqâbâd was left as a deserted site, gradually falling into decay.

REMAINS OF TUGHLUQÂBAD

The site chosen by Ghiyath al-din for the town (fig. 1) was a hill surrounded by a basin which collected water during the monsoon. With the construction

21 Shams Siraj, 'Affî, Tūrkh-i Firûz Shâhî (Calcutta, 1891), 148.
23 Barni, 456.

of a number of dams, some with sluice gates, the area to the south of the town was made into a large lake. Ghiyath al-din built his imposing tomb in the form of a small castle on a man-made island in the middle of this lake, linking
the tomb to the fort by a causeway about 300 m. long. The citadel was to the south of the town, on the highest point of the hill. The town itself had an Islamic, typically Khurāsānī, plan similar to those of Tūs, Nishāpur and particularly Bust, with three fortified areas: the lower town (pā‘īn shahr), an upper town (bālā shahr) or fort (bālā ḥiṣār) and the citadel (arg). Some Khurāsānī towns consisted of only two enclaves, the arg and the town (shahrīs-tān or rabd) but in Tughluqabad all three areas are present, and not only the citadel but also the fort appears to have been exclusively royal, housing audience halls, partly preserved, and other public offices. The residences of the sultan’s close associates could also have been in the fort. The town itself was slightly larger than Sīrī, but much smaller than the combined cities of Delhi of the time. The perimeter of Tughluqabad measures about six kilometres, and the main streets were no more than two kilometres long, and most were considerably shorter. From its size it is clear that it was not intended to rehouse a great number of Delhi’s inhabitants, but a chosen section, worthy of living in the royal capital. The bulk of the population would have remained in the older cities of Delhi.

Fortification wall

As is usual in Islamic towns, the outline of Tughluqabad is not based on an artificially imposed geometric form, but follows the contours of the rocky hill. The general layout is in the form of a rough trapezium, and the town is protected by massive walls with stilted round towers and 12 defensible gates to the outside, two more gates between the fort and the town, as well as a single gate (figs. 1–2, no. 1) connecting the fort to the citadel, making a total of 15 gates. To these the ‘Adilābād Gate opened by Muḥammad b. Tughluq to give access to his new citadel should be added. Most of the gates have a layout consisting of a dog-leg corridor flanked with chambers and a portal opening outwards to a fortified courtyard, some with arcades and chambers around. Apart from the Anherī Gate, which is well preserved but does not have an outer defence, the other gates are in ruins, but it appears that in most of them the massive wall opposite the portal was blank, while an archway in one of the flanking walls gave access to the outside. Most of the gates are similar in size, but some of the town gates vary in their arrangement according to their position in the wall. The Khirki Gate opened to the lake south of the town, and in front of the outer portal is a ghāt, a flight of steps built on the bank of a river or reservoir to provide access to the water. Some of the gates, such as the Bandāoli, Bhatoī, and Chaklakhāna have adjoining circular chambers built into a solidly constructed platform leaning against the inner side of the fortification wall. In each platform there are five rows of two chambers, making a total of ten, each over 7 m. in diameter and 9 m. deep. They are domed but have no access to each other or to the outside, each having a narrow sloping shoot leading from the top of the platform to an opening just

26 Tūs has not yet been surveyed. For aerial photographs see M. Y. Kiani (ed.) A general study on urbanization and urban planning in Iran (Tehran: Ministry of Islamic Guidance Press, 1986), 228, 477.
27 ibid., 214, 229.
29 T. Yamamoto, et al., 1, 111–12, no. O.52.
Fig. 2 The fort: complex of palace buildings, also showing part of the citadel and its gate (numbers correspond with those in fig. 1).
below the dome. These chambers seem to have been grain silos, and are probably among those mentioned by Ibn Battūta\textsuperscript{30} as providing grain for the people during the famine of Delhi. He notes that such storehouses (\textit{ambār}) were common in the fortifications of the cities of Delhi, and some still had edible grain from the time of Balban, although it had turned black. In Delhi similar pits, smaller in diameter, are also found near the Badaon Gate of Qil’a Rāi Pithūra.\textsuperscript{31}

The postern gates, such as the one opening towards the tomb of Ghiyāth al-dīn (no. 2) have different outward defences. For example, in this gate a short corridor with two small flanking chambers opens to a walled ramp which led to the causeway to the tomb. Another postern gate (no. 3) in the eastern wall of the citadel is well above ground level, and, in case of siege, access to it could be cut off. Ghiyāth al-dīn was a military man and appears to have had it in mind to make his capital into a formidable fortress. His concern was not about rivals in India, but mainly the Mongols, who by this time had control over Central Asia and Iran, and had been threatening the sultans for over two generations.

The stone for constructing the walls seems to have been quarried locally, mainly from the site of the town itself. Some of the quarry sites in the fort and in the citadel were made into reservoirs, noted below. A larger quarry (no. 4) was in the fort, alongside the western wall of the citadel, and its site was incorporated into the design of the fort so that, after completion of the work, the quarry could be flooded to provide a large tank (pl. Ia) between the gate of the citadel and the royal buildings adjoining the audience halls in the fort. More stone was quarried from the area of the moats on the north side of the citadel and the fort. Incorporating the sites of quarries as features of the design of a fort can also be seen in later Islamic towns of India, such as Bidar,\textsuperscript{32} which has double and triple moats around the fort, but in Bidar the soft local stone is used as inner rubble for the walls while the hard stone for dressed casings was brought from quarries around Gulbarga, which are at a considerable distance from Bidar.

The fortification walls and most of the buildings are built of rubble stone with lime and sand mortar, and were cased with dressed stone. The stones of the casing of the ramparts are very large in size, and blocks of $0.5 \times 0.5 \times 2$ m. are normal, while many are larger, some over three metres long. Those used for the buildings are of normal size, and some structures did not have a dressed casing, the rubble stone, roughly dressed, being rendered with a layer of coarse under-plaster, about 3 to 4 cm. thick, skimmed with fine plaster. The construction material is similar to that mentioned by Shams Sirāj to have been used in Ḥisār-i Firūza, and is indeed common in the sultanate buildings of Delhi. In the case of the fortification walls, the casing stone protects the rubble core, and in Tughluqabad, wherever the casing has been pilfered the walls have fallen into decay.

The fortification walls vary in thickness. In some places, the walls are relatively thin at the base, as they are set directly against the living rock, but in other places, where the rampart had to be built up, they are over 10 m. thick. The highest walls are those of the fort and the citadel which reach up to 30 m., but on average the town walls measure between 10 and 15 m. The walls and towers are both battered from outside and in the fort area have a

\textsuperscript{30} Ibn Baṭṭūta, 437–9.

\textsuperscript{31} ASINC, 1912, 22, pl. 2; 1917, pl. 10b.

\textsuperscript{32} ASIAR, 1914–15, 140, pl. 70b; G. Yazdani, \textit{Bidar, its history and monuments} (Oxford, 1947), 30–1, pls. 2, 4.
sophisticated three-tiered defence system (figs. 3 and 7, pl. Ib). The first tier, sharply battered, rises up to about 12 m. from the outside ground level, and on the top of this is a ledge, over 2 m. wide, running all around the fort and the citadel. The ledge is protected by a battlement, with a row of loopholes. Above each loophole is a merlon in the form of a pointed arch, with a pair of apertures for the guards to look through (pls. Ia, VIIa). Above the ledge the wall rises again for between 5 to 10 m., and behind this wall runs a barrel vaulted gallery, part of which stands today, but in most areas the vaults and the upper parts of the walls have fallen. From inside the fort the gallery appears as an arcade set on a platform, and in some parts has another lower platform in front of it. The height of the platform on which the gallery is constructed varies, sometimes being up to 5 m., to correspond with the height of the walls from outside. The gallery has its own loopholes (pl. IIb) in two rows. The loopholes of the lower row are set in the spaces between those on the upper row, and slope outwards more steeply than those above, producing a longer aperture on the façade of the walls. At certain points a door in the outer wall of the gallery gives access to the ledge, but these doors, screened by the battlements, were out of sight of the enemy. The gallery also leads to semi-circular chambers built into the towers at this level, each with its own loopholes. The third line of defence is on the roof of the gallery, where the wall is topped by arch shaped battlements in each of which are two small loopholes. This massive defensive system gives the entire fort a sense of might and strength, but the construction of the lower tier of the towers is particularly worthy of attention. Although this tier appears as part of the original design it seems to have been added to the towers, in the form of an outer shell, not keyed into the inner shell. The construction method is revealed in a number of towers where parts of the outer shell have collapsed, showing the inner shell with its own finished casing of dressed stone; a weak point, responsible for some of the damage to the towers. The reason for employing such a method is not certain but it may be that as part of the strategy of constructing the fort with speed, the walls and inner shell of the towers were built first to enclose the area of the town, and later the reinforcement of the towers was carried out during or after the construction of the buildings of the town itself.

The citadel

The citadel was most probably the site of the private buildings of Ghiyath al-din, and was the most strongly defended area. Its only formal gate (no. 1) is in the middle of its western wall opening to the fort (pl. Ia), but, as already mentioned, there is also a postern gate (no. 3), and it may also have had hidden exits through secret passages. The walls, 20 to 30 m. above the level of the town and the plain, had a commanding view, and from the northern side almost all of the town could be viewed. The eastern and southern side looked over the artificial lake, surrounding the tomb of Ghiyath al-din.

The most prominent building of the citadel must have been a pavilion (no. 5) almost in its centre, originally built on a platform over a stepped pyramid of considerable height (pl. IIIa), and surrounded by palace buildings (pl. IIIb). The ruins of the pyramid still survive in the form of a mound, and part of the casing of the upper tier at the northern side can also be seen (fig. 4, pl. IVa). This side is faced with dressed stone, and has a large arched niche flanked by two smaller niches. On the platform above this tier are the foundations of the pavilion itself, showing that it was a square chamber, 8.3 m. across from inside with walls 2.2 m. thick at the base. There were three openings on each side
Fig. 3  The fort: defences of the south fortification wall. Plan section and elevation of the arcade in the fort.
the central one wider than the flanking ones, and what remains from the base of the walls indicates that the walls were built with the usual stone rubble and mortar. Nothing of the upper structure has survived, but from the plan it appears that the pavilion was in the form of a domed chamber (fig. 5) not unlike the tomb of Ghiyāth al-dīn on the lake below. This pavilion is recorded by the Āthār al-sanādīd to have been known as the Jahān-namā (the building looking over the world). Although we do not know which building in Tughluqabad would have been Ibn Baṭṭūṭa’s ‘great palace of golden brick’, the most likely one is this pavilion on its massive platform, which would have been seen from all directions.

Of the palace buildings which surrounded the Jahān-namā nothing survives,

33 Saiyid Ahmad Khan, Āthār al-sanādīd (Lucknow, 1876), 11; also see R. Nath, Monuments of Delhi, 5. Timūr and his historian Muhammad Sharaf al-dīn Yazdī both record a building with the name of jahān-namā set on the top of the hill and apparently near the east bank of the Jumna river about two parasangs (12 km.) from Delhi. The building and its surrounding area was plundered by Timūr’s army on 27 or 28 Rabi’ I, 801/7 or 8 December 1398, and later was used as a garrison. This may not be the same as the Jahān-namā of Tughluqabad, as Timūr and Yazdī do not record the name of Tughluqabad and both mention that their jahān-namā was a work of Firūz Shāh Tughluq. It is hard to believe that at the time of Timūr’s attack on Delhi, soon after the death of Firūz Shāh, the same generation of people could not remember who was the founder of which building. See translations of Mulfūṣūd-i Timūrī and Yazdī’s Zafar-nāma in H. M. Elliot and John Dowson, The history of India as told by its own historians, m, 434, 493.
Fig. 5 The citadel: Jahān-namā, conjectural reconstruction of plan, section and north elevation.

except some basement chambers (no. 6) and the general outline of the complex in the form of a large square platform (pl. IIIb), set at an angle of about 45 degrees against the enclosure of the citadel itself. Within the platform and along its western side are the basement chambers, set at either side of a long narrow corridor (pl. IVb). There are 32 accessible chambers, 16 at each side, but inside the platform there may be more chambers, to which the access has been blocked. The chambers are vaulted and each has a single door, opening to the corridor lit by apertures in the roof, but the chambers themselves have no windows, nor any other means of ventilation or lighting. The function of the chambers is not certain, but in spite of their appearance they were probably intended as stores and armouries rather than prison cells. Such dark basement chambers are not unusual in the palaces of the Tughluqs, and can also be found in the palace of Firūz Shāh in Hisar,34 noted by Shams Sirāj35 as forming a dark maze that no one could pass through without a lamp and a guide. In both sites the structural function of these chambers was to provide a raised platform for the residential buildings above. In Tughluqabad little has survived

34 M. Shokoohy and N. H. Shokoohy, Ḩiṣār-i Firūzā, 21, fig. 6.
35 Shams Sirāj, 126.
of the superstructures, and it appears that the stone was systematically salvaged for the construction of the dwellings of a late Mughal settlement inside the citadel. The ruins of a number of late Mughal houses, with lobed arched doors and niches still stand on the site of the palaces and are datable from the late sixteenth to the eighteenth century. It seems that the occupants continued to use the Tughluq reservoirs in the citadel and in the fort, and cultivated the open lands west of the Tughluq public buildings.

The main water supply within the citadel is a large stone-lined reservoir (baɔli) at the south-west corner of the citadel (no. 7). The reservoir (pl. III) is at the south end of a street which runs parallel to the western walls of the palace complex, and would have connected with another street which originally led to the gate of the citadel. Near the gate are the ruins of arcades and other buildings which may have housed guards and personal attendants of the court. The only standing building in this part of the site is a small mosque (no. 8), which may date originally from the Tughluq period, and have been preserved because of its religious nature by later inhabitants. Small mosques near the gates of forts and citadels are common in India, and were mainly for the use of the guards. One such mosque, dating from the time of Shāh Jahān, can be found in the fort of Nagaur,36 and another by the outer gate to the citadel of Daulatabad. This second mosque, still relatively unknown, is datable to the time of the Bahmanīs.

The guards' mosque (fig. 6, pls. Va and VIa) in the citadel of Tughluqabad consists of a single prayer hall 6.4 × 2.8 m. on the inside, with three arched openings on the eastern side and a similar door at the northern and the southern side. In the western wall there are three mihrābs corresponding with the eastern doors, but the central mihrāb is deeper and slightly wider than the other two, and has a projection outside the wall. Above the central door is a rectangular recess for the foundation inscription, but the inscription itself has not been found. The walls, 77 cm. thick, are slightly battered on the outside and support the sloping roof, in the form of a hipped roof, but of masonry construction. The battered walls may be an indication of a Tughluq date for the mosque, as such walls are characteristic of the period, and were not employed at later dates. The sloping roof, however, is common in sultanate architecture. The form is first seen in the entrance chamber of the tomb of Balban,37 and also appears in the buildings of the Tughluqs, as well as those of later dynasties.

THE FORT

Situated at the south-west corner of the town, the fort looked over the lake at the southern side, and was surrounded by a moat on the other sides. It had four main gates, and two postern gates: one at the south-east corner which opened to a ramp leading to the bridge of Ghiyāth al-dīn's tomb. This gate (no. 1) was restored early in this century and is now the main access to the protected complex, but, in the original design, it would have been exclusively for access by the sultan to his tomb, or to boats on the lake. Inside the fort the gate opens to a pathway which to the east continues at a right angle to the main gate of the citadel, and to the west ran alongside the defensive arcade.

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37 T. Yamamoto et al., i, 72, fig. 30.
of the fortification walls leading to the Hāthī Gate, which, like the Andherī Gate, does not have outer defences. The pathway also provides access to the south court of the complex of buildings in the fort. At the west of the fort the Delhi Gate opens directly to the fields outside the town, while the North Gate opens to the town itself and leads to a straight street known until the beginning of this century as Khāṣṣ Bāzār, ending at the Dhoban Dhobanī Gate. The East Gate opened to a short processional street which led to the Jāmi' of Tughluqabad, making this gate the main gate of the fort, through which most of the royal and administrative traffic must have passed.

The royal square

Inside the fort (fig. 2) the East Gate faced onto a large square (maidān) (no. 9) measuring about 180 x 120 m. There was probably an arcade running around the maidān, but only a mound of debris showing its outline can now be seen. At the northern and eastern sides the roof of the arcade seems to have provided a terrace for the defensive galleries of the fortifications, giving the square a two-storeyed elevation which was probably punctuated with domed pavilions over the towers on a third level. Offices of the court and administra-
tion could have been housed in the arcades of the square, while its field may have been used for ceremonies and royal functions. The square may also have been the formal polo ground of the palace. Although it seems that there was no fixed size for polo grounds, those which are better known, such as that within the Safavid Maidān-i Shāh of Isfahan, and the site considered to be the polo ground of Fathpur Sikri, are twice as long as the field of the Tughluqabad square. In the fort of Nagaur, too, behind the palace building there is an area which seems to have been a large polo ground, but these examples are all of late sixteenth and seventeenth century origin, and the size of polo grounds in the fourteenth century is not known.

At the south of the square stand the ruins of an arched gateway (no. 10 pl. Vb) opening to a walled area (no. 11) which was probably a courtyard also surrounded by arched vaults and chambers, but this area is now in ruins and its function is not certain. It is possible that it was a part of the royal stables. To the south of the area there is another ruined gatehouse which leads via a dog-leg into a long and narrow courtyard (no. 12) flanked by the fortification walls, and, at the western side by the long arcaded gallery of the wall, which has also survived (fig. 7, pls. Vlb and VIia). This is one of the best preserved parts of the fort buildings, and not only the defensive wall with its row of loopholes, but also most of the arches, together with the barrel vaulted ceiling still stand. The top of the vaults is filled with stone rubble to form a flat roof, providing another vantage point for defending the walls. On some of the interior surfaces the plaster rendering is also preserved. The courtyard opens on the southern side directly to the gatehouse of the citadel. The ground of the courtyard slopes towards the north and the arcade steps down accordingly. However, the original floor is buried under rubble, which in the north side has accumulated up to below the impost of the arches. Although the arcade is similar to the other galleries which run alongside the walls of the fort and the citadel, its confinement here within a courtyard near the probable stables, and on the sultan’s route from the citadel to the town via the royal square suggests that it may well have been the court where the saddled horses were brought for the sultan and his close companions.

At the west of the maidān are the ruins of what must have been the public buildings of the court, including the audience halls. The building complex is constructed around two large courtyards to the north, and three smaller one to the south. At the north of the complex is a street (no. 13) which begins at the north-west corner of the royal square, and, passing between the northern fortification wall and the northern courtyard (no. 15) probably continued to the North Gate of the fort, but beyond the palace complex its traces are now lost. Along the west side of the complex is another street (no. 14) which runs from the north fortification wall to the southern perimeter wall. This street marks the western limits of the buildings, and must have been the main service access to the complex. The courtyards seem to become progressively more private from north to south, with the two northern courtyards opening to the public square while the southernmost court (no. 21) is linked to the citadel via the southern street of the fort (no. 20). This type of progression is described in some detail by Ibn Baṭṭūta while speaking of the organization of

40 M. Shokoohy and N. H. Shokoohy, Nagaur, fig. 3.
41 Ibn Baṭṭūta, 465–6.
Muḥammad b. Tughluq's court at Jahānpanāh. He notes that before reaching the audience hall one passed through a number of gates and courts with chambers for the scribes, registrars, and administrators.
Public audience hall and courts

The north courtyard (no. 15) seems to be the forecourt of the southern courtyard (no. 17) which is nearly twice its size, and, as we shall see, is most likely to have been the court of public audience (fig. 8, pl. VIIb). The forecourt itself is nearly square on the inside, measuring about 50 x 65 m., and was originally surrounded by a series of chambers fronted by a colonnade. There was an entrance chamber in the middle of the northern side of courtyard 15, opening to the north street, and another at the middle of the eastern side, but this one is now in ruins and little can be seen of its outer and inner portals. The northern entrance is better preserved and consists of a chamber about 4.2 x 4.5 m. with relatively small portals which indicate that it was a secondary or service access. The chambers at the northern side (pl. VIIIa) are in ruins, but in general the walls are preserved, together with some of the arched entrances, and at some points the remains of their barrel vaults. Little remains, however, of the three rooms at the western end, and the entire western wing of the courtyard. The surviving rooms are mostly separate from each other, without interconnecting doors, and each has an arched doorway to the colonnade, and on the opposite side an arched niche in the wall. Usually there are also two smaller niches on each of the side walls of the chambers. The chambers at the eastern side are better preserved and the three at the southern end of this wing (pl. VIIIb) still have about half of their vaulted ceilings, together with their original plaster work intact. The vaults run north south, springing at the level of the impost of the entrance arches. The absence of communicating doors between the chambers may be an indication that they housed different administrative departments.

Of the colonnade around the courtyard only the bases of the columns remain in situ, while a number of the column shafts lie scattered on the ground. The colonnade seems to have had a flat ceiling supported by stone lintels or wooden beams resting on corbels set into the walls, some still in place. It would not be surprising if timber was used in the ceiling as evidence of such roof structures appears in many parts of the palace. Inside the colonnade, the wall was punctuated by the doors to the chambers and small niches at intervals. An interesting feature is a staircase opening into the ruined colonnade in front of the third chamber to the east of the north entrance (pl. VIIIa). This staircase indicates that above the chambers there may have been one or more storeys, of which little can now be seen.

The southern side of the forecourt is somewhat different as there seem to have been no chambers at this side, but only the colonnade with a large gateway (no. 16) in the centre opening to the main southern courtyard. At the west of the gate the colonnade of the forecourt (pl. IXb) is set back by 3.5 m. and opens at the west to a chamber which was probably connected to the chambers of the southern courtyard. This would have given access for the courtiers when the main gate was closed. The main gateway (fig. 9) is relatively well preserved and consists of a vaulted passage about 4.15 m. wide (pl. Xa) flanked by three chambers on either side, and having a large portal at each end (pls. VIIb and IXa). The massive walls, almost 1.4 m. thick, supported the roof, which together with the roofs of the chambers has now fallen, but the walls and almost all the arches still stand. The two northern chambers, 3.8 x 2.9 m., have access to the forecourt (pl. IXb), but the walls facing the forecourt are blind, giving the appearance of massive piers. This is also the case with the two southern chambers, which have access to the south court. The middle chambers have doorways only to the central passage. In this area the original plaster of the walls is preserved, decorated with carved roundels.
Fig. 8 The fort: the complex of palace buildings. Plan.
on the spandrels of the arches. The roundels each have a border in the form of a cord looping around itself, with a six-pointed star in the middle and a smaller rosette in its centre (pl. Xb). These roundels are, so far, the earliest Islamic cut stucco decoration found in India, and provide a rare impression of the luxurious finish of the buildings of Ghiyath al-din, of which all that is left to be seen are the crumbling skeletons.

The gate leads to a large and impressive courtyard (no. 17) built originally on a four iwân plan, with a great arch punctuating the middle of each side of the court (fig. 8, pl. XI). The plan is Persian in origin, and dates back to pre-Islamic times, but by the fourteenth century it was used for all types of public and private buildings in the Islamic world. In Tughluqabad, however, this is the earliest extant example of a four-iwân courtyard in India. The courtyard measures about 105 × 65 m. and three of the iwâns function as the portals at the north, east and west sides. Apart from the northern portal, already noted, the eastern portal, which is in ruins, opens to the royal square, and the western portal gives access to the rear street. This portal is better preserved and its northern wall still stands, giving an indication of its original form and size. At these sides of the courtyard were rooms or arcades which are now mostly in

Fig. 9 The fort: the gateway between the forecourt and the main court. Plan, north elevation and section.
ruins, but some of the walls still stand, showing that at the western side there
were arched windows (pl. XIIb) overlooking the rear street, but it seems that
the wall towards the square was blind. At the northern side the back walls of
the arcade stand up to the roof level and in some parts still retain the corbel
stones which once supported the roof. These stones are set close to each other
indicating that the ceiling must have been constructed with wooden beams.
The slim size of the corbel stones and the wide span of the arcade at this part
also indicates a timber structure, as stone lintels would have been too heavy,
and over such a large span would not stand the tensile forces.

The arrangement of the palaces of Tughluqabad and the royal square in
front seems to have been based on that of earlier Muslim palaces of India, of
which nothing has survived. They were, however, described by Ibn Battûtã,42
and, in the case of the palace of the Khalji Sultan Jalâl al-dîn Fîriz Shâh
(1290-96), which by that time had been given by Muhammad b. Tughluq to
one of his nobles, Amir Saïf al-dîn Ghaddã, we are told:

The palace is known as kîshk-i la‘î which means the red palace and it is a
great building with a vast audience area and an awe inspiring gallery (dihîliz
ha‘îl). On the top of the entrance is a pavilion (qubba) looking over the
audience area, and over another audience area and court (mashwar)53 behind,
through which one enters the palace. Sultan Jalal al-dîn used to sit there
(in the pavilion) and in his presence on those courts they played polo
(kura).44 I went there when Amir Saïf al-dîn was living there. It was full of
carpets and furniture, which were left abandoned and were deteriorating,
as it is a tradition in India that after the death of a sultan they leave his
palace as it was and the new sultan builds a new palace.

A similar layout seems to have been used earlier in Iranian palace buildings.
In 484/1091-2 Khwâja Nizîm al-Mulk45 describes such an arrangement for
the palace of the Sasanian emperor Qubad in the account of the ruthless
massacre of the Mazdakîs. The audience court is referred to as sarâ, the
forecourt sarîcha (small court) and the square, which, like that of
Tughluqabad, was walled and secured by a gate, madân-i chaugân (polo
ground). The setting Nizâm al-Mulk describes may well be based on his own
observations of the ruins of Sasanian palaces, a common feature of the land-
scape of his time, or alternatively on the usual layout for a Seljuq palace,
familiar to him and to his patron Malik Shâh.

In Tughluqabad, the main iwân is that in the south (no. 18). It seems that
on the façade it had an arch which has now collapsed, but had a span of about
21.5 m. supported by massive piers, some parts of which still stand up to over
3 m. above ground (pl. Xllä). The Tughluqabad iwân does not open directly
to a chamber behind, and at the ground level its southern wall is blind, with
three decorative niches (pl. XIIb). However, at a higher level, above the niches,

42 ibid., 482.
43 Ibn Battûtã uses the word mashwar (place of audience) for both covered halls and open
courts. We know from other sources, for example in the case of Ahmadabad described below,
that audiences were also held in open courts, and even in the square in front of the palace. From
his description quoted here it seems likely that Ibn Battûtã is referring to open areas; also see
H. A. R. Gibb, The travels of Ibn Battûtã, ed. C. Defremery and B. R. Sanguinetti (Cambridge,
1971), m, 685, n. 112.
44 Gibb translates the word kura as mall, presumably referring to the western game of pall
mall, a game played on open ground in which a ball is hit by mallets, but of course the royal ball
game in Iran and India was polo, as given in our translation. This confirms that mashwar here
refers to open ground.
45 Khwâja Nizîm al-Mulk, Siyar al-mulûk also known as Siyâsat-nâma, ed. Hubert Darke
there are the ruins of a rectangular chamber, which looked over the īwān through three open arches: an arrangement similar to that of the upper rear chamber of the Hindola Maḥal, the audience hall of the palace complex at Mandu. The colossal size of the Tughluqabad īwān, 35.7 m long, also indicates that it was designed for large gatherings, and, as there was no other roofed area of this size, it is very likely that the īwān itself was the hall of public audience. In this case the rear chamber at the upper level would have been the throne room, and it seems that the arrangements of the Mandu audience hall was modelled on Tughluqabad, or perhaps other early sultanate halls which have not survived. The origins of the īwān as an audience hall, opening to an audience courtyard, go back to the Sasanian period or even earlier, and the best example is, of course, the Taq-i Kisrā at Ctesiphon, where the īwān itself is the throne room and there is no chamber behind it. In the palaces of the early Caliphs the audience hall is sometimes an appendage to the īwān as in Qasr al-Mshattā, and sometimes is in the form of a domed chamber behind the īwān, as in the palace of al-Ukhaidir. We know very little of early Islamic Iranian and Central Asian palaces, and the only royal sites investigated in some depth are Ghazna and Lashkari Bāzār where two Ghaznavid palaces have come to light, each having an audience chamber behind an īwān, but in both cases the two parts are at the same level. The highest chamber at Tughluqabad is, in essence, closer to the Sasanian concept, where the throne is known to have been on a high platform, putting the attendants below the ruler’s feet.

The audience īwān of Tughluqabad is, however, somewhat unusual in India. Although the Hindola Maḥal of Mandu has a comparable interior arrangement, it is not in the form of an īwān, but is a free-standing structure. In Bidar the audience court has four īwāns, but they are not the prominent feature being in the form of small colonnaded porticos in front of the audience chambers. The audience hall of Muḥammad b. Tughluq also seems to have been very different from that of his father. Muḥammad’s audience hall, known as the Hall of One Thousand Columns (hisār ustān) has not survived, but is well known through the description of Ibn Baṭṭūta who mentions it had columns of oiled wood, with a timber ceiling decorated with fine paintings. Wood, as we have noted, was also used in Tughluqabad, but without excavation we cannot be certain if the īwān had a vault, or a timber ceiling supported by a number of great arches spanning the īwān. The hall of hisār ustān may have been modelled after Central Asian audience halls, of which little has survived but the tradition is well known through other wooden buildings of that region. The style may have also existed in India before the Tughluqs, side by side with the old Sasano-Islamic forms; later, in the sixteenth and seventeenth century it was indeed translated into stone in the colonnaded and arced audience halls of the Mughals.

46 G. Yazdani, Mandi, the City of Joy (Oxford: OUP, 1929), 70–5.
48 K. A. C. Creswell, Early Muslim architecture (Oxford, 1969), i, Part 2, 578, 584–8; figs. 630, 644, for the Sasanian origin see ibid., 515–18.
49 Ibid., ii, 1940, 66–7; fig. 64.
51 D. Schlumberger, Lashkari Bāzār, Mémoires de la DAPA, xviii, Part IA, 34–5, pl. 3. For the relationship of the throne room with the smaller person to person audience chamber behind it see ibid., 38–41, pls. 13–16.
53 Ibn Baṭṭūta, 466.
The side walls of the ḫwān each have four arches, all in the form of blind niches, except that at the south end of the west wall which is open. Some of the niches may have small doors leading to the series of flanking interconnected chambers situated at both sides of the ḫwān, but the lower parts of the side walls of the ḫwān are at present buried in debris and no doors can be seen. The open arch of the western wall leads to a rectangular courtyard (no. 19) to the west of which is a street, while on the southern side is another building with a small central courtyard of its own (no. 24).

Behind the ḫwān is a mound of rubble burying the lower parts of a building which appears to have been in several storeys, and incorporated the throne room. The uppermost level of what remains of this structure indicate that here there was a central chamber with three arches on each side. The arches on the north side open onto a terrace to the south of the throne room, and on the other sides they lead to three rectangular chambers or porticos, with two smaller chambers, on the south-east and south-west corners. The rooms would probably have been for private royal use, and a place to which the sultan could retire during audiences.

Private audience halls and courts

The buildings to the south of Court 19 and the multi-storeyed structure (fig. 10, pl. XIIIa) are part of a complex with two halls which may have been private audience halls. Court 19 provided a link from this southern complex to the northern courts, but as we have already noted, the main access to the southern complex was from the citadel gate, via the street (no. 20) which goes towards the gate to the tomb of Ghiyāth al-dīn, and then passes alongside the southern wall of the fort. This street is far removed from the main route which would have been used by the public, and was perhaps for the private use of the sultan and his close companions. The street leads to the remains of a gate which opened to a large court (no. 21) at the south of the complex. At the east of the court are the foundations of some rooms which do not line up with the main buildings of the complex and are likely to be later additions.

At the north-east of the court is another smaller court (no. 22) with two halls at its north and west side. The court is opposite the citadel gate and its eastern side is on the bank of a rectangular tank as big as a lake, which separated the citadel from the complex. When the stone of the tank was quarried for the construction of the fort two narrow bars of solid rock were left running across the tank: one in front of this courtyard and the citadel gate, and the other further north (pl. Ia). The rock may have been left to support the foundations of bridges between the citadel and the compound, but no trace of any bridge can be seen today on either bank, and it is not certain whether or not such bridges were ever constructed.

The main hall at the north (no. 23) opens to the courtyard with nine tall arches, five of which still stand (pl. XIIIa), and the remains of the others are traceable on the ground, two at either side. The hall has been occupied at later dates, when additions and alterations were carried out, including a wall across the hall and two secondary arches built into two of the tall arches of the southern façade. Inside (pl. XIIIb), the hall is filled with rubble and there is also a row of vaults at the northern side, but without excavation it is difficult to establish whether or not they are part of the original design. These vaults rise to about four metres, and their roof provides a balcony or a mezzanine along the north of the hall. The most interesting feature of the hall is, however, the ceiling. Although it has long collapsed, from the support structures in the wall it is clear that it must have been constructed with timber. These supports
are in the form of stone brackets about 30 cm. wide, and set 80 cm. apart. Above the brackets are recesses in the wall, indicating that while brackets supported the load of the beams, their ends were firmly fixed into the walls to minimize movement. This system is only suitable for the relatively light timber structure of a ceiling. Since on the exterior, the upper cornice of the wall and the seatings of some water spouts remain, it seems that the halls were single storeyed and there was no other structure above. We have already seen that a similar type of corbel stones is also present in the colonnades of the two courts, and that many parts of the palace buildings appear to have had timber ceilings. The palaces of Tughluqabad, therefore, represent the earliest known example of such ceilings in the Islamic buildings of India. However, the appearance of the form is not surprising, as we know from Ibn Baṭṭūta’s description of the
timber ceiling of the hizär ustün, and there were also similar ceilings in the Bahmani palaces of Bidar.\textsuperscript{54} In the palace of Fīrūz Shāh Tughluq in Hisar evidence of a timber ceiling has also been found.\textsuperscript{55}

The eastern wall of the hall is now in ruins, but it seems that there were no other structures at this side and the hall was set near the bank of the tank, probably with a view over it. At the western side it was connected via two small chambers to the smaller hall which is set at the west of the courtyard and has two tall arches, with a smaller arch to the chamber in the southeastern corner (pl. XIVa). The middle arches are the same height, but slightly wider than the arches of the main hall. The smaller arch at the northern side has been filled in during a secondary occupation of the hall. As with the main hall the ceiling of this hall must also have been of wood, as it has the same type of stone support brackets set into the walls at the level of those of the main hall. On the interior and exterior of both halls part of the original plasterwork has survived, but it is plain and seems not to have had cut stucco ornamentation.

The smaller hall is at the east of the building (no. 24) situated at the south of Courtyard no. 19 and noted above. This building has a central courtyard about 20 m. square with a number of chambers at the other three sides (pl. XIIIa). If the eastern hall was for occasions such as small or private audiences of the sultan, this court, which could be entered directly from the southern court must have been used before entering the halls or after retiring from an audience.

The compound as a whole, while in ruins, is still not only the earliest but also the most complete and best preserved example of the palace buildings of the sultanate of Delhi.\textsuperscript{56} Although all the major components of such public palaces seem to be identifiable in the compound, it differs in layout and in the distribution of space, as well as in its masonry construction, from the palaces of the Mughals, distinguished by their colonnades and arcades. Although we know of at least one 'golden' building at Tughluqabad and are informed of the existence of exquisite decoration and painting in other Tughluq buildings, the architecture of Ghiyāth al-dīn’s palace does not rely for effect on its surface decoration. The forms are restrained and rely more on the expression of the structural elements, and the relationship between open and covered spaces. The interconnected chambers with solid walls, opening on large courtyards with arches of various sizes, provide a procession of movement from the bright exterior to the progressively darker interior, and the spaces are emphasized by the contrast of light and shade. This architecture is closer in spirit to that of Central Asia and Iran, and indeed the rest of the Islamic world than to what is to be found elsewhere in the subcontinent. How far this architecture is the result of Ghiyāth al-dīn’s personal taste we cannot say, but we do know that the construction of the town was his burning desire, and it was in Tughluqabad that for the first time buildings were constructed with battered walls, a style imported probably from Multan and Khurāsān. This feature and many other characteristics of the palaces of Tughluqabad became prototypes for the buildings of the later sultans of the dynasty, and provided a particular style with which the fourteenth-century architecture of Delhi is now associated. Similar

\textsuperscript{54} G. Yazdani, Bidar, 64.
\textsuperscript{55} M. Shokoohy and N. H. Shokoohy, Hisar-i Fīritza, 24.
\textsuperscript{56} The only other Tughluq palace which has survived extensively is Fīrūz Shāh’s palace in Hisar, but little remains of the audience halls there, and the general organization of the planning is not as clear as that of Tughluqabad, see ibid., 17–32.
constituents were later incorporated into the architecture of other parts of India, as far away as Mandu and the Deccan.

Other sites in the fort
To the south-west of the palace compound and alongside the fortification walls the foundations of a number of buildings can be found for about 350 m. westward. Little remains of these buildings, and their original function is not certain, but they could have been a collection of utilitarian structures such as the royal kitchens, the houses for close courtiers and accommodation for the palace servants. In this area there is also a deep stepped reservoir (no. 25), rectangular in plan with its retaining wall lined with dressed stone. The reservoir, comparable in size to that in the citadel, seems to have been a main source of water for the fort. The rest of the area of the fort seems never to have been built up, and was probably not intended to be occupied by buildings. This vast area measures about 24 hectares (60 acres) and is very likely to have accommodated the gardens and orchards, and probably a full-sized polo ground. Part of the area may have been reserved for cultivation, so as to provide food for the palace in case of a long siege. Farm lands within the walls of Persian forts are mentioned in the histories, for example Ibn Funduq57 records that, after the devastation of Baihaq by the Ghaznavid Sultan Muḥammad b. Mahmūd in 429/1037–38, people did not farm their lands outside the town for seven years, and the only farms which were sustained were those within the royal walls. Such cultivated areas are also common in the forts of India, the largest of all perhaps being that of the fort of Bidar which occupies a picturesque valley with a village, a stream and a semi-natural lake to the north of the palace complex. In Tughluqabad the area has also been farmed at later dates, particularly by the late Mughal community which lived in the citadel. As a result the surface remains have been disturbed, and the stones of the buildings have been used for low walls to enclose the agricultural plots. In spite of these disturbances the foundations of four buildings (no. 27), some probably garden pavilions, can still be found in the area, two near each other at the east of the centre, and two more at the north-west. A fifth structure (no. 26) is a free-standing granary similar to those near the city walls, but in this case the stone built platform 28.5 × 20.3 m. contains only six circular chambers each seven metres in diameter. It used to be known as Hathi Kund.

The town
Inside the town most of the street layout is still preserved although it is sometimes difficult to follow on the ground. The main streets are fairly straight, some aligned with the north-south or east-west coordinates. Three of the streets which end at the gates of the fort may be called the principal streets. Two of these start at the north-east corner of the fort; one leading north and the other east. The remains of this second street can hardly be seen any longer, as the modern buildings of the settlement at the south-east of the town have now covered most of the area. Only the very end of the western part of the street has still remained outside the built-up area, and the outline of the rest of it can be seen in the aerial photograph. The street opened originally to an area, probably a square (no. 28), in front of the east gate of the fort, and continued towards the Jāmi‘ mosque, described below. The street is orientated in the

direction of the qibla, and almost on the central axis of the mosque. This relatively short street would have been used for the regal processions on Fridays when the sultan attended the congregational prayers. It appears that a street ran originally all around the mosque, and at its southern and eastern sides the modern roads may be on the outlines of the older street. At the eastern side of the Jāmi‘ the processional street continues towards the Rawul Gate in the middle of the eastern wall of the town, and at this part the outline of the street seems once again to have been partially preserved in the present built up area.

The area at the eastern front of the fort and at the opening of the processional street appears to have been a square (no. 28) connected to the east gate by a bridge over the moat. The remains of the moat can still be seen, but the pilfering of the stones of the site has left little of anything else, not even the superstructure of the gate itself. The only feature still remaining intact, and indeed still in use, is a ba‘oli or step-well (no. 29, pl. XVb)58 to the east of the gate and at a position which may have been the northern corner of the processional street opening to the square. The well has a stone-lined circular shaft, and at its south a flight of steps reaches down to the water level. There are five other step-wells and a number of other wells (no. 30) scattered at different parts of the town.59 Four of these wells are in the northern part of the town which has been unoccupied for centuries.

Squares in front of the main gates of the royal quarters are common in Persian cities, and a well known example is the already noted Maidān-i Shāh of Isfahan: a well defined square with shops and arcades all around, and a polo ground in the middle. In Indian Islamic towns founded after Tughluqabad such squares are also present, examples being the royal square in front of the Lāl Darwāza of Ahmadabad,60 and that in front of the gate of the Nagaur fort. The sides of both of these squares were originally well defined by arcades and buildings. In Bidar too there is a similar open area in front of the main gate of the fort, and connected to the gate by a bridge over a triple moat. This area also opens to the processional street which leads to the Jāmi‘. However, it seems that this area in Bidar was not defined by buildings in the form of a square, but was an open field overlooked by a particular chamber within a royal tower (burj-i shāhī) in the fort, from which the sultan reviewed his army.61

In Tughluqabad nothing has remained above ground to indicate whether or not the square was surrounded by buildings and shops. The Tughluqabad square must have been the counterpart of the royal square inside the fort. While the one in the fort would have been accessible only to the nobles and courtiers, this square was for the people, and a place for most civic and commercial activities. In the old aerial photograph there are some traces of buildings surrounding the square, and the fact that the area has been plundered for old stones also indicates that the square may have had well defined boundaries with buildings and shops around. However, only by systematic excavation can the original form of the square be revealed, and that only if it is carried out before the area is built over completely.

The north side of the square opens to the other principal street, which, as already noted, continues on a direct line ending in front of the gate at the western side of the north wall of the town. This street is parallel to the third principal street, known until the beginning of this century as the Khāṣṣ Bāzār,

58 T. Yamamoto et al., i, 92, no. W.5.
60 James Burgess, The Muhammadian architecture of Ahmadabad, Part I, A.D. 1412 to 1520 (London: ASI, 1900), New Imperial Series, xxiv, 25. The royal square of Ahmadabad is partly preserved and is discussed below.
61 G. Yazdani, Bidar, 44.
the southern end of which opens in front of the north gate of the fort, and the northern end to an open area in front of the Dhanob Dhanobi Gate at the north end of the western wall of the town. In front of the north gate of the fort there is a causeway over the moat, linking the gate to this third street. The two northern principal streets intersect with the main east-west streets, which connected originally the eastern and western gates of the town. The outlines of these streets are well preserved, and are defined by the surviving platforms of the houses on either side. However, at the eastern side of the town traces of these streets disappear. In this area there are two depressions in the ground near the Rawul and Bhatoi Gates. These hollows fill with monsoon rain, and may have been used as reservoirs. The one to the north is much larger, probably making a small lake, with its banks surrounded by houses. A tunnel under the eastern wall of the town, and north of the Bhatoi Gate connected the lake with the moat outside the town, probably to secure a permanent water supply for the lake. The east end of the two northern east-west streets may have curved around the banks of the lake. Apart from the streets intersecting the town, there also seems to have been a lane running alongside the fortifications. This would have given access to the steps up the sides of the walls, for maintenance and defence. In many later towns, houses are to be found built right up to the town walls, but the arrangement in Tughluqabad indicates that this was not the case here.

Houses and public buildings

Remains of houses and other structures can be found in most of the town, but the systematic pilfering of the stones from the buildings of the town, which was more accessible than the fort, with its high rampart, has left little of the superstructures. However, not all the buildings seem to date from the Tughluq period, as the small community which continued to live in Tughluqabad has left buildings of later periods, the foundations of which appear to have been set over the earlier foundations, but on different orientations. We have already noted such buildings in the citadel. In the town the main area with secondary buildings is to the north of the Jami’ mosque, where later buildings cover even the site of the old streets. In our town plan this area and the modern built up area is left blank. In the rest of the town the layout of the houses and other buildings follows the orientation of the streets, and must date from the time of Ghiyāth al-dīn, confirming the account of Barnī that the town was indeed populated during the short period of his reign.

It is difficult to recognize the function of the buildings, but the area in the north of the town was clearly residential, built up with clusters of buildings. The foundations of many houses are preserved, mostly on platforms built between 0.7 to 1.5 m. above ground, and as a whole it seems that the houses were planned around one or several central courtyards. The foundations of a house (no. 38) near the Chaklakhāna Gate were surveyed, and it appears from the plan (fig. 11) that at the north and south of the courtyard there were small ḍwāns, that on the north opening to two large rooms, and that on the south to a small rear chamber which may have been the entrance. The residential areas were compactly built, with narrow side streets giving access to the main streets. The boundaries of individual houses are not defined, and each group of buildings with a number of courtyards set between the main streets and the side streets may indeed have been more than one dwelling. In spite of the compactness of this built up area, in between some houses there are larger sites enclosed by walls, but with little or no remains of structures within. These areas are likely to have been private gardens, associated with the nearby houses.
In the residential areas there must have been a number of small local mosques for each quarter, but without excavation none can be firmly identified, in spite of the difference in orientation between houses and mosques. There are, however, a few larger buildings with their western walls orientated towards the qibla, and these may have been mosques. Two such buildings (nos. 31 and 32) are near the Bhatol Gate. Three sides of these sites follow the street orientations, but the western walls are clearly orientated towards the qibla. These structures may have been the grander mosques of the mahallas. The building (no. 32) nearer the gate seems to have had a considerable superstructure, indicated by a mound of rubble and collapsed building material there. A third site of particular interest (no. 33) is at the south-east corner of the town, near the Khirkî Gate. The site consists of a building with a square central courtyard, orientated towards the qibla and set within a larger compound with a different orientation. The building with the square courtyard had a hall at the qibla side, and the other sides were surrounded originally by a number of chambers, the piers of which still stand, and it is very likely to have been a mosque, a madrasa, or a shrine. The larger compound also seems to have had
chambers at the southern and eastern side, and may have been a sarai associated with the religious building. The mosques and shrines of Delhi are known to have had large institutions attached to them, including schools, hospices for housing the poor and travellers, and even public kitchens. Ibn Battuta, who at the time of the famine of Delhi was in charge of one of these establishments, notes that during this time the public kitchens provided food for a great number of people.62

In the centre of the town, and at the north-east of the crossing of two of the main streets there are two large areas, one rectangular (no. 34) measuring about 60 × 100 m., and the other (no. 35) approximately 100 m. square. The areas are not orientated towards the qibla, and would not have been of a religious nature. Their large size suggests that they were likely to have been for public use, and each appears to have had structures around a large central open space, with the street between the two areas still relatively well preserved. In the rectangular area the foundations of large chambers or shops can still be seen above ground. It is likely that one or both of these areas were centralized market places. Such markets are common in Indian towns, and specialize in particular commodities such as grains and pulses, spices, or fruit and vegetables. Ibn Battuta reports such a square as being the grain market of the old city of Delhi (Qil'a Rāi Pithūra) near its Manduwi gate,63 and in Bidar a similar central market, known as 'Uthmān Ganj Market is still in use. In Tughluqabad, as in other towns, in addition to a central market there must have been shops and bazaars alongside some of the main streets and particularly the processional street between the palace and the Jámi', but no sign of the trading areas can now be seen over ground.

The Jámi' mosque

The most important building of the town was, of course, its congregational mosque, where the sultan attended the Friday prayers, and the sermon (khutba) was read in his name. However, little is now left of this once sizable building. Its remains occupy an almost square site measuring over 110 × 110 m., larger than any one of the palace courts, and about a third of the size of the citadel. What now remains of the mosque (fig. 12) is part of its platform, four of the central units of the arcade of its prayer hall (pls. XIVb and XVIa), and the platform of its minaret (pl. XVib). Some parts of the site, particularly at the northern side, have long been occupied by houses, and the monument is in such a ruinous state that without excavation even the number of the bays of the prayer hall cannot be firmly established. However, from what has remained it is possible to conjecture the general size and form of the building represented in our tentative reconstruction sketch (fig. 14), which gives an impression of its probable original proportions and appearance. The mosque was set on a platform about five metres high, the core of which was filled in, but which had a vaulted corridor or a series of vaulted chambers running around it. At the north-west corner of the site, part of the platform, together with its surrounding vault, stood until 1990 (pl. XVa), but by 1992 had been demolished. In parts of the eastern side traces of the vaults can, however, still be seen. At the western side the prayer hall was constructed in the form of an arcade, at least two aisles deep and seven bays wide making 14 units, each about 13 m. square in plan. At each end of the prayer hall there may have been a narrower bay, but nothing of these bays can now be seen above ground.

63 Ibid., 439.
The surviving walls and piers of four of the central units are at the qibla side, and stand in parts up to the level of the transitional zone of the roof, which in two of the units is in the form of pendentives, indicating that the chambers
were domed (fig. 13). In the central unit there are no traces of these pendentives and, as is usual in Indian mosques, the dome of this chamber must have been raised on squinches which would have been set on the top of the walls and above the level of the pendentives, making the central dome stand higher than the other domes. The height of the hall up to the level of the top of the pendentives is over 9.5 m., and up to the top of the domes could have been about 15 m., with the central domes presumably even higher.

The walls and piers are built of rubble stone with sand and lime mortar, and on the exterior some keystones of the ashlar casing are preserved, but the casing stones themselves have long ago been pilfered. This lays bare the construction method used for the building. The casing blocks differed in size, but on average were about $35 \times 35 \times 70$ cm., and to bond them with the rubble core, after one or two stretcher blocks, a through stone was set with the head
deep in the core. These stones have survived as it is difficult to pull them out of the wall. What has remained from the core of the walls and piers is about 3 m. thick, but the original thickness would have been even greater. Such massive walls and piers may have been felt necessary for carrying the load of domes each 13 m. in diameter, and must have given a sense of might and strength to the building, to match the general appearance of the fortifications and the palaces.

In spite of its massive structure, the interior would have been bright and well ventilated. The wide arches, spanning about 7 m., would have facilitated the penetration of light and circulation of air. In addition, in the qibla wall there were a number of windows, one at each side of the mihrāb of each unit. Only one of the mihrābs is preserved (fig. 13), in the form of a curved niche in the middle of the unit to the south of the central unit, but not enough is left of the mihrāb to establish its original form. The qibla wall of the central chamber is only partly preserved, and the interior of the main mihrāb is lost, but on the exterior there is a projection at the level of the platform, indicating that, as usual in India, the central mihrāb projected outside the wall.

In front of the prayer hall is the courtyard, but nothing remains of the constructions of its other three sides, and it is not clear if the building had an Arab-type plan with an arcade all around the court. If there were such an arcade, its western end might have matched the two probable narrow bays of the prayer hall. Only at the southern end of the eastern side of the mosque, and by the platform of the minaret, are the remains of arches which suggest that there may have been an arcade at this side, but it is possible that the arcade did not continue on the northern and southern sides. At the middle of the eastern side was the main entrance of the mosque, and there may have been other entrances at the north and south side, of which nothing has survived. The interesting and unusual feature of the mosque is that it faces back to the fort and the citadel, and when progressing to the mosque the sultan would have had to approach it from the rear. This is, of course, dictated by the position of the fort and citadel, and the chosen site for the mosque, but it is very likely that the sultan did not need to enter the mosque from any of the main entrances, as there could have been a particular entrance for the ruler which took him via a flight of steps to a royal gallery in the form of a mezzanine at the north end of the prayer hall. In many of the royal mosques of India these galleries have survived, some, such as those in the two Ghurid mosques64 of Kaman and Bayana, the Jāmi Masjid of Mandu65 and the Aḍīna Masjid.

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65 G. Yazdani, Mandu the City of Joy, 56, pls. 6, 10.
at Pandua all have their own separate entrance. During the sultanate period, these galleries were known as the mulik khāna, while the Emperor Jahangir notes that the Mughals called them the shāh nishān. That in the Ādina Masji at Pandua is still referred to as the takht-i shāhī (royal throne).

One of the most interesting features in the mosque is an unusually large square platform attached to the outer perimeter of the mosque at its southeast corner. This is a traditional position for a minaret, and would have served the same function here. However, no other minaret is known to have had a platform of this size. It has battered wall rising to about 2.8 m. above the level of the outer walls of the mosque. The platform is well preserved, and its stone casing is intact. At the level of the walls, the form of the battlements (pl. XVII) which once ran above the walls are carved in relief around the platform to keep the continuity of the original form of the walls. These battlements, about 1.1 m. high, not only indicate a more precise dimension for the original height of the walls but also give a scale for the colossal dimensions of the building and the platform of its minaret. Above the platform is flat, and nothing remains of the traces of any minaret, nor is there any record of a minaret ever existing there. Moreover, Ibn Baṭṭūṭa, who describes the other minarets of Delhi, does not mention a mighty minaret at Tughluqabad. It may therefore be likely that a minaret was never built there. However, there is another possibility that instead of a minaret, in the centre of the platform was set a single ancient Indian column. This would account for the size of the platform, as without a platform such a column would not be seen from a distance. The use of such columns is not, of course, exceptional. The earliest example is the well known iron pillar at the Quwwat al-Islām in Delhi, and at the time of Fīrūz Shāh Tughluq such columns were also erected instead of minarets in the royal mosques of Hisar and Jaunpur.

The best known example is Kotla Fīrūz Shāh in Delhi itself where Fīrūz Shāh designed a platform and transported an Ashokan column from a considerable distance to set it up as the minaret of the mosque of his new capital Fīrūzābad. Fīrūz Shāh's historians praise him for his originality and skill in the design and construction of this feature, but it may be that his design was not as original as was claimed, and its prototype was already present in Tughluqabad.

The Jāmī of Tughluqabad sets other precedents for Tughluq mosque architecture. We have already noted that the battered walls were a feature introduced by Ghiyāth al-din, and remained characteristic of Tughluq architecture, later to be exported to the Deccan, but another feature is the raising of the mosque on a platform with vaulted corridors or chambers around. This

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67 Shams Siraj, 80; Sikandar b. Muhammad Manjhu, b. Akbar, Mirāt-i Sikandar, ed. S. C Misra and M. L. Rahman (Baroda: Maharaja Sayajirao University of Baroda, 1961), 38.
72 Shams Siraj, 305–15; Anon., Strat-i Firūz Shāhī, School of Oriental and African Studies, cat. no. MS. 283116, 179–207; J. A. Page, A memoir on Kotla Firūz Shāh, MASI, li, 1937, 33–42, Persian text 3–25. In these works the columns are always referred to as minarets (minār).
feature not only appears in most Tughluq mosques, but also in the mosques and tombs of the later sultans, both in Delhi and elsewhere. A development of the form of such platforms can even be found in Mughal buildings, including the tomb of Humayun and the Jāmi' of Delhi.

TUGHLUQABAD AND LATER SULTANATE CITIES

Although a number of architectural features which distinguish Tughluq architecture are first seen in Tughluqabad, the plan of the town should not be regarded as a sudden introduction of a new urban design in India, but more as a link between the earlier and later towns. Although no earlier town has survived, there are a number of later ones which can be compared with Tughluqabad. Of course the two other Tughluq capitals, Jahānpānāh and Firūzābād, no longer exist, but among other Tughluq towns which have survived are Fatehabad, Hisar and Jaunpur. All of these towns were purposely designed and were built on previously unoccupied land. The plans of Fatehabad (Haryana) and of Jaunpur still preserve some of their original features, such as the general layout of the fort in the corner of the town, and that of some of the main streets. Both of these towns, however, have lost their walls, and there have also been significant changes in their plan during the Mughal period. This is particularly the case with Jaunpur which was devastated by Sikandar Lodī, and was virtually rebuilt during the time of Akbar. The plan of Hisar has also been changed and in recent years has been further modernized to suit the image of a progressive industrial district headquarters. Nevertheless, the general outline of the town, and a large part of the palace buildings in the citadel has been preserved.

The general layout of this town is also comparable with Tughluqabad, and after Tughluqabad the Hisar palaces are the most extensive example of the surviving royal buildings of the Tughluqs. The urban layout seen first in Tughluqabad and later in other Tughluq towns was also employed in the cities of the later sultanates. Among the better examples are Ahmadabad, the capital of Gujarat, and Bidar, the capital of the Bahmanīs. Ahmadabad, founded in 1410, has recently been affected by drastic modernization, but it existed virtually unaltered until the beginning of this century, and its old plan has been surveyed. Bidar, founded in 1429, has on the other hand retained its original plan, and provides a close comparison with Tughluqabad. We have already noted some similarities between the forts of Bidar and Tughluqabad, but more interesting is the close similarity between the towns, and the arrangement of their main components. In Bidar too the streets are laid on a rough grid, but in Bidar a monumental tower, 39 m. high and known as the Chaubārā, is set in the centre of the circular junction of the two principal streets. There is no equivalent structure in Tughluqabad, but a tower known as the Chor Minār, dating probably from the Khaljī period has survived in Delhi in the area of Sirī. As in Tughluqabad the Jāmi' of Bidar also opens to a processional street which leads to the main gate of the fort. Behind this street is the 'Uthmān Ganj Market, noted above for its similarity with two sites in the centre of Tughluqabad. It should be mentioned that the covered bazaar, a feature of Middle Eastern cities, does not suit the humid climate of India, and was never adopted there.

74 For the history and few remaining sultanate monuments of Jaunpur see A. Führer, The Sharghi architecture of Jaunpur.
77 T. Yamamoto et al., 1, 111.
Bidar and Ahmadabad were both built on virtually unoccupied land. In the case of Bidar, an old fort was demolished and its site was incorporated into the much larger new fort, and in the case of Ahmadabad, the existing town of Asawul was incorporated into one of the numerous quarters (mahalla). Ahmadabad was a much larger city than Bidar, but had a relatively small citadel called the Bhadra, occupying an area of 302 × 567 m. Its main gate opened to its already noted royal square, and a number of streets branched from it towards the various quarters of the town. Each quarter was occupied by a particular section of the community, distinguished by caste, profession or craft. This arrangement is also to be expected in the distribution of spaces in Tughluqabad, as the tradition is prevalent in Islamic cities of India and elsewhere. The royal square of Ahmadabad, called Maidān-i Shāh after the Persian prototypes, is recorded in the seventeenth century to have been in the form of a garden with a fountain, pool, and raised terraces in the centre and surrounded by rows of palms and tamarind trees mixed with citrons and oranges. In the square were a number of small pavilions and in one side of the square was a stone built caravanserai with a finely carved façade ‘adorned with several lodges and balconies supported by pillars’. The square was a multi-functional space, sometimes used as the outer courtyard of the palace to hold larger public audiences when in the evenings the sultans sat on the throne upon a platform by the side of the splashing fountain. At other times, as in the open field in Bidar, the area was also used as a place to review the army or on other days for games, martial enterprises and even as the forecourt where the nobles and ambassadors assembled before entering the court. Like Tughluqabad the processional street is short, and leads through the monumental Tin Darwāzā to another square with the Jāmi’ mosque in the middle.

The civic centre of Ahmadabad is now filled with modern office blocks and much of its original feel has been lost, but in Nagaur, a smaller town, remodelled after Ahmadabad, the traditional civic centre has survived with little change. The main entrance of the fort opens to the ceremonial square where the three principal streets meet. The entrance of each of these streets to the square is through a monumental gateway, one of which is a copy of the Tin Darwāzā of Ahmadabad, with the same name, but smaller and with simpler decoration. The square, the street to the north, and its branching streets are the core of civic activities, and not only include the market, but also the administrative and judicial offices.

It seems, therefore, that by the time of the construction of Tughluqabad the Perso-Islamic town plan has already become the norm in India. The exception may have been Sīrī, the remaining walls of which show that it had an oval layout, and which was described by Timūr as a round city. However nothing of the palaces has survived and we do not know whether they were in the centre or in a corner. After Tughluqabad, there are only a few towns such as Bijapur and the unfinished nearby town of Nausarpūr which were designed with a concentric plan. Virtually all other towns, the Mughal cities included, used in their design the principals of planning seen in Tughluqabad.

78 Theodore C. Hope, Architecture at Ahmadabad the capital of Goozerat, with architectural notes by James Fergusson and photographs by Colonel Biggs (London, 1866), 42; for the seventeenth-century accounts of the Maidān-i Shāh of Ahmadabad see Johan Albrecht von Mandelslo, Journal und Observation (1637–1640) (Copenhagen, 1942), 48, 58, 65; Voyages de M. de Thevenot, in Surendranath Sen (ed.), Indian travels of Thevenot and Careri (New Delhi, 1949), 12–13. The Mir’ā’ī Siḵandār also describes the palace and its gardens, but as the description is given in a panegyric (gusīda) it is not easy to define precisely to which parts it is referring, see Sikandar b. Muḥammad Manṣūr b. Akbar, Mir’ā’ī Siḵandār (Baroda, [1961]), 55–6.

79 H. M. Elliot and John Dowson, The history of India as told by its own historians, iv, 447–8.

80 Henry Cousens, Bijapur and its architectural remains (Bombay: ASI, 1916) New Imperial Series, xxxvii, pl. 118, map of the environs of Bijapur.
(a) Tughluqabad: the fortified gate of the citadel with the site of the quarry made into a tank in front.

(b) The fort: southern wall looking west and showing the three-tiered defences of the wall and the bastions.
Plate II

(a) Southern wall seen from the north inside the fort, showing the arcade side of the defensive galleries.

(b) Two rows of loopholes in the gallery of the south wall. The vault of the gallery has collapsed.
(a) The citadel: view from the north-west tower. In the centre is the platform of the Jahān-namā, at the right the small mosque with the palace behind. The ruins in the foreground are late Mughal.

(b) View from the Jahān-namā platform looking west. Reservoir (no. 7) is at the left, and the remains of the palace and the small mosque are in the centre with the Khūnī Burj in the background.
(a) The citadel; the small mosque near the gate seen from the north-east.

(b) The fort: remains of the south arcade of the royal square, and its south gate with standing arch, which opened originally into the arcade. The portal arches have collapsed.
PLATE VI

The citadel: the small mosque near the gate. Interior from the north.
(a) The fort: South end of the courtyard (no. 12) north of the citadel gate looking west towards the arcade of the gallery and the north-west tower of the gate.

(b) The main courtyard (no. 17) looking north and showing in the centre the gate (no. 16) to this forecourt.
Plate VIII

(a) The fort: remains of the chambers at the north side of the forecourt showing the remains of the staircase to the roof or upper storey, and the arched door of the chamber at its right.

(b) The chambers at the east side of the forecourt and the bases of the columns of their front colonnade. The wall in the foreground is later in date and not keyed into to the wall of the chambers.
(a) The fort: the gate between the two large courts seen from the forecourt looking south, showing the remains of the colonnade at its west side.

(b) The gate between the main courts seen from the colonnade at its west.
(b) Detail of a cut stucco roundel on the spandrel of one of the arches in the corridor of the gate between the courts.
(a) The fort: north side of the main court (no. 17) showing the gate and the remains of the arcade at its west. The corbel stones which supported the wooden ceiling can also be seen.

(b) The northern pier of the western portal in the main courtyard and the arcade with arched windows looking over the street at its north, seen from the east.
(a) The fort: ruins of the īwān south of the main court seen from the north, showing the standing parts of the piers partly buried under a heap of rubble from the collapsed roof.

(b) View of the blind niches of the back of the īwān and the platform of a chamber at a higher level behind the niches, seen from the north.
(a) The fort: buildings at the south of the palace complex seen from the southern courtyard (no. 24). At the right are the front arches of the larger hall (no. 23) and at the left the building with the smaller hall.

(b) Interior view of the front arches of the larger hall (no. 23) seen from the mezzanine looking south-east. The corbel stones which supported the wooden beams of the roof can also be seen.
(a) The fort: the eastern façade of the smaller hall (no. 24) seen from the courtyard (no. 22).

(b) The Jāmi’ mosque: ruins of the qibla wall with two arched windows seen from the outside. The remaining facing stones, the heads of which are keyed into the rubble core of the wall can be seen.
Remains of the vaults at the north-west corner of the platform of the mosque, still standing in 1980. This sole remaining feature of the outer arcade of the platform has since been demolished, showing the ruins of the steps which descend to a circular well lined with stone.
(a) The Jami' mosque: interior of the domed unit south of the central unit of the prayer hall. The dome and the arches have collapsed but the pendentive at the south-western corner is preserved.

(b) Detail of the upper level of the platform at the east side, showing the stonework set in relief in the form of the battlements which must have run at the top of the mosque wall.
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During the fourteenth century on the Travancore coast of South India an independent Muslim sultanate was established which lasted for less than half a century, and was eventually terminated by the newly established neighbouring kingdom of Vijayanagar. The short, brutal and enigmatic period of this sultanate has attracted the attention of a number of modern scholars3 who have tried to put together its history through study of the coins, a few inscriptions, and the brief, often dismissive remarks found in the North Indian histories, as well as, most informative of all, the travel account of Ibn Battûta,4 who visited the region when the power of the sultanate was at its peak. However, none of these studies agrees even in the number and chronology of the sultans, let alone the details of the events: a confusion which is a direct result of the lack of adequate information at the present time. Under the circumstances it may appear presumptuous to embark on a description of the architectural monuments of this sultanate. However, not only in Madura are the tombs of two of the sultans preserved, there are also other mosques and Islamic shrines which altogether represent a distinct architectural style — an architecture, which, as we shall see, has little similarity with that of Islamic North India or even the Deccan, but

1 This article is a revised and extended version of a paper read to the Royal Asiatic Society of Great Britain and Ireland on 12 October 1989. The study was initiated in 1988 and the field work was carried out by the author and Natalie H. Shokoohy in India in the summers of 1988 and 1990. At the time of the survey measured drawings of the monuments of Madura, and sketch drawings of the buildings of Calicut were made. Bahram Leissi helped in the preparation of the final drawings in London. The research has been supported by the Leverhulme Trust and the Society for South Asian Studies.


4 Chari, Desika Chari, and Rodgers used footnotes, and Husaini gives a list of the five ‘emirs’ in the North Indian histories, without listing the title of the work or the page number(s).
takes its roots from a much earlier building tradition, perhaps that of the Muslim merchants settled in South India.

Ma'bar is the name given by the Muslims to the Coromandel coast and the region of Madura. The tenth and eleventh-century Muslim geographers while mentioning Muslim communities in many ports on the Malabar coast and the coasts of Gujarat, do not record any community on the Coromandel coast. Even Buzurg b. Shahriyar al-Ramhurmuiz, a ship master and merchant who was himself taking the Arabian Sea route to India, notes the Malabar ports as far as Kaulam and Sindapura, but still makes no mention of Ma'bar. It seems, however, that Muslims settled in the ports of the Travancore coast during the eleventh and twelfth centuries, and the name Ma'bar begins to appear in Muslim chronicles from the beginning of the thirteenth century. In 600/1203-4 'Abd al-La'tif notes the name in association with the Arab trade with South India, and by the end of the century the region was also known to the Chinese as Ma-pa-rih, one of the foreign kingdoms whose "sultans" sent tribute to Qubilai Khan. At this time most of the commerce of the region was already in the hands of Muslim settlers. According to Rashid al-Din, Chinese merchandise brought by junk to the ports of Ma'bar was exchanged with goods mainly from the western world, but the main import traded in the region was horses, with a yearly quota of 1,400 horses assigned to Malik Jamal al-Din Ibrahim of the island of Kish, and another 10,000 from the other islands of the Persian Gulf. The influence of the horse traders on the government was apparently so great that a Muslim, Jamal al-Din's brother, Malik Taqi al-Din b. 'Abd al-Rahman b. Muhammad al-Tayyibi was made minister of the country and governor of three ports, Fatin, Maliifatan and Qaz'il (present Kayalpatnam). 'Abd al-Rahman was later succeeded by his son and grandson, who were all of the al-Tayyibi family, the rulers of Fars and the region of the Persian Gulf.

Rashid al-Din mentions that Ma'bar was the key to India and that from Kaulam (Quilon) to the region of Nilaivar was a distance of 300 parasangs, but he notes that he did not know

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5 Bozorg fils de Chahriyar de Ramhormoz, Livre des merveilles de l'Inde (Kitāb-i 'ajā'ib al-hind) (Leiden, 1982-6), pp. 94, 105, 147-8.


7 Henry Yule, The Book of Ser Marco Polo, the Venetian Concerning the Kingdoms and Marvels of the East (3rd edn. revised by H. Cordier, London, 1903), ii, pp. 325, 337, 603.

8 Rashid al-Din Fad'llullāh b. Imād al-daula Abī-l-Khair, Jami' al-tawā'rīsh, fascicule of Persian and Arabic texts in Karl Jahn, Rashid al-Din's History of India (The Hague, 1968), Arabic MS of 714/1314-15 (Royal Asiatic Society), fo. 206a, Persian MS of 717/1317-18 (Tup Qapo), fo. 335-6, Persian MS of 833/1429-30 (British Museum), fo. 384; also see Henry Yule, "An endeavour to elucidate Rashiduddin's geographical notices of India", JRAS, New Series, iv (1879), pp. 354-56. The monopoly of the horse trade in Ma'bar has also been described by Marco Polo, see Henry Yule, The Book of Ser Marco Polo (London, 1903), ii, p. 140.

9 The names differ in different MSS. Wassaf, who records similar information gives the name as Taqī al-Dīn, see 'Abdullāh b. Fād'llullāh al-Shirāzī known as Wassaf, Taqṣīyat al-ansār wa taqṣīyat al-āṣār (Bombay, 1826), i, p. 302.

10 Ibid., 301-9; also see H. M. Elliot and J. Dowson, The History of India as Told by its Own Historians, the Muhammadan Period (London, 1871), iii, pp. 32, 34-5, 45-7; Cordier's note in Henry Yule, The Book of Ser Marco Polo (3rd ed. revised by H. Cordier, London, 1903), ii, p. 333.
the size of the region. However, the boundaries of Ma'bar are better explained by his contemporary geographer Abu'l-Fidāʾ who records “the frontier of Ma'bar lies at a distance of four days from the east of Kaulam, in other words east of Manibār”. He identifies Ma'bar with the area to the east of Kumhurī (Cape Comorin) and notes; “From the Manibār direction Ma’bar begins at Kumhurī, where there is a mountain and town both of this name”. Abu'l-Fidāʾ also furnishes us with the names of some of the towns in Ma’bar, including Mānifatān and Biyārdāwāl (probably modern Virdachellam), its capital.

Since the thirteenth century the area also appears to have been known to the sultans of Delhi and, with the expansion of the sultanate towards the south at the time of ‘Alā’ al-Dīn Khaljī the first campaign against the region was made, apparently under the pretext of helping Sundar Pandya,13 the ruler of Madura who had been overthrown by his brother Vira. At first Uluq Khan, the governor of Bayana and one of the most trusted army commanders of ‘Alā’ al-Dīn was put in charge of the campaign,14 but he died before he had time to prepare the army, and ‘Alā’ al-Dīn appointed his Malik Nā’īb, Kāfūr Hīzār Dīnārī, in his place. The campaign started on Tuesday 24th of Jumādā II, 710/18 November 1310,15 and altogether lasted for a year, during which Ma’bar was overrun by the Muslims, the temples were demolished and the towns looted. Amīr Khusrāu,16 who recorded the campaign in detail, sums up the conquest: “At every corner conquest opened a door to them, and in all that devastated land wherever treasure remained hidden in the earth it was sifted, searched through, and carted away so that nothing remained to the infidels (gabrān) of their gold but an echo, and of their gems, a flaming fire”.

In this campaign the Muslim army penetrated south as far as Madura and Fatan,17 but it is not made clear how far Muslim control was established in the region. Kāfūr’s usual practice was to retain the local rulers in their place when they nominally accepted the supremacy of Delhi.18 However, the extraordinary wealth brought by Kāfūr, which according to one of the more moderate records exceeded 312 elephants, 20,000 horses and 96 man of red gold (equal to 10 crore of coins),19 was enough to encourage ‘Alā’ al-Dīn’s successor Mubārak Shāh to send his Malik Nā’īb, Khusrau Khān, on a similar campaign. The intention behind the second campaign may be illustrated by an incident concerning the Muslim settlers of Ma’bar. On one occasion, Khusrau, who was neither as popular, nor as good a tactician as Kāfūr, found that the Hindus had fled, taking their gold, but that a certain Muslim merchant known as Khwaja Taqī, thinking he would be safe under the protection of the army of Islam, remained behind. Khusrau took his wealth as booty.20

15 Amīr Khusrav Dihlawī, op. cit., p. 126. On his return Kāfūr was received by the sultan on Monday 4th of Jumādā II, 711/18 October, 1311, ibid., p. 181.
16 ibid., p. 172.
17 ibid., p. 174; Amīr Khusrav, Duwal Rām Khišr Khān, facsimile copy of a manuscript published for the 700th anniversary of Amīr Khusrav (Lahore, 1975), folio 8 obverse.
19 Muhammad Qasim b. Hindī Shīr known as Firūzta, Tārīkh-i Firūzta (Lucknow, 1864), i, p. 120.
Whatever the real reason for the second campaign may have been, the Muslim historians imply that from this time Delhi had limited control over the region, and Muslim governors were appointed for Ma'bar.

At the time of Muhammad b. Tughluq the governorship of Ma'bar was given to Sayyid Jalāl al-Dīn Aḥsān, who had been Ghiyāth al-Dīn Tughluq's governor of Bāthagarh, where an inscription of his time dated 725/1324–5 has been found.21 Jalāl al-Dīn was the father of the governor of Hānsi and Sīrsatī, Shārīf Ibrāhīm Kharīḍār (the chief scribe of the court),22 and Ibn Baṭṭūṭa records that when he was in North India he married one of Jalāl al-Dīn's daughters, Hūr Nasāb.23 The date of Jalāl al-Dīn's appointment as the governor of Ma'bar is not known, but he minted coins24 there with the name of Muḥammad b. Tughluq until 734/1333–4, just before his rebellion against the sultan, probably in the same year or soon afterwards.25 He proclaimed himself as Sultān Aḥsān Shāh, and according to Ibn Baṭṭūṭa, minted gold coins,26 although only his silver and copper coins have so far been discovered.27 Muhammad b. Tughluq's campaign against him was aborted in Tilang when the sultan fell ill and the rumour of his death led to many other rebellions which kept him preoccupied for the rest of his reign.

Aḥsān Shāh ruled independently for about five years, and founded the Sultanate of Ma'bar. He was apparently slain in battle and was succeeded by 'Alī al-Dīn Udaijī28 who was in his turn killed in another battle only a year or two later. The third sultan, Qub al-Dīn Firūz Shāh, was even less fortunate, as only about 40 days after his enthronement he was put to death by his own nobles, who disagreed with his style of rule. Our only descriptive source on the first three sultans is Ibn Baṭṭūṭa's brief account from the time he was in Ma'bar during the reign of the fourth and fifth sultans, Ghiyāth al-Dīn Muḥammad Dāmghān Shāh (c. 740/1339–40 to 745/1344–5), and Sultān Nāṣir al-Dīn Maḥmūd Dāmghān Shāh (c. 745/1344–5 to 757/1356). Ibn Baṭṭūṭa, however, describes in detail many of the events of the time of these sultans, quoted in most modern studies of the sultanate. From his account it appears that the Muslims, who by rebelling against Muḥammad b. Tughluq had cut themselves off from the resources of Delhi, were engaged, perhaps out of desperation, in constant battles with the neighbouring Hindu states, and had to rely entirely on their own forces, which often exercised fierce and brutal repressive methods on the local people. We know from Ibn Baṭṭūṭa that the sultans and their court spoke Persian, and in his Arabic narrative their words are given in their original Persian form. It should also be noted that Dāmghān, the title adopted by two of the sultans

23. Ibid.
24. JRAS, 1909, pl. facing 680, no. 2; JASP, 1957, p. 127, pl. 12, no. 1.
25. The date of 718/1327–8 given by Yahyā b. Aḥmad b. Ḳutb al-Dīn Aḥmad Shamsuddin Ahmad, op. cit., p. 127, is therefore much too late.
27. The date of the earliest coins may be read as 734, see JASB, 1909, p. 673, coin no. 5; Shamsuddin Ahmad, op. cit., p. 81, n. 4; JASP, 1957, p. 127, no. 2.
28. The name Udaijī appears on his coins. Ibn Baṭṭūṭa records the name as Udaijī.
of Ma'bar, is the name of a town in Khurāsān which was an important cultural centre during the Sasanian and early Islamic period. One of the earliest mosques of the Islamic world is still preserved there. It is not unlikely that Ghiyāth al-Dīn Muḥammad and Nasīr al-Dīn Mahmūd were both originally from this town.

Our knowledge of the later sultans of Ma'bar is less certain, to the extent that even the precise number of the sultans is not yet known, but, as already noted by Dr S. A. Q. Husaini, on the numismatic and inscriptive evidence it can be established that Sultan Nasir al-Dīn was succeeded by Shams al-Dīn 'Ādil Shāh (c. 757/1356 to 774/1372–3), followed by Fakhr al-Dīn Mubārāk Shāh, and finally ‘Alā' al-Dīn Sikandar Shāh (c. 774/1372 to 779/1377–8). The end of the sultanate of Madura is recorded by the Delhi court historian of the time, Shams Sirāj, who may not have been entirely without bias:

At that time (after the return of Firuz Shah from Bengal) ambassadors arrived from Ma'bar, and were taken to kiss the foot of the sultan, where they spoke in the manner usual among plaintiffs. Qurbat Hasan Kāngū had been the king of Ma'bar. When Muhammad Shāh b. Sultan Tughluq Shāh left this world and Sultan Firuz Shāh was enthroned, the royal decree was sent to Ma'bar. The people of Ma'bar formed a conspiracy and went to Daulatabad. They took Qurbat Hasan Kāngū, brought him to Ma'bar and made him their king, turning their faces from fidelity to Sultan Firuz. When Qurbat Hasan Kāngū was enthroned in Ma'bar he began to perform acts of indecency in public. Knowledgeable informants have told this humble historian, Shams Sirāj, that when this Qurbat Hasan Kāngū held court in the audience hall (mahāl-i bār jā) he wore women's ornaments on his wrists and ankles, and his neck and fingers were decked with feminine ornaments. His indecent acts with pederasts were performed openly. May Allah, blessed and most high, protect all Muslims from the establishment of such perversions. Amen. Amen. Amen. In short, when Qurbat Hasan Kāngū did things of this kind in the city of Ma'bar, the people of Ma'bar were utterly and completely weary and out of patience with him and his behaviour. The pernicious Bukkan, who was in the vicinity of Ma'bar, entered Ma'bar with a large force and magnificent elephants. He captured Qurbat Hasan Kāngū alive, and then killed him and took over the city of Ma'bar. He not only destroyed the whole of Ma'bar, which was a Muslim city, but also the Muslim women were taken by the Hindus. Bukkan established himself as ruler of Ma'bar.

Shams Sirāj continues, noting that Firuz Shah reproached the ambassadors for their disobedience and for choosing Qurbat Hasan, and dismissed them without promising any immediate assistance. From Shams Sirāj's account it is clear that Qurbat Hasan Kāngū is the last sultan of Ma'bar, and must therefore be the same as 'Alā' al-Dīn Sikandar Shāh. As usual at that time, his royal name and title would have been chosen when he was enthroned, but as his sovereignty over Ma'bar was not acknowledged in Delhi, Shams Sirāj refers to him only by his original name, as he also does for Bukkan, the ruler of Vijayanagar. The reference to the taking of Muslim women by the Hindus should be regarded with some caution, as this may have applied only to the families of the sultan and

30 Ibid., iii, pp. 933–4.
32 Shams Sirāj 'Affī, Tārīkh-i Firūz Shāhī (Calcutta, 1981), pp. 261–3. Elliot's translation of this passage is incomplete and inaccurate, see H. M. Elliot and J. Dowson, The History of India as Told by its Own Historians (London, 1871), iii, p. 339.
some of his army commanders. The local Muslim community appear to have continued
to flourish under the new Hindu rulers, as they had before the sultanate. It was this
community who turned the tombs of the sultans into holy shrines, and have continued to
preserve them up to the present time. The condition of the Muslims after the fall of the
sultanate is also reflected in an inscription now in the Makhdûm Mosque at
Virapandiyapanattanam in Tiruchchendur District. The inscription, dated Kollam 563/A.D.
1387 refers to the order of one Qâdi Abû Bakr, who imposed a quarter of one per cent
tax on the value of the commodities passing through the port of Shonadukondanpattnam,
and allocated it to the maintenance of the Jâmi' Mosque of the port. Tiruchchendur district
was part of the sultanate of Ma'bar, and the date of the inscription is only 10 years after
the death of Sikandar Shâh. This inscription shows that the Islamic community maintained
its considerable influence, particularly in commerce.

The death of Sikandar Shâh at the hand of Bukkan's brother, Kampana, who
commanded the Vijayanagar campaign against Madura, is also recorded in Mad-
hurâviwijayam. However, from the traditions of the Muslims of Tamil Nadu we get a very
different picture of Sultan Sikandar Shâh, as he is regarded as a pious saint who defended
the Muslims up to his last breath, and who was martyred together with his vizir and a
handful of remaining soldiers when he was surrounded by the enemy army on the
Tiruparangundram hill near Madura. The sultan's shrine at the top of the hill is one of the
most revered Muslim sites in the region, and as we shall see, is a fine example of the Islamic
architecture of South India.

Little is known about the social, artistic, and architectural interchanges between the
court of Ma'bar, and the Muslim settlers of the region. As in other regions, the settlers
must have already had a well established tradition of building mosques and shrines. Ibn
Baţûtâ describes such Muslim buildings on both the western and eastern coasts, and the early Muslim geographers, although silent about Ma'bar, do record well constructed
mosques in the ports of India. Today on the west coast there are a number of mosques,
the origins of which are said to go back to very early Islamic dates. For example, the
Cheraman Jâmi' Masjid at Cranganur (Kodungallor), north of Cochin, is traditionally
claimed to have been founded as early as A.H. 8/629–30. Such an early date is not of course
acceptable, as at that time Islam was still confined to a small part of Arabia, but the
tradition may reflect the fact that the trade route was used well before the Islamic period,
and there must have been foreign settlers, including Arabs on these coasts from much
earlier times. The present structure of the Cheraman Mosque is not more than a few
hundred years old, but in Calicut there are a number of mosques which date from the
fourteenth and fifteenth centuries, and according to inscriptions recording their restoration,
the original buildings were even earlier. These mosques have stone walls with wooden
columns supporting timber roofs. Some of these buildings, including the Cheraman

35 The large amount of Roman pottery and currency found in south India shows the extent of the trade via
this sea route even in ancient times. See R. E. M. Wheeler et al., "Arikamedu, an Indo Roman trading station
on the east coast of India", Ancient India, ii (July, 1946), pp. 116–19.
Mosque, are briefly noted in our appendix below, and, as we shall see, their plans are particularly comparable with the mosques at Madura.

During his stay in Ma‘bar Ibn Baṭṭūṭa also described the architecture of the region, and particularly two towns, Mathura (Madura), the capital of the sultanate, and Fatan (Patan), a port on the east coast. The exact location of Fatan, however, has not yet been firmly established, as the names of many ports in the region include the word Patan. About the port of Fatan he notes: “It has an unusual harbour, in which a large wooden pavilion has been erected. It stands on large solid beams, and has a roofed wooden passage. At the time of attack by an enemy, they bring any ships which are lying in the harbour and tie them to this pavilion. Warriors and archers take up their positions on this pavilion, and in this way the enemy cannot gain the advantage. This town has a fine mosque built of stone”. Ibn Baṭṭūṭa’s account of Madura is brief, but informative: “Mathura is a large city, with broad streets. The first person to make it the capital was my father-in-law, Sulṭān al-Sharīf Jalāl al-Dīn Aḥsān Shāh. He built the city to resemble Delhi, and it was well constructed. When I went to the city there was an outbreak of cholera, and people were dying fast...The sultan returned to Mathura (from Fatan) and found his mother, his wife and child ill. He remained in the city for three days, and then moved to the bank of the river situated one parasang from the town. At this place there is a temple of the infidels”.

This information is particularly important for determining whether or not the Islamic town was on the site of present Madura. Ibn Baṭṭūṭa indicates that the Muslim town was about six kilometres away from the river and the temple, and that it was a new city founded by Aḥsān Shāh on the Islamic model. He notes its similarity with Delhi, but does not mention which Delhi, the Khaljī Sīrī, or Ghiyāḍ al-Dīn’s Tughluqābūd, both in use at the time, and known to Ibn Baṭṭūṭa who spent many years in Delhi. In both cases the principles of Persian urban planning were applied, and in each case there is the arg, a fortified citadel, located at one side of the shahristān, the town. The shahristān itself could be divided into two parts, the hālā shahr, the upper town, and the pā‘īn shahr, or ribāt, the lower town. While little remains of Sīrī, the layout of Tughluqābūd is well preserved (Fig. 2) and represents one of the best examples of Islamic town planning in India. Tughluqābūd’s plan is comparable to the Ghaznavid cities of Bust and Nīshāpūr, and has a citadel on the highest point of a hill to the south of the town, which itself has two fortified areas for the upper and lower towns. This arrangement was traditional in the ancient Middle East, going back to the first millennium B.C. In Tughluqābūd the upper town may have been exclusively royal, with palaces belonging to the sultan and his associates. At the north-east corner of the upper town was a large square, connected via a fortified gate to the lower town, and in front of the gate was probably another square.

36 Our town plan of Tughluqābūd is the author’s survey based on aerial photographs. The town has not yet been fully studied, but for an earlier report see Hilary Waddington, “Ādilābūd a part of the fourth Delhi”, Ancient India, 1 (1946), pp. 60–76.
39 See in particular the plan of Qalāt and Livār, ibid., 90, 92; also see W. Kleiss, “Erkundungsfahrten in Iran”, Archäologische Mitteilungen aus Iran, iv (1971), pp. 51–64.
Fig. 1. Map of Madura region.
These squares played an important role in Muslim towns, as they were venues for public functions attended by the sultan and his representatives. The main streets of the town were fairly straight, and at each end of these streets was a gateway. In Tughluqabad, while a royal mosque must have existed in the citadel or in the upper town, the congregational
mosque was in the lower town, and in the usual location, in the middle of a square in front of the processional street leading via the main gate of the upper town to the royal square.

Ibn Baṭṭūṭa’s remark regarding the similarity between Islamic Madura and Delhi should not be overlooked, as in the account of his long stay in Delhi he describes in some detail the city of Tughluqābād, its palaces and mosques, as well as the royal ceremonies. The similarity of Madura and Delhi must therefore have been particularly striking to him, since Tughluqābād is not unique in India in employing the principles of Islamic urban planning, and many cities had similar plans, the earliest of which must be the town of Daybul. Among the better preserved examples are Daulatabad, the Hindu town of Devagiri rebuilt on an Islamic layout by ‘Alī al-Dīn Khaljī and Muḥammad b. Tughluq, and described by Ibn Baṭṭūṭa, as well as Gulbarga and the later town of Bidar all in the Deccan. Even in the latest Mughal towns such as Shāh-Jahānābād the same principles were applied.

The old city of Madura, as it appears in a diagrammatic plan made by Langles in 1688, shows a very different city from that described by Ibn Baṭṭūṭa. Perhaps the most significant point is that the town is on the south bank of the River Vaigai, not six kilometres away, and its location corresponds with the place where Ibn Baṭṭūṭa records the existence of the old Hindu temple. The most important feature of the town is the great Sri Minakṣi Temple, the gopuras of which dominate the entire city. Today Madura still preserves its concentric layout with the temple in the centre, the four gates of which open to four streets aligned in the cardinal directions. The town plan shows that, as is usual with ancient South Indian towns, Madura was designed based on the strict rules of Hindu town planning as expressed, for example, in the Mānasāra Śilpa. This ancient architectural manual describes eight major types of town plan suitable for various sites. In all these plans the temple occupies the centre of the town. Langles’s diagrammatic plan of Madura appears to have been based on an old Hindu drawing and is comparable to the chaturmukha type of plan, described in the Mānasāra Śilpa as suitable for larger towns.

The modern town of Madura has now expanded to both sides of the river, and in the old town, while the street layout has been preserved, the town walls and many of the old buildings have disappeared. However, a surveyed town plan published by Richard Owen Cambridge in 1761, and reproduced here (Fig. 3) shows the old features of the town including some of the main Islamic sites. This plan, which is drawn with the south orientated towards the top, also shows that while the Hindu town planning rules have been observed, the town does not have a rigid diagrammatic form, as the street layout has been based on an old Hindu drawing.
Fig. 3. Town plan of Madura in 1761.
been adapted to fit the natural land features. The Hindu layout of Madura, therefore, indicates that the Islamic town was not the same as the Hindu town, the origins of which, and of its temple, are much earlier than the fourteenth century. The precise site of the Islamic town still remains unknown, and needs further investigation. As appears in our map of the region\(^{48}\) (Fig. 1) there are a number of sites in the vicinity of Madura at a suitable distance from the town. Among these sites are Narasingam, to the north-east, and Pudukkotai and Sambakkudi to the west, all with nearby hills suitable for fortifications, but perhaps the most probable site is Tiruparangundram, described below. The location of this village, six kilometres south-west of Madura, fits the account of Ibn Baṭṭuṭa, and the site consists of a hill dominating the village, which appears to have once been fortified. Although in the present village little remains on the surface to establish beyond doubt that it was once the Muslim capital of Ma'bar, we have already noted the local belief that Tiruparangundram was the site where the last Ma'bar sultan and his army were surrounded and perished.

However, we have already seen that there were Muslim communities in the region well before the sultanate period, and it is very likely that the Hindu town of Madura also had its own community with its own mosques and shrines. The architectural style of these buildings would have had some influence on the sultanate monuments. In Madura the Mosque of Qaḍī Jamāl al-Dīn or the Kazimar Masjid is claimed to have been founded during the Khaljī period, although its structure may be datable to the fourteenth century or later. The sultanate and later monuments in the vicinity are those in the compound of the shrine of 'Alā' al-Dīn, and the tomb of Sikandar Shāh. The 1761 plan of Madura indicates that the number of Islamic monuments in Madura must have been greater than what remains today. The plan shows the enclosure of the shrine of 'Alā' al-Dīn on the north bank of the river as well as four other mosques, all marked as no. 2 in the drawing. Three buildings, are shown to have their own enclosure walls, and must have been the main mosques of the town. They no longer exist, but on the location corresponding with that of the mosque marked outside the northern gate, an old colonnade has survived (Pl. Ia) with an orientation corresponding to that of the Islamic buildings of the town. It is very likely that this is the front portico of the original mosque.

The colonnade measures about 10 m wide and consists of five bays with the central bays wider than the others, a common feature in Indian mosques. The columns are about 35 cm square at the base and 3.50 m tall, and their shafts are divided into five registers, three square and two polygonal in plan. To the west of the colonnade the site which may have been occupied by the prayer hall is now taken by modern houses. It should also be noted that apart from this colonnade, in the built-up areas of old Madura there are a few small mosques, including the Kazimar Masjid, which are not marked in the eighteenth-century town plan.

\(^{48}\) Our map is based on Map of Madura region, Army Map Service, Washington D.C., 1968, map no. NC44-9.
Plate I

(a) Madura, an old colonnaded portico, probably of a mosque, at the north-east of the north gate of the old town. The mosque has not survived, but its location is marked with a no. 2 in the 1761 town plan.

(b) Madura, Shrine of Sultan 'Ala' al-Din Udauij and Sultan Shams al-Din 'Adil Shah. General view from the east showing the shrine, the tomb of Sayyid Husain Quddusullah in the foreground, and part of the modern addition to the mosque of 'Ala' al-Din at the right side.
Fig. 4. Madura, Shrine of ‘Alā’ al-Dīn, site plan. 1, Tomb of Sultān ‘Alā’ al-Dīn Udaūjī and Sultān Shams al-Dīn ‘Ādil Shāh; 2, Mosque of ‘Alā’ al-Dīn; 3, Tomb of Bàrā Mastān Sādā Pīr; 4, Chatri tomb of Sayyid Husain Quddūsullāh; 5, Domed pavilion with portico; 6, Modern buildings; 7, Old platform known as the tomb of ‘Alā’ al-Dīn’s camel and elephant; 8, Modern hospice.

The monuments in the ‘Alā’ al-Dīn and Shams al-Dīn complex

The tombs of two of the sultans of Madura are inside a single domed building in a large compound (Pl. Ib) which also includes a mosque, three other old tomb buildings, and many graves (Fig. 4). The compound is in Goripalayam, north of the river and outside the old town. The shrine is known by the name of both of the sultans, as given in the title, but here we refer to it as the shrine of ‘Alā’ al-Dīn. It is traditionally believed that the shrine was constructed by Sultān Shams al-Dīn ‘Ādil Shāh over the grave of the slain Sultān ‘Alā’ al-Dīn Udaūjī. In Ibn Baṭṭūta’s words⁴⁹ “Sharīf al-Dīn Aḥsan Shāh ruled for five years, and after he was killed, one of his commanders (umāra), ‘Alā’ al-Dīn Udaūjī, took his place and ruled for a year during which he left for a holy war against the infidels, and took from them great wealth and a vast amount of booty, and returned to his own place. In the second year he also engaged in a holy war (ghazā), and killed a great number of infidels. It happened that on the very day of this massacre he removed his helmet from his head to drink, and a stray arrow hit him and killed him outright”.

As ‘Alā’ al-Dīn Udaūjī seems to have spent most of his reign engaged in ghazā, and died on the field, he would have been considered a martyr. A few years later, Sultan Shams al-

⁴⁹ Ibn Baṭṭūta, op. cit., p. 607.
Dīn constructed a tomb for ‘Alā’ al-Dīn, and built it to house his own tomb as well. The shrine is now a hallowed place for Muslims, and is also respected by Hindus. It is believed that the blessedness or barakāt of the sultans, particularly that of ‘Alā al-Dīn, has a beneficial effect on the mentally ill, and today there is a hospice (Fig. 4, no. 8) in the compound for the mentally afflicted of both religions. There are also a number of other modern structures in the compound, as well as modern additions to the shrine and the mosque, obscuring some of the original features of these buildings.

The shrine of ‘Alā’ al-Dīn and Shams al-Dīn

The most impressive building in the compound is the shrine itself (Fig. 4, no. 1) which consists of a square domed chamber standing on a high plinth in the centre of a colonnade two aisles deep and covered with a flat roof (Fig. 5). The colonnade itself is also on a platform about one metre above ground. The building is constructed entirely of blocks of stone, and the plinth, the column shafts and the lintels are all richly decorated. The colonnade is 17.30 m square and consists of eight columns on each face, with the span between the columns about 2.10 m. The colonnade was originally open on all sides, but it is now walled on three sides (Pl. IIa) with small entrances at the north and the south. The east side (Pl. IIIa) is not walled, but has a modern iron grill, and in front a modern arched porch and two minarets have been added (Pl. Ib). At the eastern corner of the south side a modern staircase gives access to the roof. These additions have altered the external appearance of the building, but the original structure is virtually intact and has preserved all its features, which can be seen in the interior. On the exterior (Pl. IIa) around the roof the eave stones with their bell shaped profile, as well as the two lower courses of the stonework of the parapet are also original, but the battlements on the top seem to have been partly restored. Similar battlements are also repeated in a square around the dome itself. They are solidly built in the form of pointed arches, and are similar in type to those of the Tughluq and other North Indian buildings. In South India this form is not common, and in Madura battlements of this type can only be found in this shrine. The bell shaped profile of the eave stones is, on the other hand, a South Indian feature, very different from the straight diagonal profile of the North and West Indian eaves.

The columns of the colonnade are 35 cm square at the base and are 3.50 m high. The outer and inner columns are different in form. The outer column shafts (Pl. III, also compare with Fig. 12) are similar to those of the old colonnade of the probable mosque to the north of the town, and are divided into square and octagonal registers, while the shafts of the inner columns (Fig. 6a, Pls. IIb, IIIb) are divided into circular and polygonal registers with collars of lotus leaf motifs and other bands of carving with foliage in between. The brackets are set directly on top of the columns without a separate capital. The brackets of the outer and inner columns are also different, those of the outer row consist at each side of two blooming lotus stems, the inner one in upright form known by the South Indian term madalai, and the outer one turning downward, the nammalai, with the flower known as palastaram. Brackets of this type are common in South India, and in an earlier form appear in the Pandya period, but those of the shrine of ‘Alā’ al-Dīn are
closely comparable to examples of the early Vijayanagar period. The brackets of the inner columns are simple in design and at each end they are carved in the form of a tenon, an early South Indian form which is seen mainly in Chola buildings of the tenth and eleventh centuries.\textsuperscript{50} While the outer columns may be purposely carved, the inner columns vary in form and it seems that they are re-used material, probably from earlier temples.

\textsuperscript{50} For the forms of South Indian columns and brackets see G. Jouveau-Dubreuil, \textit{Archéologie du sud de l'Inde}, 1, Architecture, \textit{Annales du Musée Guimet}, Bibliothèque d'études, xxvi (Paris, 1914), pp. 59–60, 137–40.
Muslim monuments in South India

Plate II

(a) Madura, Shrine of 'Alā' al-Dīn, exterior view from the south-west. The colonnade surrounding the chamber has been walled up.

(b) Interior of the same shrine, view of the colonnade looking towards the semi-circular stairs leading to the entrance of the central tomb chamber.

Destruction of temples and the re-use of their materials was a practice of the early sultanates of North India, and we may assume that this tradition was brought to the south by the sultans of Ma'bar. However, in this region and elsewhere, in places where Muslim settlers lived under the supremacy of Hindu states, this was, of course, not the practice.
The square chamber in the centre of the colonnade has solid stone walls with an arched opening on the middle of each face, but as the chamber is set on a high plinth only the eastern one is used as an entrance, and is reached by a flight of semi-circular stone steps (Pl. IIb). The ogee shaped arches, however, are not true arches, but are carved from large stone blocks set above the openings. Inside the chamber there are two graves: the one in the centre is said to belong to Sultan Shams al-Din, and the one to its east to Sultan 'Ala' al-Din. The plinth is 1.60 m high and is decorated with a series of mouldings with two prominent courses of bell-shaped profile with the surface carved with lotus leaves (Fig. 6b,
Plate III

(a) Madura. Shrine of 'Ali al-Din, southern view of the outer columns of the colonnade, now under a modern portico and fenced with modern iron grills.

(b) The same shrine: the inner columns of the colonnade and the outer wall of the central tomb chamber set above a high plinth.
Pl. IIIb). The walls of the chamber are plain on the inside, but on the colonnade side there are six decorative pilasters at each face. The pilasters also appear to be made out of older Hindu columns.

The most unusual feature of the building is the dome (Pl. IVa) with an inner diameter of 5.90 m over the square chamber. Although from outside it looks like an ordinary dome with a hemispherical profile, it is in fact a single piece of rock carved and smoothed on the outside to the form of a dome, but only hollowed out and left roughly dressed and unpainted on the inside to demonstrate the nature of this monolith. There is no parallel to this feature in the Islamic world, and it must have indeed been a difficult task to set up a stone of this size above the shrine. However, in South India, carving a large piece of stone and placing it on the top of a building has been seen in earlier buildings, an example being the early eleventh-century Brihadisvara Temple at Tanjore, built during the reign of the Chola Rājaraja (985–1012). In this temple the monolithic sikhara is said to weigh over 81 tonnes. In the case of the dome of the shrine it may be argued that the South Indian masons were not familiar with the principles of dome building, and for them it was perhaps easier to set up a monolith of the required shape, but there are in fact many domed buildings in South India, three inside the compound of the shrine of ‘Alī al-Dīn itself. None of these domes can be dated to the fourteenth century, but the tradition must have already been brought to the region by the Muslim settlers. One should also bear in mind that the capital of Aḥsan Shāh would not have looked like the Delhi of the Tughluqs unless it had arches and domes. The monolithic dome of the shrine must therefore have been erected as a demonstration of the ability of Shams al-Dīn ‘Ādil Shāh’s builders. Perhaps it was also intended to show that the shrine of the new Muslim conquerors was a match for the great temples of the past. It would also show that ‘Ādil Shāh could erect a monument to surpass those of the master builders of Delhi, even those of his contemporary, Fīrūz Shāh Tughluq (752–90/1351–88), who at the same time was designing new towns and was taking pride in the transportation and re-erection of a number of ancient monolithic columns.

The general form of the tomb is also worthy of attention. A square domed chamber surrounded by a colonnade is not the traditional layout for North Indian tombs, nor for the tombs of the Deccan. In South India, although the shrine of ‘Alī al-Dīn may be the earliest example of its kind, a few other buildings with a similar plan can be found on both the eastern and the western coasts. One of these is the shrine of Ḥaḍrat Qādir Wali at Nagore, a small port 85 km east of Tanjore. Nagore is one of the oldest Muslim centres of South India, and some scholars consider it to be the same as the Fatan mentioned by Ibn Baṭṭūta and Rashīd al-Dīn. These buildings, however, are not yet studied, and future investigation may throw new light on the background of the form of the shrine of ‘Alī’


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Plate IV

(a) Madura, Shrine of 'Ala' al-Dīn, the monolithic dome above the central chamber.

(b) Mosque of 'Ala' al-Dīn, view from the south-west, showing the exterior of the qibla wall and the projection of the mihrāb.

Nevertheless, it appears that the form of a domed tomb chamber surrounded by a colonnade may have existed on the coastal regions of India from the thirteenth or fourteenth centuries. A century later, we find this arrangement in many of the tombs of Gujarat\textsuperscript{54} for example the tombs of Malik Sha'ban at Rakeyal, and Burhan al-Dīn in

Vatuwa. The tombs of the Gujarat Sultân Mahmûd Bigara and Shaikh Ahmad Khatû, both in the complex at Sarkhej also have a similar arrangement, but on a grander scale.

**The mosque of ‘Alâ’ al-Dîn**

The mosque of ‘Alâ’ al-Dîn, also known as Goripalayam Masjid (Fig. 4 no. 2, Fig. 7, Pls. IV b, V), stands next to the shrine of ‘Alâ’ al-Dîn on its northern side. The mosque is a relatively small building standing on a plinth measuring 13.00 × 7.30 m and about one metre high. The structure is built of large blocks of roughly dressed stone and consists of a prayer chamber at the western side with a colonnade to the east. The mosque was originally free standing but recently a building was constructed on its northern side, and a poorly constructed porch was added to the front of the colonnade (Pl. Ib) to extend the covered space for worshippers. These additions obscure the exterior view of the building from the east and the north, but they have not affected the features of the old building, some of which can be seen under the modern porch. In our drawings of the mosque (Fig. 7) the modern buildings are not shown.

The entrance to the prayer chamber is through a colonnade, which is walled on three sides but open on the eastern side. The western wall has three doors giving access to the prayer chamber, and in the middle of the south wall is a door with an ogee arch formed out of two carved stone blocks. The colonnade (Pl. V a) is two aisles deep and three bays wide with the side bays measuring 1.50 m while the wider central bay is 2.10 m. The front columns have corresponding pilasters on the side walls but there are no other pilasters in the building, and the ends of the stone lintels rest on corbelled brackets set directly into the walls. In front of the colonnade at each side there is a minaret, rising from the ground, and octagonal in plan. The minarets have plain buttresses, which may be original up to the carved stone mouldings at the roof level. The upper parts are reconstructed, each in five registers decorated with small arched niches and divided by mouldings, and topped with a solid finial in the form of an onion shaped dome with a double collar of lotus leaves. The type is common in Islamic buildings of the seventeenth to nineteenth century in South India, and shows the influence of ‘Ädîl Shâhî architecture on the late Islamic buildings of the region. The reconstructed minarets of the mosque are, however, the oldest type of their kind in the compound, and their form has been imitated in two modern minarets added to the shrine of ‘Alâ’ al-Dîn (Pl. Ib), and in the minarets of a nearby tomb pavilion (Fig. 4, no. 5, Pl. VI b). As with the shrine of ‘Alâ’ al-Dîn the eave stones and the lower courses of the parapet around the roof of the mosque are original. The eaves (Pl. IV b) have a bell shaped profile, but unlike those of the shrine they are not hollowed out from below and are set on a moulding with a double cyma recta profile underneath. The upper registers of the parapet, built with arched openings and a number of small turrets, are all relatively modern.

The prayer chamber is plain both on the exterior and on the interior, and has four columns in the middle. The single mihrâb (Pl. V b) has a rectangular projection on the outside. On the interior the mihrâb is almost square in plan, but has a semi-circular arch with a slightly ogee form. Once again the arch is not true, but is carved on large stone
Muslim monuments in South India

Plate V

(a) Madura, the Mosque of 'Ala' al-Din, view of the front colonnade looking south.
(b) The same mosque, view of the prayer chamber looking towards the mihrab.

blocks laid horizontally. The columns of the prayer chamber and the front colonnade are similar in design and measure 35 cm square in plan. The monolithic shafts are about 2.80 m tall and rise directly from the floor without a separate base block, but the lower registers are square in plan and have the form of a tall base, decorated on each face with different patterns, some resembling ogee and lobed arches. The upper corners of this register are
Fig. 7: Madura, Mosque of 'Ali al-Din. Plan, south elevation and section.
Muslim monuments in South India

Plate VI

(a) Madura, chatri tomb of Sayyid Husain Quddūs'ullāh, view from the south-west. The space between the columns has been walled up, giving the building the look of a square domed chamber.

(b) Domed pavilion with a front portico in the courtyard of the shrine, view from the north-west.

carved with blooming lotus buds. These upper registers are octagonal, and each column has a cubical capital supporting the brackets. The faces of some of the capitals are also carved with circular or square flower patterns.

The mosque is traditionally believed to be as old as the shrine. From the form of the
arch shaped carvings of the lower register of the columns it appears that the columns may not be re-used material, but would have been purposely carved for this building. The capitals are on the other hand relatively plain, and do not have the elaborate decorative features seen in the post sultanate or Vijayanagar period. The almost semi-circular profile of the arches of the mihrāb and the southern door of the colonnade may also indicate an early date for the building. In the absence of any inscription it is difficult to determine an exact date for the mosque, but from the style of the building we may agree with the local tradition, and date the structure to the late fourteenth or, more probably, to the early fifteenth century.

The most interesting feature of the mosque is perhaps the arrangement of its plan with a prayer chamber and a portico in front. This layout, as we shall see below, and in the appendix, is common for South Indian mosques, but is virtually unknown in North India, or in the Deccan. In the northern regions, where mosque building was introduced from Khurāsān and Central Asia, the larger mosques have a central courtyard plan and the smaller mosques consist of a single prayer hall, with or without a courtyard in front. There are a number of variations on these two basic layouts, but a colonnade never appears in front of the prayer chamber in the mosques of the sultanates. On the coast of Gujarat, however, there are a few monuments dating prior to the Islamic conquest, comparable in layout to the South Indian mosques. The earliest examples are at Bhadresvār, an ancient port on the coast of Kachch,55 and are datable to c. A.D. 1160. They belonged to a twelfth-century merchant community, and like the Madura mosque, the Chhoft Masjid at Bhadresvār has a colonnade almost the same size as the prayer hall itself, but it also has a subsidiary mihrāb in the colonnade, indicating that the colonnade too was used for prayers. In Bhadresvār, the main mosque,56 in spite of having a central courtyard plan, still has a large colonnaded portico in front of the entrance. Another example is the thirteenth-century Mosque of Abu'l-Qāsim b. ‘Alī al-Idhajī (or al-Irajjī), again associated with Muslim settlers, at Junagadh in Gujarat. Abu'l-Qāsim was a shipowner and the chief merchant of Junagadh, and his mosque illustrates the continuation of the use of a plan with a prayer hall and a front colonnade.57 The layout of the Madura mosque, therefore, follows the traditional plan which was developed by the Muslim trading communities in India, and continued to be used in the South, but was never adopted by the Muslim conquerors of the North.

Chatri of Sayyid Ḥusain Quddūs‘ullāh

The tomb in the form of a chatri, a domed pavilion with four columns (Fig. 4, no. 4, Fig. 8, Pls. 1b and VIa), stands in front of the tomb of ‘Alā‘ al-Dīn, and slightly to the north of its central axis. Under the dome there are two graves, and it is said that they belong to one Sayyid Ḥusain Quddūs‘ullāh and his wife. Sayyid Ḥusain is traditionally believed to have been the vazir of Sulṭān ‘Alī al-Dīn Udaujī, but Ibn Baṭṭūtā does not mention the

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55 M. Shokoohy, Bhadresvār, the Oldest Islamic Monuments in India (Leiden and New York, 1988), pp. 25–33.
56 Ibid., pp. 19–25.
57 Ibid., pp. 42–9.
Fig. 8. Madura, Chatri tomb of Sayyid Husain Quddus'ullah. Plan, section and north elevation.
name of ‘Alā’ al-Dīn’s vazir, and with our scanty knowledge of the history of the Ma’bar Sultanate the tradition can neither be confirmed nor dismissed.

The chatri is a small building standing on a plinth 2.80 m square and 98 cm high. The open space between the columns has now been walled up, giving the building the form of a square domed chamber with three arched windows at each face, except the western side where there are two windows and a central door. These walls are relatively modern, and have changed the appearance of the building drastically (Pls. 1a, VIa). In our drawing the additional walls are not shown.

The columns measure 35 cm square at base and 162 cm high and are surmounted by square capitals 30 cm high. The columns are highly decorated, but vary in their decoration and appear to be re-used material of earlier temples. The two columns at the eastern side of the chatri are of a similar type, and are square at each end and divided into three octagonal registers in the middle. There is a slight variation in their decorative details. The columns at the western side of the chatri appear to have been taken from one building, and are very similar in form consisting of a polygonal shaft, square at each end with a collar in the middle decorated with lotus leaves. Above the columns, the dome is supported by lintels, resting on the brackets over the capitals of the columns. As is usual in the construction of many chatris, there are no squinches or pendentives, and the dome rests directly on four triangular corner slabs set on the lintels. Around the roof the well-preserved eave stones are closely similar in profile to those of the shrine itself, but above the eaves the parapet, decorated with small arches and topped with merlons is relatively late.

As for the date of the chatri, the local attribution of the tomb to the vazir of ‘Alā’ al-Dīn suggests c. 740/1339–40. The archaic form of the building and the similarity of its eave stones with those of the shrine of ‘Alā’ al-Dīn also indicate an early origin for the tomb, and a date not later than the fifteenth or early sixteenth century. The most informative features are perhaps the re-used columns of the building. We have already noted that in South India it is not usual to find temple spoil in the monuments of the Muslims who lived under the authority of Hindu states, and this practice of the northern sultanates seems to have been carried out in the south only during the short period of the sultanate of Ma’bar. On these grounds we may be able to agree with the local tradition, and suggest a mid-fourteenth-century date for the chatri. It should also be noted that while chatris are a common feature in India, and many fourteenth-century examples can be found in Delhi and elsewhere, they are not usual in the Hindu architecture of the south, and as Muslim tombs they only appear in the late and post-Mughal periods. The chatri of Sayyid Husain, therefore, is an unusual specimen of its kind in South India, and the only example in Madura.

Octagonal tomb of Barā Mastān Sāda Pīr

The tomb is located to the south-east corner of the shrine of ‘Alā’ al-Dīn (Fig. 4, no. 3, Fig. 9, Pl. VI). The building is locally believed to house the tomb of a Sufi shaikh whose name

is given as Muhammad 'Abd'ullah, and who was known to his followers as Bara Mastan Sada Pir, but his origins and the history of his life are not well documented. The tomb is a relatively small octagonal building standing on a plinth. It is constructed of rubble stone faced with dressed stone, and roofed with a small dome. The building has four entrances in the walls facing the cardinal points, and the other walls have no openings. On the
Plate VII

(a) Madura, octagonal tomb of Shaikh Muhammad 'Abd'ullāh known as Barā Mastān Sāda Pir, view from the north-east.

(b) The same tomb, interior view showing the roof structure with the two tiers of corbelled slabs which support the small dome. The dome itself is hidden by the cloth canopy.
exterior (Pl. VIIa) at each corner there is a pilaster, and the walls are divided into two registers by means of a moulded string course about one metre above the plinth. The lower register is decorated with a row of flat niches with three-lobed arches. Similar arched forms are also carved in the horizontal stone courses of the top of the entrances. On each wall the main register has a single large flat niche with five lobes. Above the wall the cave stones have the usual bell-shaped profile, and are surmounted by two courses of stone blocks on the top of which are small battlements. The northern wall of the building fell some time ago, and has recently been reconstructed, but a large number of the cave stones and battlements were lost and have not been replaced. On the interior the walls are again divided into two registers, similar to the exterior faces, but there is no string course of moulding between the registers, and the niches on the lower course have semi-circular arches.

In this building, the dome is once again an unusual feature, as it does not rise as would be expected, from the octagon over the walls. Instead, above the niches there are two sets of cantilevered stone slabs (Pl. VIIb). The lower slabs are larger, trapezoid in shape and set on the walls to make an open square in the centre, measuring 3 m on each side. The upper slabs are triangular, and overlap the corners to make a smaller octagon. The dome, with a diameter of about 3 m then rises over this inner octagon. The result of this exercise is that the dome is rather small in proportion to the size of the chamber.

The building seems to be later in date than the shrine of ‘Alā’ al-Dīn or the tomb of Sayyid Ḥusain. Lobed arches, although they appear in the early Islamic architecture of India, are unusual in fourteenth and fifteenth-century buildings. In South India these arches are not to be found in the early buildings of the Muslim settlers, and are mainly seen during the Mughal period, presumably under the influence of Mughal architecture. Although the arches of the tomb of Baṭā Mastān Sāda Pīr are not strictly Mughal in spirit, they may be the work of local masons who were not closely familiar with Mughal buildings. In the late and post-Mughal period, Mughal style arches were common in South India in both Hindu and Islamic buildings. The tomb of the Pīr may therefore date from the sixteenth century, corresponding with the early Mughal period.

**Domed pavilion with portico**

Inside the compound there is a neglected domed tomb to the north-west of the shrine of ‘Alā’ al-Dīn, and near the eastern enclosure wall (Fig. 4 no. 5. Pl. VIb). The building measures about 5.50 x 8.00 m and consists of a square pavilion with 12 columns supporting the dome, with an extra row of four columns at the southern side to provide a front portico with a flat roof. The columns stand once again on a plinth, similar in form to those of the other buildings in the compound. The monolithic shafts are carved into three main registers, square at each end and octagonal in the middle, and are surmounted by brackets supporting the lintels. The brackets are decorated with a four petalled flower motif and the lintels of the portico have simple mouldings, but the surfaces of the columns are highly decorated. In size and general form they are comparable to those of the mosque as is the arrangement and form of the eaves.
The lintels of the portico are exposed, but the lintels of the pavilion itself, together with the brackets and even the upper part of the columns, have been covered by a series of pointed arches to give the pavilion the appearance of an arched building, with three arches at each face. These arches, may, however, be a later addition to the building, and, as they are not structural and are not bonded into the building, pieces have fallen at the north side exposing the structural brackets and lintels beneath. The dome appears to be original, but the parapet around the roof, decorated with a row of small arches set between small turrets, was added to the building at later dates. The parapet is of brick, and is in the style of the late eighteenth- and nineteenth-century parapets of the region. Two minarets, in five registers topped with small domes, are set on the corners of the roof of the portico. These minarets also appear to have been added to the building at a later date, perhaps at the same time as the parapets. The date of the pavilion itself is not certain, but as its columns are similar to those of the mosque, the building may be datable to the fifteenth century, with arches added to it a century or so later.

The mosque of Qāḍī Tāj al-Dīn

The majority of the Muslims of Madura live around the main street of Qāḍī Mahalla or Kazimar, in the south-west of the old town. There are two mosques in the area, the mosque of Qāḍī Tāj al-Dīn also known as the Kazimar Masjid (Fig. 10, Pl. VIII) and another nearby in West Masi Street, outside Qāḍī Mahalla. This second mosque originally consisted of a rectangular prayer hall with a flat roof supported by plain columns. It is said to have been built in 1917, but in spite of its late date it has the traditional layout, and a plain mihrab, semi-circular in plan. The mosque of Qāḍī Tāj al-Dīn, however, is an old structure and is regarded as the Jāmi' of the old town. Since the early 1970s modern institutions, including a Muslim administration centre and a library, have been constructed around the building, and the mosque itself has also been enlarged: a modern prayer hall has been added in front of the old building (Pl. VIIIa), and another hall to its north. In spite of these modifications the old mosque has survived intact, and without much alteration, except that the exterior features such as the original eaves and drip stones are now hidden under modern additions.

The mosque is traditionally claimed to be the oldest Islamic monument of Madura, founded in the late thirteenth century by Qāḍī Sayyid Tāj al-Dīn whose descendants still hold the office of qāḍī in the town. According to the family history and genealogy of the qāḍīs the Sayyid Tāj al-Dīn was the son of Sayyid Jamāl al-Dīn Ma'barī al-Muftī who was sent from Egypt early in the thirteenth century to South India as qāḍī of Ma'barī. One of his sons Sayyid 'Alī al-Dīn later became qāḍī of the town of Qā'il (present Kayalpatnam) and the other son, Tāj al-Dīn, qāḍī of Madura as well as of the army of 'Alī al-Dīn Khalīfī. However, the genealogy records that Tāj al-Dīn died in 692/1292–3. This date is three years before 'Alī al-Dīn Khalīfī came to the throne of Delhi. The dates of the qāḍī's genealogy may not be accurate, but it is also possible that some events of his life have been

Fig. 10. Madura, Mosque of Qādī Tāj al-Dīn or Kazimar Masjid. Plan, section and east elevation.

confused with those of his grandson, who, as appears from the family records, was a later qādī of Madura, and had the name Tāj al-Dīn b. Jamāl al-Dīn. The date of this second Tāj al-Dīn may easily fall into the period of the Khaljī conquest of Maʿbar. The genealogy reveals that the office of qādī of Madura remained for many centuries in the hands of one family, and also mentions some historical events which are not recorded elsewhere, and are, therefore, unattested. For example, it suggests that the Khaljī army penetrated to as far south as Kayalpatnam.

The Kazimar or Qādī Tāj al-Dīn Masjid itself is a relatively small building measuring 16 × 11 m from outside, and built entirely of stone. It consists of a colonnaded porch at the
(a) Madura, Mosque of Qāḍī Tāj al-Dīn or Kazimar Masjid. View from the east looking at the front colonnade, which was originally the exterior façade of the old mosque, but is now enclosed by recent extensions.

(b) The same mosque, interior view of the ante-chamber looking north.

eastern side, leading through an ante-chamber to the prayer hall (Fig. 10). The front porch is only one aisle deep with a flat ceiling, and has six free standing columns in front with corresponding pilasters on the two corners of the front wall of the ante-chamber. The central bay of the colonnade is wider than the other bays. The monolithic columns are
40 cm square at base, and their shafts, 3.68 m high from the ground, are divided into alternating square and octagonal registers, the surfaces of which are elaborately decorated. The arrangement of the registers, and the decorative details of the shafts are similar to the outer columns of the shrine of ‘Ala’ al-Dīn, but the shafts are not as tall. The columns are surmounted by brackets which are also closely similar to those of the outer columns of the same shrine, and have the familiar features, although at present the downward stem and flower, the nannadal and palastaram, are hidden behind modern arches which have been built between the columns of the porch (Pl. VIII a). However, a large photograph is kept in the mosque, showing the building as it was in 1966 before the additions and alterations. This photograph, also published in the genealogy of Sayyid Tāj al-Dīn, shows the decorative features of the brackets, and the details of the original eaves and drip stones, as well as a post-Mughal parapet together with its turrets above. In our drawings the modern additions, including the arches of the porch are not shown, and the features obscured by modern constructions are drawn in their original form, based on the 1966 photograph.

From the porch three doors give access to the ante-chamber (Pl. XIII b) which is divided into three bays by means of four columns, supporting stone lintels running the length of the room. As in the mosque of ‘Ala’ al-Dīn there are no corresponding pilasters in the walls, and at these points the lintels rest on corbelled brackets. As usual the roof is made of flat stone slabs, but the ceiling of the central bay is 30 cm higher than the side bays. This type of roof structure is unusual in North and West India, but is common in the South. The higher middle slabs of the roof allow a reduction of the thickness of the cement cover, which slopes from the middle to both sides in the form of a flattened gable. The gable is probably an imitation of the sloping roofs of the wooden structures of the past, the existence of which are recorded by Ibn Baṭṭūṭa. This arrangement helps heavy rain drain rapidly, a need which is not felt as acutely in the dryer northern regions. The columns and the brackets of the ante-chamber are similar in form to those of the mosque of ‘Ala’ al-Dīn, but in this mosque the lower registers have recently been covered with terrazzo cement, obscuring the details. The north and south walls of the ante-chamber also have entrances, flanked by windows. At a later period arches were built over these side entrances, but the arches are now filled in.

From the ante-chamber three doors lead to the prayer chamber, and there are also entrances, in the middle of the northern and southern walls. The single miḥrāb in the centre of the qibla wall is square in plan and has a slightly ogee three lobed arch. Three lobed arches are, of course, a very old form in the Islamic world, and their origin may be traced back to the miḥrāb of the Dome of the Rock. In India the earliest examples appear in the miḥrāb of Arāhān din kā Jhunpā; in Ajmer and the Shāhī Masjid in Khatu, both dating from the end of the twelfth century. If the origin claimed for the Kazimar Masjid can be accepted this miḥrāb would represent one of the oldest of the type in South India. At either

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62 Ibid., pp. 55–6, pl. 51.
side of the mihrab there is a flat niche with a four-centred arch. It should be pointed out that, as seen in other buildings, in this mosque the arches are again not true arches, but are cut out of large blocks of stone to the required profile.

The ceiling is made out of flat stone slabs which at the northern and southern ends rest on stone lintels supported by four pilasters with carved shafts and brackets. In the middle of the chamber are four columns which differ slightly from those of the ante-chamber and have relatively plain shafts with an octagonal register in the middle and a square register at each end, although, as with those of the ante-chamber, modern cement covers the lower register. The columns support four lintels which are unusual in that they are not set to rest at each end on the pilasters of the wall, but instead form a rectangle in the middle of the ceiling, covered by slabs which stand about 30 cm higher than the ceiling of the chamber. It is not clear whether this arrangement is original, or if the roof structure was repaired at later dates and the lintels between the columns and the pilasters removed. However, the existing arrangement gives the feeling of a central canopy, and on the roof the cement cover in the form of a flattened pyramid assists rapid drainage of rain water.

As far as the dating of the building is concerned, from the form of the columns, and particularly those of the front porch, a thirteenth-century date is unlikely to be acceptable. We have noted that these elements are similar to those in the tomb of ‘Ala’ al-Din and are comparable to the fourteenth- and fifteenth-century columns of the Vijayanagar period. Although a mosque at this site may have been founded originally by Sayyid Tāj al-Dīn in the late thirteenth century, the present building is more likely to date from the late fourteenth or early fifteenth century.

The layout of the mosque is also notable. The plan of the Qādī Tāj al-Dīn Masjid differs from that of the mosque of ‘Ala’ al-Dīn in that it has the extra ante-chamber between the front colonnaded porch and the prayer chamber. An ante-chamber in front of a prayer hall never appears in North India or in the earlier mosques of the Muslim settlers at Bhadresvar and Junagadh, notable for their front colonnades. However, ante-chambers can be found in many of the mosques of South India datable to the fourteenth century and later. Among such buildings are the Mithqālpalli and the Muchchandipalli in Calicut described in the Appendix. Although the wooden superstructures give these buildings a totally different appearance, in plan the Muchchandipalli in particular is closely comparable to the Qādī Tāj al-Dīn Masjid. Elsewhere in the Islamic world ante-chambers in front of the prayer halls of a mosque are uncommon, but appear exceptionally in the coastal regions, for example in a number of mosques in the Yemen, some as early as the twelfth century. However, in the mosques of the Yemen the ante-chambers are much smaller than the prayer halls, and do not have colonnaded porches. It seems, therefore, that the layout incorporating an ante-chamber was brought to South India by Arab merchants sometime in the fourteenth century, and this layout was combined with the earlier tradition of setting a colonnade in front of the mosque. From this time the two types of plan appear side by side in the mosques of South India, as can be seen in the mosques of Madura and Calicut.

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63 Umberto Scerrato et al., “Archaeological activities in the Yemen Arab Republic”, East and West, xxxv, iv (1985), pp. 375-82, figs. 38, 48. Foundations of a mosque with a similar plan have also been found in Sīrāf, see David Whitehouse, “Excavations at Sīrāf”, sixth interim report, Iran, xii (1974), p. 16, fig. 8.
Shrine of Sikandar Shāh in Tiruparangundram

Tiruparangundram, situated 6 km south-west of Madura (Fig. 1), is a small town at the north-east of a rocky hill. There are a number of old buildings in and around the town, some abandoned, and some incorporated into modern structures. Inside the town at the foot of the hill is a large temple, probably of late Vijayanagar origin. To the east of the town is a lake-sized reservoir, cut mainly into the living rock, and filled via water courses which bring rain water from the bare rock of the hill. Few old structures have remained on the hill itself apart from a small tank cut deeply into the rock to the east of the summit, a Hindu shrine at the south, and the shrine of Sikandar Shāh on the summit at the north of the hill. The shrine of Sikandar Shāh is one of the main pilgrimage centres for Muslims in the region, and as we have already noted, the town is regarded as the last stronghold of the sultans of Madura. Its location 6 km from the River Vaigai closely corresponds with Ibn Baṭṭūţa’s location of the sultanate capital. The tomb of Sikandar Shāh, believed to be at the place where he was killed by the Vijayanagar Raja after a long resistance, also indicates that Tiruparangundram may be the site of sultanate Madura. However, apart from the shrine of Sikandar Shāh and a number of other tombs no other Muslim traces can be seen on the hill at present, and to establish the true location of the sultanate capital a thorough investigation of the area, and perhaps some archaeological excavation may be needed.

The route to the summit of the hill ascends from the south-west of the town. Halfway to the summit in a relatively flat area there are a number of graves, believed by the Muslims to be of the soldiers of Sulṭān ‘Alī al-Dīn Sikandar Shāh who fell in the last battle with Kampana. There are no tomb buildings over these graves, but some graves have larger tombstones, and are said to belong to nobles, including the vazir of the sultan.

Sulṭān Sikandar himself is buried on the summit of the hill, originally in a grave with a simple tombstone under a large piece of rock which juts out diagonally from the ground. The present shrine (Figs. 11, 12, Pls. IXb, X and XI) was built sometime later over the grave, incorporating the rock (Pl. Xb). The structure consists of two parts, a square tomb chamber for the shrine itself, at the western side, and an adjoining mosque at the eastern side. It is not clear whether or not they were both built at the same time, and from the upper courses of the exterior walls, the eaves and the dripstones are the same in both parts of the building. There is, however, a joint between the two parts and the walls differ in thickness. The ground level of the two parts also differs, and the prayer hall of the mosque stands about 30 cm above the level of the tomb chamber. It appears, therefore, that the tomb chamber was first built and the mosque was soon added to it. On the other hand it cannot be ruled out that the mosque was built, and the grave was left in its striking position under the massive hanging rock, which provided a natural shrine, and that some time later the square chamber was built to enclose the grave and the diagonal rock together.

The mosque is similar in plan to the Qādī Taj al-Dīn Masjid, and consists of a front colonnaded porch (Pl. Xa) at the west, leading via three doors to an ante-chamber (Pl. XIa) which opens via a single door to the prayer chamber (Pl. XIb). There are also other entrances to the ante-chamber from the north and south, but the prayer chamber has no
doors to the outside, and in the middle of the northern and southern walls is a small window. The ground levels vary in the mosque, probably to adjust to the form of the rock on which it stands. The colonnade is on a plinth 1.20 m above the level of a small courtyard to the east of the building, and while the ground level of the prayer chamber is the same as that of the porch, the floor of the ante-chamber is lower by 23 cm. The
building is constructed with the usual large stone blocks, monolithic columns, brackets and lintels, and the roof is made out of flat roof slabs.

The porch measures $8.90 \times 3.00$ m and has four highly decorated columns in front (Fig. 12, Pl. Xa) supporting the lintels, the soffits of which are also carved with foliage patterns. At each end of the back wall of the porch there is a pilaster, square in plan with no decoration. The columns stand on bases $34$ cm square, and the shafts are divided into five main registers, square in plan at each end and with polygonal registers in between. The columns are similar in form to those of the colonnade of the Qāḍī Tāj al-Dīn Masjid and also the outer columns of the shrine of ‘Alā’ al-Dīn, but in this building the carved decoration, although similar in principle, is more refined and better executed. The square lower registers are decorated with foliage patterns of the South Indian Type, and above each corner is an upstanding carved leaf known in South Indian architecture as nāgāpadam.
Plate IX

(a) Madura, Qādī Tāj al-Dīn Masjid, interior of the prayer chamber showing the miḥrāb.
(b) Tiruparangundram, Shrine of Sultān Sikandar Shāh, general view from the south.

The middle registers have a variety of decoration on each face, mainly in the form of foliated motifs or rosettes. The upper registers are mostly decorated with a four petalled flower within a square. The polygonal registers are separated by octagonal collars. The brackets are also in the usual South Indian form, with the upward and downward turning lotuses.
Plate X

(a) Tiruparangundram, Shrine of Sikandar Shāh, the front colonnade, with pilgrims resting in its shade.

(b) The same shrine, exterior view of the northern side of the tomb chamber built around the rock under which the sultan is buried. Part of the rock, which forms the roof of the chamber, protrudes through the northern wall. The domed pavilion above was added at a later date.
(a) Tiruparangundram, Shrine of Sikandar Shāh, view of the ante-chamber of the mosque looking north.

(b) The same shrine, interior view of the prayer chamber of the mosque looking north.

Inside the mosque the ante-chamber (Pl. XIa) measures 7.90 × 8.40 m and has three aisles with the lintels running the length of the chamber and supported by four columns and corresponding pilasters on the east and west walls. The pilasters are plain, and are rectangular in plan. The columns are also plain, with the shafts divided into five alternate
square and octagonal registers, set directly on the ground without a base. This type of column is among the most common in South India, made either of stone or wood. The roof structure of the ante-chamber is also similar to that of the Qādī Tāj al-Dīn Masjid, and the ceiling of the central bay is about 30 cm higher than that of the side bays. The prayer chamber (Pl. XIIb) is square in plan and its ceiling is divided into nine smaller squares of varying heights, supported by carved lintels resting on four columns in the middle of the chamber and corresponding pilasters on all walls. The central square of the ceiling is about 30 cm higher than the adjoining ones, which cover the middle bay and aisle. The corner squares on the other hand are the lowest of all, being about 30 cm lower than those of the middle bay and aisle, and 60 cm lower than the ceiling of the central square. On the roof level these stone slabs are covered with cement in the form of a flattened pyramid. Inside the chamber the roof lintels, columns and brackets bear extensive decoration. These elements are in their general form and decoration similar to those in the front porch, but in these columns the patterns are flatter and are slightly simplified, leaving the decoration of the front porch to dominate.

There is no conventional mihrāb in the prayer chamber, instead the niche in the middle of the qibla wall opens into the tomb chamber behind. Although the lack of a mihrāb may seem unusual, mihrābs in the form of an opening to a sanctum behind are not entirely unknown in the Islamic world, and conform with the concept of the mihrāb as a door to heaven. One of the earliest examples of a mihrāb in the form of an additional sanctum to the prayer chamber can be found in the Great Mosque of Cordoba, but there are examples closer to the sub-continent in Iran, in the coastal areas of the Persian Gulf and the Arabian Sea, in mosques excavated in Strāf,64 and in Ghubayrā65 situated between Hurmuz and Bam. These areas were centres of Muslim commerce with India. In the shrine of Sikandar Shāh the idea of opening the mihrāb of the mosque into the tomb chamber is, therefore, not without precedent. We have, however, noted that two parts of the shrine may not be of the same date. If the mosque is earlier, the present opening may have originally been a conventional mihrāb which was later made into the entrance of the added tomb chamber, but if the tomb chamber is earlier, the present arrangement would be original, as the mosque would have been added in front of the only entrance of the tomb.

The tomb chamber measures 6.70 m square from outside, and from inside appears as an irregular cave with the ceiling and southern part of natural rock. It is hardly possible to stand at the north-east corner of the chamber and the ceiling slopes down to the ground at the south and south-east. The tomb of Sikandar Shāh is under this rock and has a simple tombstone. On the outside, part of the rock protrudes from the east wall of the chamber, and underneath a small window is built into the wall, providing light and air to the


65 The final report of the excavations at Ghubayrā, in which the mosque is described, has not yet been published. In the interim reports the mosque, known locally as the Dargāh, has been referred to as a gatehouse or a throne room. See A. D. H. Bivar and G. Fehervári, “Excavations at Ghubayrā, 1971, first interim report”, *JRA*, 1974, p. 112, fig. 2; “Survey of excavations in Iran, 1973-4”, *Iran*, xiii (1973), p. 181, pls. Vla and Vlb; *Proceedings of the third annual symposium on archaeological research in Iran* (Tehran, 1974), pp. 257-8, fig. 5.
otherwise dark interior. On the roof of the chamber a square domed pavilion has been added at a much later date (Pl. Xb). The pavilion has an arched opening at each face, and the broken ogee arches are of post-Mughal form. The dome of the pavilion is octagonal at the base, and at each corner of the roof of the pavilion there is a small turret in the form of a domed lantern, also comparable with those of the late and post-Mughal period in the Deccan. Among other later additions to the building is a parapet around the roof, reinforced by a number of turrets (Pl. IXa). In recent years poorly constructed porches have also been added to the north, west and part of the south side of the building. In our drawings (Fig. 11) the older additions are shown, but modern additions are omitted.

The Shrine of Sultan ‘Ala’ al-Din Sikandar Shāh is the last monument in the region associated with the sultans of Madura. It must have been built some time after the death of the sultan, and, as we have seen, the architectural elements of the building are comparable to those of the early Vijayanagar period. The building may therefore be datable to the end of the fourteenth or more probably to the fifteenth century. The layout of the building shows the continuation of a traditional plan which originated in the architecture of the Muslim merchant communities of the south, and bore little relation to North Indian Islamic architecture. In decorative elements the building also follows the other monuments of the sultanate of Ma’bar, and uses purely South Indian patterns, already familiar in the Hindu architecture of the region. The Muslims, however, avoided the figurative elements which are so characteristic of South Indian architecture. The Shrine once more represents that, in spite of the northern origin of the sultans, their architecture followed traditions which were already established in the south, and continued until recent times.

As the Shrine of Sikandar Shāh must have been constructed after the death of the sultan, it appears that the local Muslims were not treated by their new Hindu sovereign as badly as was represented to the court of Delhi, and recorded by Shams Sirāj. It seems that they enjoyed some freedoms, even to the extent of being able to preserve the tombs of their previous sultans, and build one for the last of them, Sikandar Shāh, who was, after all, killed at the hands of the new rulers. The Muslims continued to pay tribute to the tombs, which in the course of time became holy shrines. If it were not for a handful of coins and the brief account of Ibn Baṭṭuta, the history of the Sultanate of Madura might have been forgotten by outsiders, but for the Muslims of Madura, who have tended the monuments and the memory of the sultans — their martyred warriors — it is a central element of their cultural history.
APPENDIX

Islamic monuments of Calicut

The ancient port of Calicut in Kerala on the Malabar coast has preserved some of the most impressive mosques of the Muslim settlers in India. In spite of the monumental size of the buildings, and in two cases decorative woodcarvings which are among the rare examples of their kind in India, these mosques are little known, and so far no study of their architecture has been made. During our survey of the Islamic monuments in Tamil Nadu we were able to make a brief visit to the west coast and carry out a preliminary study of the monuments in the region. In this appendix notes on the mosques of Calicut, together with sketch drawings are presented, but a thorough investigation and detailed survey of the buildings remains to be carried out in the future.

The mosques of Calicut are very different in appearance from Muslim structures of other parts of India. The extensive use of timber in the construction of their upper storeys, and the tiered form of their roofs represent a distinct type of Islamic architecture which is worthy of special attention. The form follows the traditional system of building used in Kerala for structures as diverse as simple dwellings and large temple complexes. Until two decades ago many old mosques of this type existed in the region, but the old Islamic buildings are now fast disappearing, and are replaced by modern concrete mosques, or remodelled to such an extent that, at least from the exterior, the original form of the mosque is no longer recognizable. For example, during the last 15 years in Quilon (Kaulam) the old Jāmi' Masjid or Jamakapuram was demolished and a new mosque built on its site. In Cranganur (Kodungalor), the old building of the Cheraman Jāmi' Masjid (Fig. 13) has been obscured by modern corridors and halls built in 1984 around the old structure.

We have already noted the local legend claiming the foundation of the Cheraman Mosque to be as early as A.H. 8/629-10. It is said that in this year an Arab saint-converted Rājā Cheraman Perumal to Islam and he founded the mosque. Two versions of the legend are also recorded by Firishta69 who gives no dates, but in one version he notes that the event took place during the lifetime of the Prophet, while in the other he implies a much later date. The original part of the Cheraman Masjid appears, however, to be no more than two or three hundred years old, and consists of a small prayer chamber with an ante-chamber in front. It is not clear if the building had originally a front porch, as no traces of such a structure can be seen in the place now occupied by the modern hall. In the original prayer chamber the main features are preserved, including the mihrāb which is semi-circular in plan and has a semi-circular arch, with a rectangular projection outside the wall.

67 Ibn Baṭṭūta, op. cit., p. 575.
69 Firishta, op. cit., ii, pp. 369-70.
ceiling is made of oiled timber supported by wooden cross beams which rest on the walls. There are no columns in the old building.

In Calicut, on the other hand, the mosques have so far escaped extensive modern renovation or reconstruction. The town was one of the oldest Muslim settlements in India, and Ibn Battūta describes Calicut as a major port on the Malabar coast, governed by a Hindu ruler, and inhabited by various ethnic groups coming from China, Java, Ceylon, the Yemen and Fārs. The Portuguese accounts record that at the end of the fifteenth century foreign commerce was entirely in the hands of the Muslims, who in 1498 blocked all attempts by Vasco da Gama to establish his influence in the town. The Muslims’ determination to retain their position made da Gama leave Calicut in frustration, and in his second voyage in 1500 his armada shelled the town, causing damage and fire. Later, on 4 January 1510 the Portuguese made another attempt to take over Calicut, but were defeated by the local Hindu forces. This defeat is noted both by the Portuguese and by Firishta, who mentions that during the looting the Portuguese once again set fire to Calicut, and many buildings, including the Jāmī’ mosque, were burnt. In the following years Albuquerque, who was determined to establish his authority over Calicut, built a fort near the town, but the defence of the fort proved impracticable and in 1525, before leaving the area, the Portuguese themselves destroyed the fort to prevent it falling into the hands of the Muslims.  

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70 Ibn Battūta, op. cit., p. 372.  
72 Ibid., ii, pp. 153–63; Affonso Dalboquerque the Younger, The Commentaries of the Great Affonso Dalboquerque, Second Viceroy of India, tr. by Walter de Grey Birch, (London, 1875), ii, pp. 64–71. This account records that the palace of Calicut was set on fire, and also that the Marshal ordered a mosque near the city gate to be burnt, but does not make it clear if the order was carried out.  
73 Firishta, op. cit., ii, p. 372.
hands of the Hindus. With the departure of the Portuguese the Muslim community continued to remain in control of maritime trade in Calicut for many centuries. Today the Muslims live mainly in the old part of the town near the coast, in the area which was once the core of the old port. In the centre of the area is the main square of the town, with a large tank, and two of the old mosques. The other three mosques, including the Jāmi', are located nearby, in the streets south of the square.

The structural principle for all these mosques is the same. They consist of a stone foundation, usually in the form of a plinth, and stone walls at ground level with wooden columns and a wooden upper floor with a sloping roof. The columns in most of the buildings are of a similar type, each having five registers—three square in plan, with two octagonal ones in between (Pls. XII b, XIII b). The form of these columns is closely comparable to that of some of the stone columns seen in Madura, but these wooden columns are plain. Their lower register is usually taller than the other registers, and their wooden brackets supporting the beams are much smaller than the stone brackets seen in Madura. Later columns, usually datable to the eighteenth century and later, are slimmer in diameter and are round. The ground floor functions as a conventional mosque, but the upper floor may be used for housing a madrasa, an administration hall, or even a storehouse. The roof is sometimes tiered, but this form may only appear in the front elevation, while the rest of the building has a single hipped roof. In principle the plans follow the familiar South Indian type, already seen in Madura, and consist of a prayer hall at the west, an ante-chamber at the east, and all buildings except the Mithqālpalli (Fig. 14) have an open porch in front of the ante-chamber. As is usual with timber structures the buildings have undergone many repairs and restorations in the past, and most now have additions and alterations. A common addition to a mosque is a washing area consisting of a pool with an open roof in the centre of a covered hall, usually set at the north side of the ante-chamber or the front porch (Figs. 14–15). The arrangement of the roof of the pool is similar to that of the atrium of an ancient Roman house, with the roof sloping to direct rainwater into the pool through a central opening in the ceiling. Although the washing areas of all the mosques appear to be additions of relatively recent dates, the arrangement of an open ceiling in the middle of a building is traditional in the region. The mosques, large or small, each have only a single mihrāb, semi-circular in plan and mostly with a semi-circular arch (Pls. XII b, XIV b). This tradition is common in South India and shows a link with the western Islamic world, but differs from the North Indian tradition where a number of mihrābs are placed in the qibla wall of a mosque, and sometimes the form of the mihrāb is repeated in the niches of the other walls.

The Mithqālpalli or Nākhudā Mithqāl Masjid

The mosque (Fig. 14, Pl. XII) is a dominating structure set in open ground to the north of the central square. In spite of the additional washing area at the northern side, and a modern and poorly constructed colonnaded hall at the eastern side, the original building has remained virtually intact and has preserved most of its original features. The mosque

74 Affonso Dalboquerque the Younger, op. cit., iv, 1884, pp. 61–75.
Plate XII

(a) Calicut, Nākhudā Mithqāl Masjid or Mithqālpalli, exterior view from the south.
(b) The same mosque, interior of the prayer hall showing the mihrāb.

is said to have been constructed in the fourteenth century by Nākhudā Mithqāl, the well known fourteenth-century merchant of Calicut, who was alive at the time of Ibn Baṭṭūta.\textsuperscript{75} The original structure is set on a plinth which is now in the form of four steps running around three sides of the building, except at the eastern side where the ante-

\textsuperscript{75} Ibn Baṭṭūta, \textit{op. cit.}, p. 572.
Plate XIII

(a) Calicut, the Jāmi' Masjid. Exterior view from south-east of the front porch, and recent additions to the south of it.

(b) The historical part of the inscription of the Jāmi' of Calicut, dated 885/1480 and carved on a long wooden lintel set inside the ante-chamber and above the openings to the prayer hall. Part of the interior of the prayer hall can also be seen.
chamber is entered by five small doors. This chamber, five bays wide and three aisles deep is set to the east of the large prayer hall of the same width, and both parts have a number of doors at all sides. In the middle of the qibla wall is the mihrab, in the form of a deep semi-circular niche with a semi-circular arch. On the northern and southern sides of the mosque are two narrow corridors which continue at the western side, but are disconnected in the
middle of the qibla wall by the outer projection of the mihrab. In a later reconstruction the eastern part of the northern corridor has been removed to provide space for a washing area with a pool in the centre. Around the corridor there are also a number of doorways, each corresponding with an entrance door to the prayer hall or the ante-chamber. All the doors have semi-circular arches with a prominent border on the exterior. On the elevation, between the doors there are smaller flat niches with similar semi-circular arches. Only at the northern side of the ante-chamber the original entrances have been removed and replaced with two larger arches. The original form of the eastern front of the building is not clear, as at present it is occupied by a modern corridor and hall. While the mosque may never have had a colonnaded porch in front of the ante-chamber, when it is compared with other monuments the existence of such a porch cannot be ruled out.

The wooden upper structure of the mosque is now entered from a staircase at the north-west corner of the ante-chamber, but the staircase appears to date from a later restoration. The space of the upper structure is in the form of a three tiered roof with trellises around each tier, and a balcony around the lower tier. This space was said to have been used as a madrasa until recently. At the top of the roof there are three pinnacles, one in the middle, and two at each end of the roof. The number and arrangement of these pinnacles resemble those on the roofs of Hindu and Buddhist temples in South India and the Far East, and can be found even in the temples and monasteries of Nepal.76

The building is known to have been damaged by fire at least twice, once at the time of the Portuguese attacks and again in the late seventeenth century. However, the stone walls seem to be original and date from the fourteenth century. Some of the columns, with the familiar square and octagonal registers, as well as most of the massive beams of the ceiling may also be original, but are more likely to date from the fifteenth-century reconstruction. The modestly carved wooden minbar is set to the north of the mihrab and bears inscriptions recording the seventeenth-century fire, and mentions that the minbar was constructed after the fire in 1088/1677–8.77

The Jāmiʿ Masjid

The Jāmiʿ of Calicut (Fig. 15, Pl. XIII) in its present form is the largest mosque of the town, but appears to have been originally a small building which has grown to its present size after much restoration and expansion. However, the Jāmiʿ recorded by Firishta to have been burnt by the Portuguese may not be the same as the present mosque. It is more probable that the burnt Jāmiʿ was never reconstructed, and instead the present mosque was chosen as the new Jāmiʿ, and later enlarged to house a greater congregation. The original part of the mosque is among the few South Indian Islamic monuments bearing a dated inscription in situ. It is carved on a wooden lintel and has an Arabic text beginning with Qurʾān IX, xviii, followed by a tradition, and ending with a historical statement (Pl. XIII.b):

Translation: This noble place was renovated and restored\textsuperscript{78} by the honourable \textit{khwaja}, Badr al-Din Hasan the son of the late Ab\textsuperscript{i} Bakr al-Si\textsuperscript{i}r\textsuperscript{79} known as al-Kanafi\textsuperscript{80} in the year 885/1480-1.

From this text it is clear that at that time the original building must have been an old structure, already in need of renovation. The date of the construction of the mosque therefore can be put to at least the fourteenth or early fifteenth century, if not earlier. The date of restoration is also worthy of attention as it is well before the Portuguese attacks on Calicut, and is therefore not associated with any reconstruction after the Portuguese fire.

The building is constructed on a plinth about 80 cm high, and the lower register of the stone walls is battered, giving a sense of solidity and rigidity to the structure. Although as

\textsuperscript{78} The word \textit{shayyad} literally means resurfacing the walls with plaster, but can also mean renovation, restoration, and sometimes making additions to a building, see F. Steingass, \textit{Arabic-English Dictionary (London, no date but c. 1884)}, p. 566, under the word \textit{shd}.

\textsuperscript{79} Si\textsuperscript{i}r or Si\textsuperscript{i}rdh is also recorded by Abu\textsuperscript{'}l-Fida, op. cit., pp. 324-5, as Si\textsuperscript{r}t and Is\textsuperscript{r}dth.

\textsuperscript{80} The title al-Kanafi, “of the coasts”, must refer to the reputation of the family in maritime trade.
(a) Calicut, Muchchandipalli, entrance porch from the east. The original form is slightly altered, with the addition of two bays at either side of the porch and a modern wall in the upper structure.

(b) The same mosque, coffered ceiling of the entrance porch with religious inscriptions carved in relief in a fine overlapping naskhī script on the lintels. Similar ceilings can be found in the porch of the Jāmi' Masjid.
a result of several additions to the mosque the plan is no longer symmetrical, the building still consists of the usual front colonnaded porch, an ante-chamber, and a large prayer hall. The small porch at the eastern side originally had four columns in the middle and was walled on three sides and open to the east, but the southern wall has recently been removed, and a poorly constructed extension has been added to the south of the porch. The old porch may originally date from the fifteenth-century restoration, but has again been restored in the late seventeenth century, and, according to an inscription carved on one of the lintels, this restoration was carried out under the patronage of one Shaikh 'Imād (? b. ʿrāhim, known as Nāwkhudā (the ship master). The ceiling of the porch, reconstructed by Shaikh 'Imād is the most ornamented part of the mosque and is similar to that of the Muchchandipalli porch (Pl. 14 b) described below. The inner facing side of each beam is divided into four registers, the lower one decorated with foliated scrolls, with above it a series of palmettes surrounded by aureoles. This motif appears to be South Indian rather than Islamic in character. In contrast, the register above the palmettes is inscribed in relief with religious inscriptions, as well as the record of Shaikh 'Imād, in a compact overlapping nastkhī script. The uppermost register is decorated with a course of rosettes with mouldings above. The ceiling itself is also highly decorated and the square coffers each have a large lotus with the frames carved with rows of rosettes. The coffered ceiling follows ancient southern Indian forms, represented in the Ajanta caves, but it is also comparable with the ceilings of wooden mosques in the Islamic world, for example those in the Imamzāda Ismāʿīl at Barz and the fourteenth-century Jāmiʿ of Abyāna both in central Iran as well as the mid-twelfth-century Mosque of Bānī al-Ṭayyar at Qaydān in the Yemen. In these buildings the beams also bear religious and historical inscriptions, but they are painted rather than carved.

Behind the porch, the original ante-chamber had a nearly square plan with four columns in the middle. At the time of the extension the southern wall was removed, and six columns in two rows of three columns were added to the chamber, bringing the southern wall into line with the wall of the prayer hall. The northern wall of the ante-chamber has been preserved. The most significant feature in the ante-chamber is the dated inscription (Pl. XIII b), the text of which is given above. This inscription is carved on a long wooden lintel set above the three doors to the prayer hall, and runs along the whole length of the original wall of the ante-chamber. At either side of the inscription is a rosette set in a square frame. The inscription itself is in a fine overlapping nastkhī script carved in relief, and in some places small rosettes are added to fill up plain surfaces between letters or words. The calligraphy of this inscription is a fine example of fifteenth century nastkhī in India.

The prayer hall in its present form is rectangular, eleven bays wide and five deep. There are two rectangular pools inside the prayer hall one orientated north–south, in the

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81 The inscription has so far remained unreported and needs further study. Our reading of the name was made on site.  
northern part of the hall, and another orientated east-west, in the southern part. Above the pools the roof is open, with the roof of the upper structure sloping towards these openings, directing rainwater into the pools. The columns are not arranged on the usual grid plan, instead there are two rows of columns in the middle part of the hall, while the rest of the columns are set in two rectangles around each pool. The columns are of the usual type, except those set at the borders of the pools, which have slimmer, circular shafts. The unusual arrangement of the prayer hall and its columns may be due to alterations and expansions, perhaps on two separate occasions. The original hall appears to have consisted of the three middle bays only, later to be expanded on the northern and southern sides. In these expansions the pools, which must have been in washing areas outside the hall, were preserved and incorporated into the hall. As in the Mithqālpalli, the prayer hall has a number of doors on all sides, and recently a colonnade was constructed around the hall, but it is not clear if this is a replacement of an earlier one.

The original mihrāb, similar to that of Mithqālpalli, is also preserved, and to its north is a relatively modern wooden minbar with six steps ascending to a speaker’s platform with a canopy above. The minbar bears an inscription dated 1316/1898–9,85 but on the back of the speaker’s platform the inscription of an earlier minbar is preserved, recording in three lines of Arabic verse the restoration and renovation of the minbar by Shaikh ibn Ibrāhīm, known as Nāwkhudā, in 1094/1682–3.86 This must be the same as the Shaikh ‘Imād who was responsible for the restoration of the porch and presumably a major restoration of the whole building which perhaps included the expansion of the prayer hall.

The wooden upper structure consists of one large space with a separate room above the porch. The roof of the upper structure is in a two-tiered form and is supported by wooden columns with square and octagonal registers. The chamber above the porch is the office of the Imām of Calicut. The walls of the chamber are made of lattice-work, sloping in towards the floor, providing light from the three open sides, with a built-in bench behind the lattices running around the chamber. This bench and the sloping lattices are similar in form to the traditional stone benches around many pavilions in India, for example in the entrance porches of the Tanka Masjid and the Mosque of Hilāl Khān Ghāzī in Gujarat.87 Similar lattice work is set around the building, as well as around the openings above the pools, and provides light for the main hall of the upper structure.

**Muchchandipalli**

Muchchandipalli (Figs. 16–17, Pls. XIV–XV) is a small mosque situated to the south of the old town. The layout and lower structure of the mosque are well preserved with relatively minor changes. The mosque is a rectangular building measuring about 22 × 9 m and consisted originally of an open colonnaded porch, three bays wide and two aisles deep, with three doors opening to a relatively small ante-chamber which in turns leads by

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85 The inscription is unpublished, our reading was made on site, and from a photograph, not reproduced here.
86 The inscription is unpublished but was reported in ARIE, 1965–6, p. 136 no. D. 57.
Fig. 16. Calicut, Muchchandipalli. Sketch plan showing the original building, with a modern pool added at the north side and additions to both ends of the portico.

another three doors to the prayer hall. On the wall inside the mosque is a bilingual inscription in Arabic and Tamil carved in relief on a slab of stone, recording the construction of a mosque by a personage whose name may be read as Shihāb al-Dīn Rayhān. The inscription is damaged, and the date can no longer be read, but from the type of the script it may be datable to the thirteenth or early fourteenth century. The stone is not in situ, but it is locally believed that the inscription is the foundation stone of Muchchandipalli.

The existing structure itself is also of considerable age, and inside the ante-chamber there is another inscription (Pl. XV a) the historical part of which is damaged but which appears to have been set up to record a restoration of the mosque. In all aspects the inscription is comparable to the 885/1480–1 inscription of the Jāmi' Masjid as it is also in overlapping naskhī script, carved in relief on a long wooden beam which is set above the three entrances to the prayer hall. The calligraphy of the two inscriptions is also very similar and if they are not by the same hand they belong to the same school and must be close in date. The


89 The inscription has not been reported previously.
composition of the inscriptions is also similar, as they both bear a religious text followed by historical information, with the two parts of the text divided by small rosettes. In Muchchandipalli, as we noted, the historical text is badly damaged. From what has been left the words shayyada, masjid, Hasa(n), thamā(n), hijra and nabawi can be read with some certainty, and with the help of other surviving letters the following reading may be tentatively suggested:

\[
\text{jaddada wa shayyada... (hadha) al-masjid... Hasa(n) (ibn)... (bi tārikh) sana... kham(s)... thamā(n mi'a) hijra nabawī.}
\]
Calicut, Muchchandipalli, the end of the fifteenth century inscription carved on a long wooden lintel set in the ante-chamber and above the three entrances to the prayer hall.

The same mosque, interior view of the prayer hall looking towards the mihrab.

Translation: this mosque... (was) restored and renovated (by)... Hasan b.... in the year... eight hundred (and)... five of the Hijra of the Prophet.

If the reading of the name can be accepted, Hasan may be the same Badr al-Din Hasan who renovated the Jami' in 885. The date of the renovation of the Muchchandipalli must also be close to this date, if not the same year.
The mosque stands on a relatively high plinth, about 1.50 m above street level, and around the mosque a number of doors open directly to the ante-chamber or to the prayer hall. As with the Mithqālīpalli, the doors each have a semi-circular arch with a wide border on the exterior. The arches, however, are not true, but are carved out of large blocks of stone, in the usual manner for early Islamic monuments in South India. The borders are simpler than those of the doors of the Mithqālīpalli, and on the exterior of the Muchchandipalli there are no decorative arched niches between the doors. The most decorated part of the building is, as with the Jāmi‘, the colonnaded porch. The wooden columns have recently been clad with marble slabs, obscuring the original form, but the decorated beams and the coffered ceiling (Pl. XIV b) are closely comparable with those of the porch of the Jāmi‘. The decorative details, including the script of the band of religious inscriptions on the beams, are so closely similar that they can be regarded as the work of the same team of craftsmen. The present porch must therefore date from the seventeenth century. The porch has been extended recently to the north and south, and on the northern side there is access to a washing area, also added recently to the north of the ante-chamber.

The upper structure of the mosque is divided into two parts. The single tiered upper floor above the prayer hall and ante-chamber has a hipped roof which joins the two tiered roof of the porch. In addition, on the east elevation (Fig. 17, Pl. XIV a) the sides of the upper tier are cut away, and a roof is added over the first floor balcony to give the appearance of an extra tier to the roof. This effect is a feature of the Kerala mosques, and can be seen in all the mosques discussed here. It appears that the mosque originally had a simple hipped roof, and to give the building a grander façade, in the seventeenth-century renovation the two tiered roof was constructed together with the porch. As a whole the roof is well preserved, but the original lattice work around the upper structure has now been replaced by a modern plastered wall.

Allāhrapalli, Idrīspalli and the Dargāh of Sayyid ‘Abd’ullāh

The other two traditional mosques of Calicut are the Allāhrapalli, located at the southwest corner of the tank in the main square of the old town, and the Idrīspalli, situated a short distance to the south east of the Jāmi‘. Neither of the mosques bears a historical inscription, but in design and structural principles they are comparable to the other mosques under discussion. Allāhrapalli (Pl. XVI b) is the smallest, and its narrow front porch walled at each side and with two front columns may date from a relatively recent date. Like the Mithqālīpalli, it may never have had a porch. Above the porch is a balcony in front of the upper structure of the main mosque. The building has a single hipped roof, with the sides of the roof cut away to give the effect of two tiers on the eastern elevation. From the porch a single door leads to a narrow ante-chamber with a staircase at the southern side giving access to the upper structure. The prayer chamber itself is nearly square in plan and has a relatively large mihrāb with a semi-circular arch in the middle of the qibla wall.

The Idrīspalli (Pl. XVI a) is comparable in size to Muchchandipalli, but its layout is closer to the plan of Mithqālīpalli, and has a corridor running around three sides of the
Plate XVI

(a) Calicut, Idrispalli, view of the front porch from the north-east.

(b) Calicut, Allihapalli, view of the front porch from the north.
building and open at each end at the eastern side. The upper structure is reached by a staircase at the north of the ante-chamber. The upper floor is built over the inner walls of the corridor and has a single roof. The corridor itself has a separate roof giving the building a two-tiered appearance. At the eastern side of the mosque an extra aisle has been added to the front of the colonnade and the openings of the two sides of the corridor, but the new porch is set on the ground level while the original porch and the corridor are built over the plinth of the mosque. The two columns of the original porch are round, but are divided into two registers with the lower register being fluted, somewhat in the manner of classical columns. From the porch three doors open to a relatively large ante-chamber,
three bays wide and with doors at all sides. The prayer hall is also three bays wide and has doors and windows all around. The mihrāb is different from other mihrābs of Calicut in that it has a three lobed ogee arch which may be an indication of a later date for the mihrāb—perhaps seventeenth or even eighteenth century, although the mosque itself may be older.

In front of the Idrīspalli is an old tomb chamber known as the Dargāh of Sayyid ‘Abd’ullāh. The building is a square domed chamber (Fig. 18) constructed of dressed stone blocks on a plinth about 3 m square and 80 cm high, and there is a door in the middle of each wall, except at the south. At either side of the eastern and western doors are circular windows with open work wooden screens, finely carved with concentric patterns. Around the roof there is a massively built cornice, the top course of which also functions as drip stones, and at each corner of the roof there are small stone turrets, topped with brass pinnacles. From inside, the building has an unusual structure, as the inner walls of the chamber curve inward, and at each corner, instead of squinches or pendentives, there are wide corbelled blocks, which, together with the walls, gradually curve to make a circular drum to support the dome. In the middle of the chamber is a tomb with a headstone bearing an inscription, reported90 to record the death of Sayyid ‘Abd’ullāh b. Muḥammad on 22 Sha‘bān 1185/30 November 1771. The reported information may belong to another inscription, as it does not correspond with what could be seen on the headstone. The inscription is worn and part of the text is no longer legible, but the date appears to be 805/1402–3, and the name Sayyid ‘Abd al-Rahmān.

The monuments of Calicut provide important precedents for the study of Islamic architecture in South India. In their layout and structure they represent a combination of local influences and forms brought from other parts of the Islamic world. The tiered roofs of the buildings, and the corridors around some of the mosques conform with the local architectural features seen in both religious and domestic buildings. Other features, such as doors with semi-circular arches, and arched mihrābs semi-circular in plan, are forms which would have appealed to the Muslim settlers who were familiar with them from their homelands. However, as has been seen in Bahdres‘var and Junagadh, these features had long been part of the architectural repertoire of the Muslim settlers in India, and were not newly introduced by the Madura and Calicut merchants. In the Calicut mosques, the most distinctive feature is perhaps the layout of the plan. We have already seen that the concept of having an ante-chamber in front of the prayer hall may have come from the mosques of the coasts of the Arabian Sea, and particularly from the Yemen. The colonnaded porch, however, has a much earlier origin in India, and, for mosques, again appears first in Bhadres‘var. The combination of these components has produced a particular form of plan for South Indian mosques, typified in the mosques of Calicut and Madura. How far these features are widespread in the region and to what extent this type of plan provides the main architectural theme for South Indian mosques remains to be determined by further study of the Islamic monuments in other parts of South India.

90 ARIE, 1965–6, p. 137, no. D. 59. Our information is based on our reading on site, and a photograph, not reproduced here.
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In South India Cochin is well known for its Jewish settlement, but the rich Muslim heritage of the town has so far remained almost unknown. A reason for this anonymity lies perhaps in that the Muslim community of Cochin — unlike that of Calicut — while highly influential in the commerce of the region, kept a low profile with regard to political affairs, at least from the time of the appearance of the Portuguese. Cochin, situated at 9° 58' N and 76° 14' E, occupies the northern part of a long stretch of land, about half a kilometre south of the Island of Vypin (Baypin or Vypeen) and 1.5 km west of the shores of the mainland, now occupied by the modern town of Ernakulam. Between Cochin and Ernakulam is a long expanse of sheltered but navigable water, at the mouth of which is Willingdon Island, housing the modern sea port and the airport.

The origin of the present town is said to go back only to 1341 when a geological event on a grand scale, presumably a massive earthquake, re-shaped the coast line of the region, destroying the old town of Cochin and its neighbouring villages, and at the same time causing the island of Vypin to emerge from the sea. The impact of the land movement was so dramatic that the people of the region commemorated the event as the beginning of a new era, calling it Puduvaipu, and started a new calendar. Many of the fourteenth and fifteenth-century inscriptions, and other records of Cochin, including two Muslim inscriptions described below, give dates according to this calendar.

Before this date, near the bank of the River Kocchi there was a small town with the same name, apparently under the administration of Cranganur (Cranganore or Kodungallore). This old Cochin was not, apparently a port of much significance, as there is no mention of it in the early Muslim records, in spite of its position almost half way between two of the most important ports of Malabar: Calicut in the north and Quilon in the south. The main port in the region was at this time Cranganur itself, which had a Muslim trading community from early times, with a mosque which according to local legend was founded as far back as a A.H. 8/629-30.

1 The survey of the Islamic monuments of Cochin was carried out as part of a larger project to record the architecture of the Muslim trading communities of South India. The project has been supported by the British Academy and the Society of South Asian Studies. Natalie H. Shokoohy assisted in the field-work, and Bahram Leisi helped with the production of the final drawings in London. The author wishes to express his gratitude to Dr Javad Golmohammadi and Mr Ala Qods for useful suggestions with regard to the reading of the inscriptions.


Ibn Battûta,4 who was travelling in Malabar in c. 743/1342–3, passed through the region a year or so after the destruction of the old coastal town, but apparently before the development of the later Cochin, as he does not mention it as a port. However, in his brief account he mentions the Jewish settlement of Cochin, which was set above a hill,5 and had apparently remained unaffected by the geological changes to the coastline:

The distance from Calicut to Quilon (Kûlûm) is ten days journey whether on land or on water. I chose to travel on water and hired a Muslim to carry my belongings. It is customary for those who travel on water to come ashore in the evenings to the coastal villages, and continue their voyage the next morning, and we did the same. My servant was the only Muslim on the boat, but he drank in every stop together with the infidels, growling at me, making me ever more depressed. On the fifth day we arrived at Kunjî Kârî which is situated above a hill and its population are the Jews who have their own community leader, and who pay their tribute to the king of Quilon.

The location of the Jewish town halfway between Calicut and Quilon, corresponds with Cochin, while the name Kunjî Kârî is most probably a version of the Indian name Konchi Ghârî (the town of Konchi).6 This name is also preserved locally; the old area of the town is still known as Cochangadi, and the historic synagogue of Cochin as the Cochangadi Synagogue. The Jewish settlement seems to have first moved to the new town early after its establishment, as the synagogue is said7 to have been founded in 1344, although, as we shall see, the main population of Jews moved to the town some time later and the present synagogues date from the sixteenth century.

After the abandonment of old Cochin the new town developed on the eastern side of the present site, along the deep and calm backwater, which formed an excellent harbour. At the western side the modern town is exposed to the open sea, and there is no edifice of considerable age on this side, indicating that in the early life of the town these parts remained rural.

One of the earliest mentions of the new town of Cochin is a brief passage by Nicolò de' Conti8 who travelled to India in the first decades of the fifteenth century and came to the

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5 The location of the old settlement is identified by P. M. Jussay as the old site of Chennamangalam a few miles east of Cranganur where on a slope of a hill are the remains of houses and cemeteries of the Jews and the Muslims, as well as the remains of a palace, an ancient Hindu temple, a mosque and a synagogue, the last two of relatively late origin. Near the synagogue, now deserted but still well preserved, is the tombstone of one Sara daughter of Israel, datable to A.D. 1269. This identification is not yet attested archaeologically, and it should be borne in mind that apart from the community in Cochin there were many other Jewish settlements in South India. See P. M. Jussay, “The songs of Evarayi”, in Thomas A. Timberg (ed.), Jews in India (Shahiabad, 1986), p. 151; for the tombstone see J. B. Segal, A History of the Jews of Cochin (London, 1993), p. 11.
6 In Arabic the sound ẓhe is represented with the letter j, and Indian g or gh with the letter k; thus the name may be read as Konchi Ghari. Ibn Battûta’s record of Kunji instead of Kujîn may be an error of memory as he wrote his travel accounts some years later, but, as usual in India, there may have been more than one pronunciation for the name, and Ibn Battûta recorded the one closest to what he had heard. As we shall see Kochi (from Malayalam kochi), a small place, is also recorded as the name, with slight variations, by later Muslim historians.
The town of Cochin

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shore there on his voyage from Quilon to Calicut. Poggio Bracciolini, the narrator of Conti’s travel account records:

From Coloen he wente three dayes journye vnto a Citie named Cochin, it is fiue myles in compass, ’sicituated at the entring of a River, of the whiche it hath the name.

The size of the town seems to refer not to the built up area, but to the vicinity of Cochin, which would have been occupied by coconut groves and farm-land, with the farmers’ houses dotted around. Yet, according to Conti, Cochin was at this time still smaller than Calicut (Conti’s Colychachia) with a circumference of eight miles, and Quilon, twelve miles around. Cochin was known to the later Indo-Muslim historians as Kūji10 and Kushī.11

The position of the new port, with an exceptionally well protected harbour, was perhaps one of the two major factors in its rise to fame. The harbours of the other two ports, Quilon and Calicut, were both exposed to the hostile storms of the Arabian Sea, as, for example, experienced by Ibn Baṭṭūta, when the ship in which he was to begin his voyage to China was lost in the Calicut harbour, killing all his companions.12

The second – and perhaps more important – factor was the alliance made by the Raja of Cochin with the Portuguese, who were soon to dominate the trade routes of the Indian Ocean. On the 20th or 24th December 1500, when Cabral arrived in Cochin, the town – now about one and a half centuries old – was still far from being a wealthy port to be compared with Calicut or Quilon. The Portuguese found Cochin a small town on the coast of a long and sandy island covered with coconut palms. The palace of the Raja, unlike that of Calicut, was a humble structure, badly furnished, and the ordinary people lived in houses with mud walls and simple timber roofs thatched with palm leaves. The only buildings with stone walls and tiled roofs were the temples, and ordinary people were not apparently allowed to build houses of the structural type reserved for the gods, and the nobility of Calicut. There was, however, a community of Muslim merchants, Cabral’s “Moors”, living in houses better than those of the local people, and permitted to surround their houses with stone walls to protect their merchandise.13

Durante Barbosa’s account of Cochin in the first decade of the sixteenth century gives a vivid impression of the town at this time:

The Kingdom of Cochin ... possesses a very fine large river where many and great ships enter, both Portuguese and Moorish. And within it is a large city inhabited by Moors and Gentiles (Hindus), who are Chetis and Guzarats, and Jews natives of the country. The Moors and the Chetis are great merchants and own many ships, and trade much with Chormandel, Cambay, Cheul and Dabul ...

9. R. H. Major, India in the Fifteenth Century (London, 1857), ii, p. 17, in the Elizabethan translation the circumference of Coeleon is given as three miles, which seems to be incorrect.

10. Muhammad Qāsim b. Hindī Shāh known as Firishta, Tārīkh-i Firishta (Lucknow, 1864), ii, p. 371, see also note 5 above.


The King of Portugal has a very good fortress at the mouth of this river, all round which is a large village of Portuguese and Christians, natives of the country ... The King of Cochin has but a small country, and he was not a King before the Portuguese went there, because all the kings of Calicut, when newly come into power, had the custom of entering Cochin and depriving the king of his state and taking possession of it, and afterwards they restored it to him again for life. The King of Calicut observed this as a law, and the King of Cochin used to give him a tribute of elephants and so he returned to Calicut. And the King of Cochin could not coin money, nor roof his houses with tiles, under pain of losing his state. And now since the Portuguese went there, the King of Portugal made him exempt from all this; so that he lords it absolutely and coins money according to his custom.

Barbosa’s account illustrates clearly the reasons for which the ambitious Raja Tirumumpara (or Trimumpara) of Cochin, still a reluctant vassal of the Calicut Raja (“Zamorin” of the Portuguese and “Sāmīri” of the Muslims, Sanskrit samudri: the sea-lord) took a calculated but determined risk in making an alliance with the Portuguese. If they were to succeed, the Raja would benefit, while if they failed he would not have much to lose.

On the arrival of Cabral, Raja Tirumumpara, who had already been informed of the hostility between the Zamorin and Cabral, welcomed the Portuguese, and as a friendly gesture allowed them to buy spices for cash or exchange with their own merchandise. Cabral set up a factory in Cochin, and returned to Portugal with a large cargo of Cochin pepper and the news of his attack on Calicut.15 In 1502 Vasco da Gama, in his second voyage to India, and after a brutal but fruitless attack on Calicut, arrived at Cochin and was received by the Factor Gil Fernandez Barbosa, and other Portuguese settled there.16 Da Gama had openly waged war with the Muslim traders, and his alliance with Cochin could not be tolerated by the Zamorin, who after the departure of da Gama attacked Cochin. In 1503 the Calicut forces took over Cochin and Raja Tirumumpara was forced to take refuge in the island of Vypin, when a fresh Portuguese fleet under the command of Albuquerque arrived and the Zamorin was forced to retreat to Calicut. Albuquerque built a small fort in Cochin17 which was the first European fort in India, and enlarged the structure two years later. This must be the fort mentioned by Barbosa. While the Portuguese records are silent, the Muslim historians mention that after the building of the fort, the Portuguese demolished a mosque which was standing on the coast, and replaced it with a church, imposing the labour of building it on the local people.18

In spite of this event, the Muslim community of Cochin, who were importers of the staple diet of Cochin, rice, from the Coromandel coast,19 could not only maintain their position, but also trade with both the local people and with the Portuguese. In subsequent years, while the Portuguese exercised a considerable influence on local affairs, the Rajas of Cochin continued to insist on protecting the Jews and the Muslims, whom they considered as their own subjects. This must have been the main reason that, unlike in Goa, the Muslim community of Cochin not only continued to survive, but with the later decline of

18 Zain al-Din, op. cit., Arabic text, p. 37; English tr. pp. 82-3; Firishta, op. cit., ii, p. 371.
the Portuguese power regained their social position, and increased in number. The census of 1881, which shows the population of Cochin before the modern development of Ernakulam and consequent shifts in population, gives the numbers of the different communities in Cochin as 8,360 Christians, 4,383 Hindus and 2,942 Muslims – over 19 per cent of the whole population.

During the early sixteenth century, and until the development of Goa as the main Portuguese stronghold in India, Fort Cochin was their main garrison. In later dates Cochin still remained an important Portuguese trading port, until the appearance of the Dutch on the scene. In 1661 the Dutch, determined to press the Portuguese out of Malabar, made an alliance with Paliat Achan, the hereditary grand minister of the Raja of Cochin, and landed at Vypin. In a subsequent battle the Portuguese defended their position and after a year of struggle eventually made the Dutch retreat. The Jews, who had helped the safe retreat of the Dutch were severely punished, many of the “White Jews” (Jews of Middle Eastern origin) were killed, and their houses, together with their synagogue set on fire. Those who survived took refuge in the interior of the Raja’s dominions. Some time later the Dutch returned with a stronger force, and in 1662 first took over Cranganur, and after a long siege of Cochin, on the 8th January 1663 the Portuguese, abandoned by all their native allies, handed the fort over to the Dutch. On entering Cochin, the Dutch found a small factory of the English East India Company already established there.

The Dutch history of Cochin, and indeed of South India in general, was a period of political struggle, reflecting the conflicts of the time between the Dutch, the English, and the French in Europe, and their desire for domination of the South Seas. On the local front the Dutch proved unable to develop a friendly relationship with the Zamorin of Calicut. In 1691 they lost Chetwai to him, and only in 1717 could they regain their control there. In Cochin the Portuguese fort was gradually falling into decay, and, as the Dutch colony was much smaller than that of the Portuguese, in 1680 the old fort was eventually demolished, and reconstructed in half its size. Nevertheless, under the Dutch East India Company, Cochin remained their more prominent port for the Indian Ocean trade, although throughout the eighteenth century, while the British and French presence in the region was gaining strength, that of the Dutch continued to decline.

The final episode of the Dutch colony coincided with the rise in power of the Mysore ruler, Nawwāb Haidar ‘Ali, who invaded Malabar, gradually took over most of the territory of the Zamorin, and, by the end of 1776, also took over all the Dutch territories, with the exception of Cochin and the fort of Cranganur. Haidar ‘Ali died in December 1782, and was succeeded by Tippu Sultan, who, having the Raja of Cochin as one of his tributaries, was virtually in control of the town, except the Dutch fort. In 1789 Tippu even proposed to buy the fort, but the Dutch declined.

20 W. Logan, Malabar, ii (Madras, 1887), Appendix XXI, p. 418.
The rise of Mysore power in Malabar, and Tippu's final defeat by the British, virtually eliminated Dutch power in the region, and eventually on 20th October 1796 the fort of Cochin, together with the Dutch settlement, was handed over to the British. For the next nineteen years the Dutch continued to maintain their own laws and administration in Cochin, but under the Paris Convention of 1814 the territory was formally handed over to the British.24

TOWN PLAN

In India there are few towns which have been so many times remodelled and reconstructed as Cochin. Under Portuguese domination the already existing town does not seem to have been altered considerably. For the site of their fort the Portuguese chose the northern tip of the land, which had a commanding view over the open sea, and it is possible that the Zamorin's garrison in 1503 was also housed at this site, which was well outside the northern boundaries of the built up area of the town. The Portuguese forts in other regions of India were also constructed in strategically dominant positions, usually outside the existing towns. The Zamorin's attacks on Cochin continued even after the construction of the fort, and in 1505 Dom Francisco Almedia, the first Portuguese viceroy, built a stronger fort and enlarged the Portuguese garrison.25 He also made Cochin his main residence, and a European town developed at the north of the "Indian" Cochin. Pyrard de Laval, who visited Cochin at this time gives an informative description of the layout of the town and its spatial organization.26

There are two towns of Cochin, the one being the Old Town, distant from the sea by about a league and half, where the king resides; the other only a league from the sea, at the mouth of a large river, upon which also the Old Town is. The New Town belongs to the Portuguese, and is fortified with good walls and a citadel. The kings of Cochin have given them this place, and some land round about, over which they exercise dominion ... [This town] is built of very handsome houses, Churches and monasteries ... and a royal hospital for the Portuguese ...; The [New] town is very populous as well with Portuguese as Indians, both Christians, of whom there are a large number, and infidels, who, however, are not permitted to exercise their paganism in the town, but have to go outside, to places depending upon the King of Cochin.

From Pyrard de Laval's account it is clear that the Portuguese quarters were self-contained and separated from the town by fields, some of which were under Portuguese control. In fact on the order of Dom João III of Portugal the Portuguese town, christened as Santa Cruz, was elevated to the rank of a city, and was granted all rights enjoyed by the cities of Portugal.27 The Indian town, however, seems to have remained without much alteration, and while the local population could enter, and apparently reside, in the

24 William Logan, Malabar (Madras, 1887), i, p. 715.
25 Frederick Charteris Danvers, The Portuguese in India (London,1894), i, p. 121.
27 Testado da patente per que El-Rei Dom João novo senhor fes a vila de Cochin sidade e a petição porque foi testada juridicamente de pungaminho em que primeiro estava em papel, in K. S. Mathew and Afzal Ahmad, Emergence of Cochin in the pre-industrial era: (a study of Portuguese Cochin) (Pondicherry, 1990), pp. 1–3.
Portuguese town, their places of worship were confined to those in the older town which remained under the jurisdiction of the Raja.

Later European travellers also speak of the native Cochin as a traditional Indian town. Van Linschoten,28 who travelled through Malabar in 1583–4, describes the Indian Cochin as a town separated from the Portuguese town by shallow water which could be passed through on foot.29 He noted that the town was densely populated, and the houses well constructed in the traditional Indian style. In the late seventeenth century Philip Baldaeus30 gives a similar description of the Indian town and notes:

Cochin . . . is built after the Indian fashion, with very broad streets; it is very populous, and the royal palace is built with bricks and mortar after the European way, with apartments very spacious and lofty; near which stood the pagoda, with a very large cistern adjoining it.

It seems that until the Dutch took over Cochin, in spite of some European influence on the architecture of the Raja’s palace, the Indian town itself remained separate from the Portuguese one, preserving its traditional Indian town plan and architecture. Later on, for their new fort, the Dutch remodelled the Portuguese town and laid out new streets, on a grid pattern, and constructed new buildings in the Dutch style. The Calvinist Dutch also converted the Santa Cruz Cathedral into a warehouse, and in 1778, the governor, Van Moens, restored the fort and removed practically all the remaining buildings of the Portuguese.

The Dutch town, as we have seen, was much smaller than the earlier Portuguese town, and it seems that until the nineteenth century the two towns remained separate from each other. It is not known how far the Raja’s town was also remodelled under Dutch dominance, but, as will be discussed, it seems unlikely that substantial changes were made either to the buildings or to the layout of the town.

The new Dutch city in turn proved to have a very short life. In 1806 the East India Company, without much discussion with - or approval by - the British Government, demolished the entire Dutch city by blowing up most of its buildings with explosives. A new British style colonial town was then constructed, which merged gradually with the old town. Some Dutch buildings, including the churches, however, did survive, but in the following decades many of the older buildings of the Dutch town were also gradually replaced by British ‘colonial’ style structures. A mid-nineteenth century description of the British town and whatever was left of the older Dutch town is given by Charles Allen Lawson:31

Before us is the town, embosomed most cosily among tulip, lettuce, and coco-nut trees; its venerable Flagstaff Tower and peculiar Church just peeping above the brown tiled roofs of the white and yellow houses... The Flagstaff, erected on the ruined Tower of the Cathedral is in front; behind is

29 This shallow water made the Portuguese Cochin virtually an island, and was an important factor in the early battles between the Portuguese and the Calicut forces, see for example the account of Durante Pacheco Pereira’s battle of 1504 in Danvers, i, pp. 105-9.
30 Philip Baldaeus, A True and Exact Description of the Most Celebrated East India Coasts of Malabar and Coromandel, tr. by A. and J. Churchill (London, 1732), ch. 18.
31 Charles Allen Lawson, British and Native Cochin, second ed. (London, 1861), pp. 17–54. Lawson gives a long and vivid description of both the European and the Indian towns, of which only a few highlights are quoted here.
Fig. 1. Town plan of modern Cochin showing the site of the old fort, still known as Fort Cochin, and the main monuments situated in the historic quarters of the town.

Key: 1 Raja's palace known as the Dutch Palace. 2 Jewish synagogues. 3 Santa Cruz Cathedral. 4 Church of St Francis Xavier. 5 Dutch Cemetery. 6 Shafi'i Jami' Mosque. 7 Shrine of Zain al-Din. 8 Dar al-Salam madrasa. 9 Ferry stations.
The town of Cochin

the Cutcherry or Court-house, a painfully white building; around are heavy looking white, yellow or grey houses, all tiled, mostly surmounted by high walls, and generally very economical in windows... From the platform on the top of the Flagstaff Tower we obtain an excellent idea of the old Dutch houses, their quaint gables, barn like roofs, heavy walls and buttresses; of the narrow but regular streets; of the venerable Protestant; (and) of the parade ground beyond it...

After the Calvinist forms had been unostentatiously kept up for one hundred and thirty years, the old church fell into the hands of the English, and owing to its large size, was exposed to the fate that had befallen the Cathedral. Some barrels of gunpowder had been already placed inside, and everything was ready for its demolition, when at the eleventh hour, the officer in command relented, and happily, this interesting pile has no trace of our sad levelling principles. The Church cannot lay claim to any great architectural merit. It has a tall gable towards the west, with arched windows and porch, columns and pinnacles of a very obsolete fashion...

Cochin does not thoroughly awake until six in the morning; then the crows summon a parliament; shutters are unfastened; doors opened; goats and cows trot out; (and) fishermen set busily to work... It would be difficult to describe the arrangement of that part of Cochin metropolis (old Cochin) in which are to be found the dwellings of the hundreds of operatives who earn their livelihood in the Fort... From the north-east corner of the Fort two good roads proceed, one into the Cochin, the other into the Travancore territory. The latter is almost entirely overhung by coco-nut and banian trees, and forms an agreeable ride; there are few shops, all of the most ordinary character; and little to remark either in wares, dealers, or customers; but the other road, towards the Rajah’s palace, is enlivened for nearly two miles by the presence on either side of shops and stores, and the scene generally animated in the extreme... The Cochin bazaars... proceed rapidly through that called the Muttencherry which runs along the Backwaters for some distance. The houses are generally built upon a small embankment raised two feet above the level of the road. They comprise the shop, open in front like a coach-house, a back store room, and two or three small rooms in the floor above...

Lawson’s description is indeed informative; not only does he give a detailed account of what was left of the Dutch town, and incorporated later into the British settlement, but also indicates that in the mid-nineteenth century the western part of the present town, then overhung by coco-nut and banian trees, forming an agreeable ride (probably along the route of the present St John Patten Road), was not yet built. All these areas are now occupied by houses, evidently constructed in recent times. The layout of this part of the town, with its wide and airy streets is, therefore, modern. On the other hand, at the time of Lawson the eastern parts with their lively bazaars (present Bazaar Road) had already been developed fully, joining the fort to Old Cochin and the Raja’s palace.

With all the remodelling of the town and changes in the street layout, from a cursory glance at its town plan it would be difficult to discern any traces of the configuration of the boundaries of old Cochin (Fig. 1), let alone the original street layout. However, the detailed description of Lawson and the surviving historical buildings: the Raja’s palace, the synagogues, the mosques and other Muslim shrines, provide indications which help establish the location of the old quarters. Old maps of the Portuguese and the Dutch forts also assist in determining the approximate boundaries of the European town.

Within the site of the old Portuguese fort at the north-west are the two old churches,

32 For a plan of the Portuguese fort in 1663, when the Portuguese town was extended to its largest size, see K.P. Padmanabha Menon, A History of Kerala, Notes on Vischer’s Letters from Malabar, i (Ermakulam, 1924), map facing p. 168; for a plan of the Dutch fort showing the street layout of the town in 1780 see ibid, map facing p. 174.
St Francis Xavier and Santa Cruz, both restored to their original function. Although the area of Fort Cochin has been rebuilt and remodelled many times, the main street layout of the Dutch town seems to have been preserved, and a large open space in front of the church of Santa Cruz may be the site of a Portuguese plaza (Lawson's parade ground) which once occupied the space between the church and the citadel. Today many Christians still live in the area of the old fort, and the areas developed to its south.

At the south-east of the fort the old Hindu town appears to have spread as a wide ribbon stretching south for about one kilometre, occupying the coastal areas. The present Bazaar Road dates back probably to the eighteenth century and as we have seen was fully operational in the mid-nineteenth century, but it seems to be a northern extension of the main spinal road of the old Hindu town to the south. The name and the present function of this road as a crowded centre for wholesale of imported merchandise is a continuation of its historic life. The road is set slightly away from the coast, but runs alongside it, and frequently between the warehouses, the merchants' offices, and shops, there are access routes to the water front. A number of smaller roads lead westward from the Bazaar Road to the residential area known as Mattanchery. The street layout immediately to the west of this road is partly datable to the British period, and some of the old houses date from the nineteenth century. An area of Mattanchery between the two modern ferry stations is now populated by the Muslims, but it seems that they moved to this area in the nineteenth century, as the few mosques there are of recent origin, one of them bearing an inscription recording its construction in 1291-2/1875-6. The commerce of Bazaar Road is now mainly in the hands of Hindus and Muslims.

The Raja's residence, later partly reconstructed in the European style and now known as the Dutch Palace, was apparently located at the centre of the old "Indian" town. Some of the oldest Hindu temples of the town are situated in this area, and one is within the palace complex, indicating that the complex must have been occupied by the rulers and high cast Hindus from well before the arrival of the Portuguese. The area is now known by its old name Cochangadi, and by a more recent name, "Jew Town". According to local Jewish tradition it is believed that members of the faith were housed in the area adjoining the palace, in order to be under the protection of the Raja himself.34 As we have seen, the date of the settlement and foundation of the first synagogue is said to go back to 1344, and the early days of the building of the new town. In subsequent centuries many more Jews seem to have moved to Cochin, mainly from the area of Cranganur.35 The Cochangadi Synagogue, the historic synagogue of the "Black Jews" (Jews of Indian origin), was reconstructed by Barukh Josef Levi in 1539, and in 1568 the elegant Paradesi Synagogue of the "White Jews" (of Middle Eastern origin) was constructed by Samuel Castiel.36 Both these synagogues are situated in this area, and to the south of the Dutch Palace.

The medieval Muslim quarter, together with its historical buildings, is situated to the south of the Jewish quarter. This area may have been self contained in the past, separated by an old Jewish cemetery to the south of the Synagogue, but at present the boundary of the two areas is a short east-west street known as Jewish Cemetery Lane. It should be noted that with the emigration of the Jewish community to Israel in the last three decades, at present only a few Jewish families are left in Cochin, and the old Jewish quarter is now occupied by other population groups. The few remaining families are also in the process of leaving, bringing the long tradition of this Jewish community to an end.

The old Jewish and Muslim quarters are the only part of the town in which the old street layout seems to have been better preserved, perhaps because of a lack of interest by the Europeans in the two communities, or as a result of conscious decisions to avoid interference. Whatever the reason, the old street layout in this area differs considerably from adjoining areas and consists of a rough grid pattern with three north-south streets, intersected by a number of short east-west streets. The most prominent of the three main streets is now that at the west, known until recently as the Muslims' Street, but now renamed Maulana Azad Road. The eastern street running alongside the old harbour is now named Jew Town Road, and the central street is Darusalam (dār al-salām) Road. This street must have been the spinal road of the old settlement, as all the Muslim institutions, the Dār al-Salām religious school, the shrine and mosque of Zain al-Dīn, and the Shāfī‘ī Jāmī‘ mosque are all located alongside the southern section of this road. The old school has been reconstructed, but the old buildings of the Jāmī‘ and the shrine have been preserved. The area is still populated by Muslims.

THE SHĀFI‘Ī JĀMĪ‘ OR CHEMBATTAPALLI

The large and impressive congregational mosque of Cochin (Figs. 2–11, Pls. 1–14) is among one of the best examples of the Muslim monuments of South India, and although it is smaller and not as grand as the Jāmī‘ or the Mithqālpaljī of Calicut, the details and its wooden structure are among the finest surviving examples of the Muslim architecture of Kerala. It is usual for the mosques of South India to have two names, one Arabic and another local, and in the case of the Jāmī‘ of Cochin, it is referred to by the local name of Chembattapaljī (or Chembittapaljī) and the Arabic Shāfī‘ī Jāmī‘, referring to the sect of the Muslims of Cochin who congregate there.

The mosque is situated at the south of the old Muslim quarter and to the east of the Dār al-Salām Road, about 75 m. away from the coast. As with the other mosques of the region the outer walls are constructed of stone, but the entire roof structure in two tiers and the columns at the ground level are of wood. The building consists of a prayer hall with a colonnaded entrance porch at its eastern side (Fig. 2). Under the porch three doors open to the prayer hall, and above the doors a long bilingual inscription is carved with religious and historical texts. The Malayalam version records the renovation of the mosque in the year 180 of Puduvaipu, the local era of Cochin (1520–21). The Arabic

37 Ibid.
38 ARIE, 1965–66, B 61. The report contains the date and a brief description of the content of the inscription, but the text itself has not yet been fully studied.
Plate 1. Cochin, Shafi'i Jami' Masjid, general view of the mosque from west.

Plate 2. Shafi'i Jami' Masjid, eastern side of the northern façade with part of the structure over the ablution pool seen at left.
Plate 3. Şahi’i Jami’ Masjid, the front (eastern) gable of the upper tier of the roof, preserving its original features, and seen from the roof of the large modern structure which has recently been added in front of the mosque, obscuring the view of this main feature from the ground level.

Plate 4. Şahi’i Jami’ Masjid, the entrance porch showing some of the shorter outer columns supporting the sloping roof, and one of the taller inner columns supporting the central area with coffered ceiling. In the background one of the main entrances to the prayer hall with a window beside it, and the bilingual inscription above can also be seen.
version is carved in relief on three panels in between the Malayalam text, each panel roughly above one of the entrances to the prayer hall. The Arabic version is in a fine naskhī script - apparently the work of a skilled calligrapher - and contains traditions (hadith) and other religious texts, but on the panel above the entrance at the northern side (Pl. 6), at the end of a hadith concerning the importance of taking part in the congregation, appears the date:

1 这话 伊本 옷이 وذلک اذا دخل أحدكم المسجد
2 القبلة للنور افتتح في أبوابها، فخرجت القبلة
3 للنور افتتح في أبوابها، فخرجت القبلة

The Prophet of God, may God’s blessing be upon him, says when any one of you enter the mosque, he should say, “O God open to me the doors of your blessing”, and when he leaves it should say, “O God open to me the doors of your wisdom”. It was reconstructed in the year nine hundred and twenty six of the Hijra (1519–20).39

The two other inscriptions, which bear only religious texts, are not without historical significance. The relatively long text of the central panel (Pl. 7) contains two hadith and reads:

1 و قال النبي صلى الله عليه وسلم باتي خلي الانتان و رمان يكون حديثهم في سماحهم فلا نجاحهم فليس فيها بل حااجة و قال صلى الله عليه وسلم بحجة
2 بطلهم الله في مهلته يوم لا قبل إلا ظل الله أمام عدل و شابه نما في عبادة الله و رجل قليل بلقين بالمسجد اذا خرج منه حتى
3 يعود ياء الله و رجلان معا في الله أبجديهما عليه و تفرقا عليه و رجل ذكر الله خاليا و فصطف معا و رجلان دعته امرأة ذات حسن و جمال فقال إني أشخاف الله و رجل
4 فيصدح بعدة فاصفا على حتى لا فتى منذ هذا ما تبتيت بعده

And the Prophet, may God’s blessing be upon Him, says: “There will come a day that people’s discussion in their mosques will only be about their worldly affairs, they will not congregate, and they will feel no need for God”. The Prophet, may God’s blessing be upon him, says that there are seven groups of people whom God will suffer to dwell under His shade, on the day when there is no other shade but His: the just imam; the young man brought up to pray to God; the man whose heart cleaves to the mosque when he leaves it, until he takes refuge in God; those men who love God and assemble together reflecting on Him, and leave each other reflecting on Him; the man who remembers God in his solitude, while tears fall from his eyes; the man who, when a woman of beauty and poise calls him to her house says “I fear God”; and the man who gives alms in secret to the extent that his left hand does not know what charity his right hand has bestowed.

39 The Hijra year 926 begins on 23rd December 1519. The actual date of the completion of the mosque must be 1520, leaving no discrepancies between the two Islamic and Puduvaipu dates.
Plate 5. Shāfī‘i Jāmi‘ Masjid, the entrance porch seen from the newly constructed concrete hall, which has turned into an interior space. In the foreground are the modern concrete columns and in the background are the original wooden columns with the eastern wall of the prayer hall and its three main entrances.

Plate 6. Shāfī‘i Jāmi‘ Masjid, the bilingual inscription at the entrance porch, the dated Arabic portion above the northern door with the date A.H. 926/1519-20.
The panel above the entrance at the south (Pl. 8) bears three lines of Arabic verse:

1. ماذا تخاللَّ من كنتَ الغدًا و إنكار
2. طرأ بين يديُّ (١٠) شياً و جلا
3. قد أن نقص ما كَسَرْتَ مِن يَوْمَ الايَام

For a person whose place is in paradise, what harm is there if (in this world) he has to suffer hardship and destitution.

You see him going to the mosque many times between one mid-day prayer and the next (azhūr) with fear and apprehension (of God).

O mortal body (nafs) what will become of you if you endure the fire, for the time to be received by God comes after much adversity.

It seems clear that the traditions were chosen, and the verses composed, to allude to the conflict between the Muslims and the Portuguese some two decades earlier. The text expresses that the strength of the Muslims might be regained if they would bear frustration and hardship with restraint, and preserve the unity of the community. The phrase “endure the fire” (sabr 'alā al-nār) may be a direct reference to the fire which burnt the original mosque.

In the dated inscription, too, the use of the word ‘umina, meaning literally “to preserve a building alive” or ‘to make a building well inhabited and flourishing’, instead of words such as binā’a (constructed), jaddada (renovated) or shayyada (restored) is worthy of attention. The word has been translated here as “reconstructed”, to carry the sense that there had already been a building on the site, and that it had been “re-inhabited”. The building in question is most likely to be the same as the one destroyed by the Portuguese.

If the old mosque were set on fire – the usual practice of the Portuguese – little of the original structure would have been left to be incorporated into the new building, except perhaps the stone walls and foundations. We may, therefore expect that while the footprint, the layout, and perhaps the stone walls of the present mosque may be of an earlier date, almost all of the superstructure must date from the time of the reconstruction in 1520.

Minor repairs in later years have not altered the structure of the mosque drastically. The only addition to the building has been a chamber with a small pool inside (Figs. 2, 5, Pls. 1, 2, 10), added to the north side of the entrance porch, to provide a covered space for ritual ablutions (wudū) before prayer. These covered pools are a common feature of South Indian mosques, but, as in the Jāmi' of Cochin, they mostly appear to have been added to the original buildings at later dates, mostly in the seventeenth and eighteenth centuries, when the feature was apparently fashionable. In the Cochin mosque the roof structure of the ablution chamber is detached from the roof of the mosque itself, keeping the original roof of the mosque intact.

In recent years, however, the mosque has undergone some renovations and a large extension has been built. Although the old structure itself has not been effected seriously, the appearance of the mosque has therefore changed. In front of the entrance colonnade a
Plate 7. Shafi‘I Jami‘ Masjid, the bilingual inscription at the entrance porch, the Arabic portion containing a religious text above the central door.

Plate 8. Shafi‘I Jami‘ Masjid, the bilingual inscription at the entrance porch, the Arabic portion containing three lines of Arabic verse above the southern door.
Fig. 2. Cochin, Shāfi‘ī Jāmi‘ Masjid, ground plan, present condition with the shaded area indicating the adjoining area of the modern concrete extension to the old building.
The town of Cochin

Fig. 3. Shafi'i Jami' Masjid, plan of the upper level, present condition, also showing the chamber above the ablution room.
large hall (Pl. 5) has been constructed, with a new large ablution pool inside, covered by a flat concrete roof on concrete columns, obscuring entirely the original front façade of the building. The new extension has also turned the entrance colonnade into an internal hall. The decorative wooden façade of the upper tier of the roof (Figs. 4, 10, Pl. 3) is still preserved above the flat roof of the extension, but is no longer visible from the ground, and can only be seen from the roof of the new structure.

Around the prayer hall of the mosque ran a colonnade (Figs. 9, 11) which has recently been walled up with a number of windows (Figs. 2, 5, Pls. 1–2), each set in front of a door or a window in the original wall of the colonnade. The porch is transformed to a corridor running around the mosque. Such walled corridors are not unknown among the old mosques of Kerala, and can be seen, for example, in the Mithqalpalli at Calicut where the form is original, but in the case of the Jāmi' of Cochin some of the original columns of the colonnade can still be seen under the plaster of the walls, indicating that the walls are of later origin, and the corridor is the result of a later alteration.

In spite of the additions and alterations, which have effected the external view of the mosque, on the interior (Pls. 11, 12) the original form of the mosque is preserved without any change. Even the entrance colonnade itself, which has a fine coffered ceiling (Pl. 9) is intact, in spite of the adjoining new concrete extension. The porch (Figs. 2, 4, 9 and 10, Pl. 4) has six outer columns supporting the beams which carry the load of the sloping rafters, and two taller inner columns which are offset from the front columns, and bear the load of the higher beams of the flat coffered ceiling, supported at the western side by the wall of the prayer hall. The sloping rafters which continue in the same manner inside the prayer chamber, extending to cover the colonnade running around the mosque, support

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Plate 9. Shāfī’ī Jāmi’ Maṣjid, the coffered ceiling above the central bay of the entrance porch.

Plate 10. Shāfī’ī Jāmi’ Maṣjid, interior view of the chamber with an ablution pool added at the north of the entrance colonnade, seen from the colonnade looking north also showing the step-ladder to the upper chamber.
Plate 11. Shāfi‘ī Jāmī‘ Masjid, interior of prayer hall looking east towards the entrances and the flight of steps to the upper level of the mosque. On the two wooden columns is one of the massive beams supporting the rafters and timber floor of the upper level, and at either side of the columns the structure of the sloping roof of the lower tier can be seen.

Plate 12. Shāfi‘ī Jāmī‘ Masjid, general view of the interior of the prayer hall looking west towards the qibla with the mihrāb and the minbar at the far end. Above the two doors at either side of the qibla wall light penetrates through two of the later openings with modern glazing opened into the lower tier of the mosque.
The roof structure of the lower tier of the mosque a vital element in the mosque, responsible for the two tiered form on its exterior.

The main beams and the coffered ceiling at the central bay of the porch and below the floor of the upper tier of the mosque are decorated with mouldings, and, in addition the joints of the coffers are further decorated with hemispherical bosses. In the mosques of Kerala in general, the coffering — and labour involved — seem to have been highly regarded, and kept for the ceilings of the entrance colonnades, not appearing elsewhere in the buildings. Such examples can be found in a number of the mosques at Calicut, such as the Jāmi', the Muchchandipālī and the Mudhakarepālī, an old mosque in the “Big Bazaar” of Calicut, the last of which is closest in style to that of the Jāmi' of Cochin. The coffering in the other two mosques, both datable to the seventeenth century, is made of larger units, and is elaborately carved with inscriptions and floral motifs. In the Jāmi' of Cochin, however, the coffering appears not only in the ceiling of the porch, but also of the ablution chamber (Pl. 10). The work on the two ceilings is so closely similar that they both seem to have been carried out at the same time, and probably by the same craftsmen. As we have noted, the ablution chamber is an addition to the prayer hall. The coffering of both ceilings is likely to have been carried out at the time of building or perhaps after the completion of the ablution chamber. As comparable coffering dates from the seventeenth century, it is not unlikely that the work in this mosque may also date from the same period, corresponding with the date already suggested for the additional ablution chamber.

The three entrances to the prayer hall are all of the same size, with jambs decorated with mouldings, and lintels each carved with a foliated pattern adorned by a rosette in the centre. The original doors themselves have long been replaced with later ones of no particular distinction. In addition to these three doors, at each end of the entrance wall is an opening which seems to have been originally a window, but has now been made into a door, making five openings to the prayer hall altogether.
Fig. 6. Shāfī'ī Jāmi' Masjid, transverse section of the north side of the prayer hall, and the corridor at its north showing the details of the roof structure of both the lower and upper tiers.
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Plate 13. Shāfi‘i Jāmi‘ Masjid, interior of prayer hall showing the qibla wall, the miḥrāb and the wooden minbar.

The long, but well-proportioned prayer hall (Pls. 11, 12) has two rows of six columns dividing it into three bays, the central one spanning about 6 m., four times wider than those at each side. The columns, over 4 m. tall, are all of the same size and set along the same line as the two taller columns of the prayer hall. These tall columns are the main load bearing elements of the building, supporting not only a timber floor above, but also, as we shall see, most of the massive weight of the roof structure of the upper tier. The columns are each made out of a single piece of timber, and in shape they are divided into five alternating square and octagonal registers, with the lower square register almost three times as high as the others. The shorter columns of the porch also have the same form, but in smaller proportions. The form of the columns is not only similar to that of the fifteenth and sixteenth century wooden columns at Calicut but is also closely comparable to the stone columns of the same period and earlier in Tamil Nadu, taken directly from the Hindu architecture of the region.

The columns are set on thin square bases and above the columns are brackets supporting the solid wooden beams decorated with mouldings. Above the side isles the beams support the sloping roof, the structure of which can be seen (Fig. 6, Pls. 11, 12), consisting of shaped rafters reinforced with rounded purlins running across them through a number of holes made in the rafters. Above the rafters lie the thin battens on which the ceramic roof tiles are set, but at certain intervals between two or three rafters the roof has been cut out, and a space opened for skylights to provide additional light to the prayer hall. The skylights, with relatively large areas of sheet glass – a modern material – seem, however, to be a recent alteration to the roof, carried out perhaps at the time when the colonnade around
Fig. 7. Shāfi‘ī Jāmi‘ Masjid, details of the transverse section showing part of the loft and details of the floor and roof structure, and the position of the upper columns set above the lower ones.
the prayer hall was walled up, to compensate for the reduction in the direct light which used to penetrate through the doors and windows of the prayer hall. Above the wide central aisle the ceiling is flat and is made simply of the floor boards of the upper tier (Figs. 6–7), set on rafters which are laid along the length of the hall, in the opposite direction to the rafters of the side aisles.
Apart from the main entrances under the porch, the hall can be entered from doors at all other sides. The northern and southern walls each have three doors and three windows set at intervals, and the qibla wall at the west has a door at either side of the mihrāb. These doors opened originally to the outside colonnade — now converted into the corridor — which runs around the hall.

The single mihrāb (Pl. 13) in the middle of the qibla wall is the prominent focal point in the hall, and is in the form of a niche, semi-circular in plan and with a semi-circular arch above; a form which is common in the mosques of South India, originating from the Arab style mihrābs of the regions of the Persian Gulf and the Yemen. In Cochin the mihrāb is framed with a lobed arch on two stucco pilasters. It is not certain if this border was not added around the mihrāb at a later date, but most mihrābs of the mosques of the Indian coastal communities have such decorative borders, the earliest example being in the thirteenth century mosque of Abu’l-Qāsim al-Īdajī (Iraqi) at Junagath in Gujarat, where the frame of the mihrāb is in the local Hindu style. The border of the mihrāb of the Mithqālpalji in Calicut, noted above, also shows some influence of traditional Indian motifs, while many other mihrābs, such as that of the Muchchandipalji in Calicut, have a plain border decorated with simple mouldings. As usual in India the mihrāb projects outside the qibla wall. The projection is rectangular in plan, and is at present inside the corridor running around the hall.

Inside the hall and to the right of the mihrāb is a wooden minbar (pulpit) with seven steps leading to the speaker’s seat with a relatively high back panel, semi-circular at the top (Fig. 8, Pl. 13). While many mosques in India have preserved their original stone minbars, wooden minbars are very rare, and the only examples comparable to the Cochin minbar are those in the Jāmi’ of Calicut and the Mithqālpalji, both bearing a number of inscriptions indicating that they have been reconstructed many times, and that their present form probably dates from their eighteenth and nineteenth century restorations. The minbar at Cochin does not bear any date, but its method of construction and decoration is in the same manner as the other two minbars, and may be of the same period. The minbar has a simple structure with five vertical posts, square in profile, at either side, providing the support for the frames which are filled in with panels, decorated with mouldings.

The vertical posts continue upward above the balustrades of the steps and the seat. At this point the form of each post changes to a rounded and moulded profile, ending with a spiral finial. The upper parts of the posts are intended to provide support for a light weight canopy — made of textile — to be hung on special occasions. The canopies above most minbars — either of wood or stone — are sometimes constructed of permanent materials, and usually imitate the form of the textile canopies, an example being that of the minbar of the Mithqālpalji, where the relatively heavy and lavishly carved wooden canopy imitates the form of a tent made of fabric.

Among the few wooden minbars of south India, the minbar of Cochin is yet another example of its type, providing further information in the form of such minbars. While none of the known minbars are of considerable age, they represent a style which must have been

41 M. Shokoohy, Bhadresvar, the Oldest Islamic Monuments in India (Leiden-New York, 1988), p. 47, pl. 53b.
of much earlier origin, and their existence is known through some of their surviving inscriptions.\textsuperscript{42}

Inside the prayer hall and next to the main entrances on the eastern wall is a flight of steep steps leading to the upper level under the loft (Figs. 2–4, 9, Pl. 11). There is another step-ladder inside the room of the ablution pool (Pl. 10), but these steps lead to an upper chamber above the room. This chamber has stone walls with large windows, but as we have already noted is an addition to the mosque and has no link with the original loft space, leaving the original roof structure unaltered (Figs. 3, 5, Pl. 1). Both the stairways are made of timber, and the one in the main prayer hall also has balustrades and railings.

The upper level of the mosque (Figs. 4, 6–7, Pl. 14) consists of a single large hall over the central aisle of both the prayer hall and the entrance colonnade. At each side of the upper hall is a row of columns. At the northern and southern side each column is set over one of the tall columns of the prayer hall and the front porch, but at the east and west side, the inner columns rest on the beams. These columns, however, do not bear a massive load, as the main load of the ends of the roof is taken by the corner columns. The columns, each about 2.5 m. tall, are shorter than the corresponding ones on the ground floor, but in general form they are similar, and once again each shaft consists of five registers, with alternating square and octagonal profiles, with the lower square register about three times

\textsuperscript{42} ARIE, 1965-6, 136, D 50, D 53-4, D 57; M. Shokoohy, “Architecture of the Muslim trading communities in India,” in Islam and Indian Regions, ed. Anna Libera Dallapiccola and Stephanie Zingel-Ave Lallemant, Beiträge zur Südasiensforschung, Südasiens Institut, Universität Heidelberg, no. 145 (Stuttgart, 1993), i, p. 303; ii, pl. 50.
taller than each of the other registers. The columns have a thin flat base set almost at the level of the floor boards, and directly over the main beams of the ground floor ceiling, each on the line of the column shaft below.

Above each column is a thin bracket capital, supporting a set of beams which run along the four sides of the hall. They are the main load-bearing beams of the sloping roof, providing a frame on which rest the rafters. At the same time they stiffen the columns and restrict their tendency to lean sideways under the load of the roof. A main element of the roof structure is a set of massive tie-beams which run across the hall, and rest on the northern and southern columns above the load-bearing beams. The tie-beams not only help stop any movement of the columns, but prevent the roof from stretching open outwards — a natural tendency of such sloping roofs. The tie-beams are plainly decorated at the lower side, and project past the columns, to join the nearby rafters, though this is not essential from a structural point of view. As is also seen at the lower tier at ground level, through the rafters pass a series of horizontal purlins, and above the rafters are the battens on which the roof tiles are laid.

At each side the sloping roof is cantilevered outward, and below the roof are a series of struts, sloping inwards towards the floor of the upper tier, and supporting a row of louvres. These louvres provide light and air for the loft space, and, as they are set inward from the cantilevered roof they prevent penetration of rainwater into the loft. At certain intervals the louvres are interrupted by windows, the tops of which are in the form of ogee arches cut from wooden boards (Pl. 2). The windows are without glazing, and give a view from this level, but are provided with timber shutters which control the amount of light inside. They have little effect on the air circulation, as air can pass through the louvres at all times.

The roof is in a hipped form at the west side (Pl. 1), but has a gable at the upper part of the eastern side (Pl. 3), an arrangement common for the front end of both Hindu and Muslim buildings in South India. The gable is in the form of a balcony supported by small columns, with balustrades made of turned wood. The balcony opens to the hall through a window decorated with carvings.

The general effect of the loft is a large hall, well ventilated, and slightly dark, with a high ceiling. Such a loft space is, of course, a product of the structural form of South Indian buildings, and while in many smaller buildings the space is not used, in the larger mosques it is often made into a usable area, but not usually a secondary prayer hall. In the Şafi‘i Jami‘ the area is said to have been used in the past as a madrasa (theological college), which seems to have been a common function for the loft space of mosques in South India. In this mosque, the access to the upper hall through the prayer hall is somewhat unusual, as in other mosques the access is usually from outside the prayer hall, which allows the upper hall to be accessed without interrupting the function of the prayer hall, or even at times when the prayer hall is locked up.

The Chebbattapalli or the Şafi‘i Jami‘ is one of the rare examples of the larger South Indian mosques, which, in spite of some later additions and a recent concrete extension, has survived without significant alteration to the original form and fabric. In its construction, consisting of plain but massive stone walls and wooden columns supporting a timber superstructure, the mosque shares many similarities with other buildings of the region. The joinery is simple, and sometimes perhaps crude, but the details are designed in a manner
Fig. 9. Shafi'i Jami' Masjid, ground plan of the mosque as in its original condition, after omitting the additional features such as the ablution chamber, the walls between the columns of the colonnade around the prayer hall, and the modern concrete extension.
that the structural elements fit together and support each other in equilibrium, simply under their own weight. Such skilful detailing is an indication that the builders were using a well attested method, which must have been established traditionally for several centuries. The joints fit together mainly by one element resting on the other, often with a simple cut or groove in both elements, to stop them from slipping, and there is little need for pegs or nails, although such elements are used sometimes for reinforcement, and sometimes as part of a later repair. The main use of nails is in the fixing of the non-structural elements, such as the roof battens and floor boards.

Many of the decorative and non-structural details seen in the Chembattapalli can also be found in the other monuments. We have already seen that the form of the columns in the mosque is similar not only to those of the other wooden mosques in the region, but also to the stone columns of South India dating from the thirteenth to sixteenth century. Other features of the mosque already noted to be common in South India include the coffering of the ceiling of the porch, the decorative balcony of the front gable, with its carved details and turned columns and balustrades, and even the general form of the mihrâb and the minbar. The single mihrâb in the centre of the prayer hall is a feature common in the mosques of the Muslim settlers in India, brought from the Middle East. The tradition is in sharp contrast with that of the multiple mihrâbs found in the sultanate and Mughal mosques elsewhere in India. In the Jâmi' of Cochin the location of the inscription on a long panel
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Fig. 11 Shafi'I Jami' Masjid, North Elevation in its original form as would have been seen before the construction of additional features, showing the colonnade around the mosque, and omitting the ablution chamber and the modern extension.

stretching over the three doors is also not without precedent, and similar boards can be found over the entrances to the prayer hall of both the Jami' and the Muchchandipalli at Calicut, although in these examples the text is solely in Arabic.

The general layout and the architectural form of the Shafi'I Jami', however, is not entirely close to the other important wooden mosques of the region. In the mosques of Calicut, for example, the front porch does not lead to the prayer hall directly, but opens to an ante-chamber in front of the prayer hall. The stairs to the upper level are usually located in the ante-chambers, making the loft space accessible without the need to enter the prayer hall. In the older mosques the front porch is usually a later alteration or addition, and it is not clear whether or not they replace an original earlier porch. In the stone mosques of Tamil Nadu examples of prayer halls with ante-chambers with or without entrance porches can be found. In the Shafi'I Jami' the ante-chamber is absent, and the porch becomes a dominant feature leading to a relatively long prayer hall. The structural elements, particularly the arrangement of the taller columns, indicate that the porch is designed as an integral part of the building, and in general form, particularly the external proportions, and its appearance the mosque looks similar to those which in their plan include an ante-chamber. As the date of the mosque is close to, and indeed slightly later than some of the wooden mosques with ante-chambers in Calicut, we must assume that the exclusion of the ante-chamber must have been a conscious design decision, and would have come from a much earlier tradition.

Although in recent decades many of the wooden mosques in South India have been

43 Ibid, i, pp. 302, 304; ii, pls. 49, 53.
44 In Madura Qâdi Taj al-Din's mosque and the shrine of Sikandar Shah each have an ante-chamber and a porch, but the mosque of 'Ala' al-Din does not have ante-chambers, see ibid, pp. 311-18; ii, pp. 110-2, figs. 18-20; M. Shokoohy, "Architecture of the sultanate of Ma'bar in Madura and other Muslim monuments in South India," JRAS (1991), pp. 52-6, 62-74.
demolished to give way to some modern and featureless concrete mosques, there are still wooden mosques in many towns and villages of South India which are not yet studied. An example is the Jāmi‘ of Pannauni which is close in form and proportion to the Shāfi‘i Jāmi‘. A future study of the Pannauni Jāmi‘ and other monuments of this type may throw light on the tradition of the mosque plan without an ante-chamber in the wooden buildings of Malabar, but the older origin of such type of plan is not unknown, and indeed dates earlier than the plan type which includes the ante-chamber. Although in stone, the monuments of the twelfth and thirteenth century Muslim settlers at Bhadreswar and Junagadh in Gujarat, and the fourteenth to sixteenth century mosques of Kayalpatnam in Tamil Nadu, have similar plans, consisting only of a prayer hall and an imposing front porch. Such buildings must have provided a prototype plan, which in the Malabar coast was adapted for wooden structures, and appears in this case in the Shāfi‘i Jāmi‘.

OTHER MONUMENTS

In the old Muslim area of Cochin there are two other buildings of considerable age, both built over the tombs of local religious personages, and regarded as shrines. One of these buildings is built over the tombs of Sayyid Ismā‘il and Sayyid Fakhr al-Dīn Bukhārī and is located near the Jāmi‘, and the other is the revered Dargah of Zain al-Dīn, which together with its mosque is situated further to the north of the Jāmi‘. These buildings are relatively small, and while not as striking architecturally as the Jāmi‘, are worthy of attention, and will be described here briefly.
THE SHRINE OF SAYYID ISMĀ'IL BUKHĀRĪ AND SAYYID FAKHR AL-DĪN BUKHĀRĪ

The shrine is a small structure situated opposite the Shāfiʿī Jamaʿī, to its north. The building (Figs. 12–13, Pl. 15) consists of an ante-chamber leading to two interconnected burial chambers each containing the tomb of one of the sayyids. The tombs are set in an angle of about 15° to the building, indicating that the building was constructed over the graves later, and apparently to follow the line of other buildings of the site, rather than on the orientation of the graves, which face the direction of Mecca (qibla). It seems that around the mosque was once a graveyard, parts of which have survived: a portion to the west of the shrine and another to the south of the mosque. Other areas to the east and north of the shrine have now been occupied by houses of the Muslim neighbourhood. The tombs of the two saints may have also stood in the open in the graveyard.

Little is known about the life of the personages buried in the shrine, but it is said that they were a sayyid family coming originally from the Central Asian town of Bukhara, and were among the spiritual leaders of the merchant community of Cochin as early as the fourteenth century. The main personage was Sayyid Ismā'īl, who is referred to as Sayyid al-Kabīr (the great sayyid), and was the son of Ahmad Jalāl al-Dīn al-Bukhārī. Sayyid Ismā'īl is believed to have died in 769/1367–8, but there is no inscription on the tomb, and the date, appearing only in the local records, is so far unattested. Sayyid Ismā'īl is buried in the western chamber of the shrine, and in the middle chamber is the tomb of his son or a descendant, Sayyid Fakhr al-Dīn al-Bukhārī.

The shrine itself is a small and plain, but handsome building, constructed in the local style with stone walls and a wooden roof covered with terra-cotta tiles. The main entrance is at the eastern side opening to the ante-chamber (Fig. 12) which is roughly square, about 4m. at each side. The north and south walls of the chamber each have a door and a window, but at the western side a central door connects to the small burial chamber of Sayyid Fakhr al-Dīn: a small room, about 4 × 2.7m. with a window in its northern wall. The floor space is just slightly wider than the tomb itself, leaving only a small space for circumambulation. Another door at the west of the room leads to the Sayyid Ismā'īl chamber: a long and narrow room, projecting outward from both the south and north side of the structure. There is a window in the northern and in the eastern wall. On the exterior the high walls of the chamber are decorated with a band of moulding running at the level of the ceiling of the other two rooms (Fig. 13, Pl 15), and the chamber itself is roofed along its length with a hipped roof in the opposite direction to the roof of the other chambers. At each end the upper part of the hipped roof has a gable in the tradition common in Kerala buildings, that on the eastern side projects outward giving to the east façade an impression of a two tiered roof. These projecting gables at the top of wooden roofs are common, not only in the buildings of the Malabar coast, but also in the traditional architecture of South-East Asia, and can be found in some of the mosques of Malaysia and Indonesia.45

In the shrine, the form of the tomb chamber of Sayyid Ismā'īl with its narrow plan and

45 See for example the Langgar Mosque at Kota Bharu, the Pulai Chongdong Mosque at Kampung Pulai Chongdong south of Kota Bharu, in Abdul Halom Nasir, Mosques of Peninsular Malaysia (Selangor, 1984), pp. 26–31.
Fig. 12. Shrine of Sayyid Ismā‘īl Bukhārī and Sayyid Fakhr al-Dīn Bukhārī, plan (below) and east elevation (above). The plan shows the difference between the orientation of the tombs with the building.
high exterior walls and moulded decoration suggests that the chamber may be older than the rest of the building, and perhaps once stood as a single tomb chamber. The extension could have been added at a later date to shelter the tomb of Sayyid Fakhr al-Dīn. The actual dates of construction of each part of the building are not certain, but the building is said to be over one and a half centuries old at least. From the orientation of the building, which is clearly different from that of the tombstones (Fig. 12) and the Shāfi‘ī Jāmi‘, it is apparent that the building – whether built all at the same time, or in stages – must date much later than the mosque, and from a period, perhaps not earlier than the nineteenth century, when parts of the area were no longer regarded as a graveyard and were being built up. The local dating may therefore, be acceptable.

DARGAH OF SHAIKH ZAIN AL-DĪN MAKHḌŪM AL-MA‘BARĪ

The shrine of Zain al-Dīn (Figs. 14–15, PIs. 16–19), together with its mosque known as the Akathipalli and some extensions, is situated within an enclosure on Darussalam (Dar al-Salām) Road in Kochangadhi, a few hundred metres north of the Jāmi‘. Both the shrine and the mosque are small simple structures with stone walls and traditional wooden roofs, but the tomb of Shaikh Zain al-Dīn is highly revered by the local Muslims, and, although little is known about the Shaikh’s family outside the area, this learned family took a leading role in restoring and preserving the Islamic culture of the region, after its devastation by the Portuguese.46

46 The information on Shaikh Makhdūm and his descendants was provided by Mohamooda Abdul Latheef, the Kaikkar (executive manager) of the shrine, and is based on the local records preserved in his house, near the shrine. The present author is most grateful for the information provided, and permission for carrying out the survey of the shrine.
Fig. 14. Dargah of Shaikh Zain al-Din Makhdum al-Ma'bari, plan of the shrine and the mosque with its extensions.

Fig. 15. Dargah of Shaikh Zain al-Din, north elevation of the shrine and the mosque in its present form, also showing the northern extensions of the mosque.
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Plate 16. Dargah of Shaikh Zain al-Din Makhdum al-Ma'bari, general view of the complex from the north-east, showing the shrine in the foreground and the mosque with its high walls and its additions behind.

Plate 17. Shrine of Shaikh Zain al-Din, the front gable at the north end of the building with the inscription designed to fit its triangular space. Part of the roof structure, including the purlins passing through the rafters, and the small columns with carved bracket capitals can also be seen.
Plate 18. Shrine of Shaikh Zain al-Din, interior of the tomb chamber from the north, with the tomb of the Shaikh on the right and the tomb of his grand-daughter Zainaba Bibi on the left. Part of the flat ceiling of the chamber can also be seen.

Plate 19. Dargah of Shaikh Zain al-Din, interior of the mosque from the north-west showing the southern and eastern wall. At the right side the inscribed wooden plank can be seen, loosely fixed over the central door of the south wall.
According to the records of the shrine, Shaikh Zain al-Dīn Makhdūm al-Ma'barī was originally from the Yemen, and came first to Nagore in the region of Tanjavur, Tamil Nadu, some time early in the fifteenth century. He became a follower of Abū Bakr Ṣādiq Ma'barī, but later moved to Cochin and established himself as a teacher and spiritual leader in the region, playing a significant role in the conversion of the local people to Islam. Makhdūm Zain al-Dīn is also recorded as being the founder of the original Jāmi' which once stood on the site of the present Chembattapally.

Makhdūm Zain al-Dīn had two sons, Ibrāhīm and 'Alī, both of whom followed the path of their father. He died in the late fifteenth century, and was buried in Cochin, but his family is also associated with Pannauni, as while 'Alī remained in Cochin to become the qādī (religious judge) of the town, Ibrāhīm moved to Pannauni to be the qādī there. In the autonomous Muslim communities of South India the qādis had a great influence on the community, as they acted independently from the local Hindu rulers, and were responsible for the observation of Islamic law within their own community. In rank they were perhaps second to the sadr, the leader of the community, who was usually chosen from among the wealthy and influential merchants and shipowners.

'Alī b. Zain al-Dīn lived all of his life in Cochin and established a madrasa (theological college) there. He had a daughter named Zainaba Bībī, who is buried in the shrine of her grandfather (Pl. 18), and a son, named after his grandfather, who was born on 12th Shā'ban 872/7th March 1468, and was known as Shaikh Zain al-Dīn Makhdūm Abū Yahyā. Most of the adult life of Abū Yahyā coincides with the early presence of the Portuguese in the South Indian arena. He also left Cochin, first going to Pannauni, and from there on to “foreign” lands, apparently Egypt and Arabia, and studied under Qādī 'Abd al-Rahmān Miṣrī, Shaikh Shamī al-Dīn Jaujīrī, Kamāl al-Dīn b. Abū Sharīf, and Shaikh Zama'īya al-Ansāfī. Abū Yahyā later return to Pannauni and reconstructed the Jāmi' of that town, after the destruction of an earlier mosque by the Portuguese. It is this mosque which still stands in Pannauni, and, as we have noted, it is in size and general form closely comparable to the Jāmi' of Cochin. Zain al-Dīn Abū Yahyā is also known in South India as the author of a number of religious books, including Qīsas al-anbiyā', Tuhfāt al-anbiyā', Ithnā ad-gāsidin, and Kitāb al-safā min al-shafā, among others. He died in Pannauni on 16th Shā'ban 928/11th July 1522. Abū Yahyā had two sons, 'Abd al-'Azīz and Shaikh Zain al-Dīn Muḥammad Ghazzālī.

The son of this Shaikh Muḥammad is Shaikh Ahmad Zain al-Dīn the author of the well known work Tuhfāt al-mujahidin, the Arabic history of South India, and one of our major historical sources on the Muslims of South India and their struggle with the Portuguese. While Tuhfāt al-mujahidin itself needs little introduction, until now almost nothing was known about its author in the west.47 The records of the shrine need further investigation, as there is little doubt that they will throw more light in the life of Shaikh Ahmad Zain al-Dīn, and the Muslim history of the area.

47 Rowlandson, the English translator of Tuhfāt al-mujahidin, notes at the beginning of his introduction: “Of Sheikh Zeen-ud-deen, the author of the Tuhfut-ul-mujahideen, but little appears known. From that work we learn, that he lived in the reign of Sultan Alee-adil Shah, the fifth sovereign of the Adil-Shahy dynasty of Bijapoor; whilst, from his title of Al-maburee (al-Ma'bari), it may be concluded that he was a descendant of one of the original emigrants from Arabia; but beyond these points no information regarding him appears to exist”. M. J. Rowlandson, Tuhfut-ul-Mujahideen, an Historical Work in the Arabic Language (London, 1833), int., p. vii.
The local records also give an alternative title for the book as the Fath al-mu'īn, and mention the date of its composition as 982/1574-5. The existing copies of the book, however, give a brief account of the events until 991/1583-4. It is not unlikely that Zain al-Dīn himself added the few final pages to his work in later years. Shaikh Ahmad Zain al-Dīn is said to have been born in Mahe, north of Calicut, and spent some of his time in Mecca studying under Muḥammad b. Abu'l-Ḥasan (or Hazān) Bakkariyya and Imām al-Haithami. Later he returned to Malabar where he wrote his famous book. His tomb is in Chombal.

The shrine of his ancestor in Cochin bears a religious inscription (Pl. 17) carved in relief on a number of panels put together to fit the triangle of the front gable of the building. The inscription is in Malayalam, Tamil and Arabic, and the text of each panel varies — as does the style and the size of the script. It is, however likely that the entire work was carried out by the same calligrapher, who exercised several styles according to the length of the text which needed to fit in certain spaces. The two small triangular portions at the top, for example, contain an Arabic text (probably Qur'ān). The right portion of the inscription also contains some small cursive naskhī text which contains Quranic verses.

The Malayalam and Tamil texts are not yet fully studied, but they are reported to bear a date of Puduvaiyappu 84/1425, and to contain the instructions of the Prophet requiring Muslims to recite certain portions of the Qur'ān whenever they enter or leave a mosque or their homes. These verses, together with some prayers, and two hadith are given in the Arabic text (Pl. 17). The verses of the Qur'ān include 2:259, 3: 37, 15: 19-20, 17: 111, 18: 10, 15:9, 24: 61, and 85: 20-21.

The Arabic inscription is not dated, but from the style of the calligraphy, particularly the two lines of cursive script at the top, and the small script of the Qur'ānic text at the right, it appears to date from the late sixteenth to the early eighteenth century. As we shall see, there is other evidence which indicates a similar date for the building. The inscription, and particularly the Malayalam and Tamil texts need further investigation to establish in particular if the reading of the date 84 is correct and if so to what the date actually refers. It is possible that this is the date of the death of the Shaikh, but it could also refer to some event in his life. It is, however, clear that the date 84 cannot be associated with the construction of the shrine, which must have been built at least one and a half centuries later than this time.

The shrine (Figs. 14-15) consists of a simple ante-chamber 4.1 × 3.1 m from inside leading to the tomb chamber 4.1 × 3.6 m. which contains the tomb of the Shaikh on the west side, and that of Zainaba Bībī on the east (Pl. 18). The walls are plain on both the interior and on the exterior, and are pierced with windows at all sides except the north. Some of the windows may have been opened — or enlarged — in relatively recent years to allow more light into the chambers. There are also three entrances to the ante-chamber.

48 For the Malayalam and Tamil texts see ARIE, 1973-7, 47, B 97; for the Arabic text see ibid., D 161.
49 So far we have been able to decipher parts of the Arabic text from some larger and more detailed photographs as follows: the centre part; top two lines: part of Qur'ān 24: 61, and lines 3 to 5: two hadith. On the right portion the top four lines contain Qur'ān 2:259 up to the word sharībika, and the middle lines (line 5-8) 2: 259 continues, followed by the second part of 3: 37 (from the phrase wa kaffalalāh zaharıyyā). Lines 9-12 of the right portion contain Qur'ān 15: 19-20 followed by 17: 111, 18: 10, 15: 9, and 85: 20-21. At the lower part of the triangular space is a rectangle divided into three and containing a non-Quranic religious text with a prayer for peace and blessings on the shrine.
On the interior the shrine has a flat ceiling made of boards resting on beams which run north-south in the tomb chamber and east-west in the ante-chamber. The ceiling provides a floor for the loft, but, unlike other buildings of this type, there is no public access to the loft, perhaps because the relatively low pitch of the roof does not provide adequate usable space there.

The building itself is not exceptional from the architectural point of view, but its interesting features are the roof (Pl. 16), and indeed the inscription of its north (front) gable (Pl. 17). There are no columns from the original building, except two modern posts supporting a light eave added in front of the south entrance. The walls, about 30 cm thick, support the roof. Unlike in other regions of India, the relatively thin walls of this building do not necessarily indicate a late date for the construction, as the building is small and the wooden roof relatively light. The wooden elements of the roof, such as the principal rafters, and particularly the barge-boards of the front gable, are comparable in detail to those of the Shāfīʿi Masjid, while in later buildings, such as in the mosque and shrine of Sayyid Ismāʿīl and Sayyid Fakhr al-Dīn, these elements are much simpler in form. The structural method used for the roof, with purlins passing through the rafters, similar to that of the Jāmīʿ, dates from earlier times, as from the eighteenth century on much simpler details were employed, with the purlins resting on the rafters. Another indication of a relatively early date for the roof can be seen in the two columns with carved bracket capitals (Pl. 16). We have seen similar elements on a larger scale in the front gable of the Shāfīʿi Jāmīʿ, and they indeed appear in the gables of the sixteenth and seventeenth century, but the less decorated gables of the eighteenth century and later do not usually have such columns.

The mosque in the complex is detached from the shrine but is constructed in close proximity with it. The mosque was originally a rectangular prayer hall 7.20 x 3.50 m. with a plain but traditional mīhrāb, a niche with a semi-circular arch, semi-circular in plan, projecting out on the exterior (Fig. 14). The mīhrāb is framed by two decorative pilasters with simple moulded bases and capitals, supporting an arch decorated with mouldings.

The prayer hall remains without much alteration, but a corridor 1.65 m. wide has been added along the length of the south wall, and a large L shaped hall added to the north. At the northern wing of this hall is a relatively large ablution pool. These additions date from recent decades, but during the construction of the extension it seems that the original roof of the mosque was removed and over 1.5 m. was added to the height of the original walls, and the new roof constructed, covering the whole of the old prayer hall and new extension. The extended walls of the prayer hall are narrower in some places than the original wall, and the change in the thickness of the wall can be seen on the interior (Pl. 19). The main entrance to the prayer hall was to the eastern side, but with the modern addition of the corridor at the east, and its close proximity to the shrine, this entrance is no longer the main access. On each of the northern and southern walls there is a window flanked by two doors, those at the southern side now open to a recently constructed long chamber, leaving the main access to the mosque through the northern wall. While the eastern entrance seems to be in its original setting, it is not certain how far the other entrances are part of the original design, or have been added or altered at the time of remodelling.

An important feature in the mosque is an inscription on a wooden plank, which seems to have been once set into the original wall of the mosque (or the shrine) perhaps over the
entrance. The inscription may have been removed at the time of remodelling the mosque, and is now loosely fixed inside the prayer hall, over the western door of the southern wall (Pl. 19). The inscription is in two lines of naskhi script of the style of probably the sixteenth or seventeenth century. The text is reported⁵⁰ to contain Qurʾān 72: 18, followed by a well known hadith concerning the construction of mosques, and bearing a date which may be read as A.H. 1000/1591-2. The inscription is most likely to refer to the construction of the original hall, and, if the reported date is correct, it fixes the date of the building to the late sixteenth century. We have already noted from the inscription of the shrine, and the structural system of its roof, that the shrine itself can be dated to the late sixteenth century or early seventeenth century. If the inscription of A.H. 1000 does indeed belong to the original prayer hall it may be concluded that the mosque must have been built either together with the shrine, or at a slightly later date.

⁵⁰ For the earlier reports of the inscription see ARIE, 1973-4, 159, D 162; Z. A. Dessai, A Topographical List of Arabic, Persian and Urdu Inscriptions of South India (New Delhi, 1989), pp. 37-8, insc. no. 385. The inscription was examined on the site. It contains two lines of Arabic text, the first line of which is Quranic as it begins with qatallah ta‘ala, but the middle part of the first line is obscured by paint, and it seems that the line contains a longer verse than the one reported (Qurʾān: 72, 18). The second line contains the reported hadith, stating that those who build a mosque will later dwell in paradise. The date was not clear, nor could it be determined whether or not there is a date in the inscription.
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The Şafā Masjid at Ponda, Goa — An Architectural Hybrid

HRDAD SHOKOOHY

The Şafā Masjid at Ponda, in the State of Goa, is a somewhat curious and unusual example, the mosque is neither entirely in the style of the buildings of the Muslim settlers of Malabar, nor in style of mosques of the Deccan, which included la before it was taken by the Portuguese in 1763 (Mendes, 1986, p. 53). The mosque is set on a plinth, and has doors, windows and niches pointed arches in a what may be called the ‘cani’ style, but the configuration of its prayer hall surrounded by a colonnade, as well as the structure of its wooden roof, conforms with style of the Malabar mosques. Its exceptional alone makes the building worthy of investigation, but even more so in view of its survival for so long under the Portuguese, characterized as dedicated enemies of the Muslims, and destroyers of Muslim buildings wherever they found them in India (Dalboquerque, 1875, vol. II, pp. 64–65; Frishta, vol. II, pp. 371–372; Zain al-din, Ar. 37, 42 Eng. tr. pp. 82, 98).

The Ponda mosque is not entirely unknown. The first Board of Goa presents it in colour brochures as a major Muslim monument in the state, and guide books also refer to it. Yet we know little about its origins, or the true date of its construction. The inaccurate and partial information of the mosque, some two decades has also badly affected the original appearance of the building, and has left the colonnade around prayer hall still in ruins.
The name of the mosque is sometimes given as Şahapūrī, sometimes as Şafā Shahouri, but mainly as Şafā Masjid: the name most commonly used locally. The traditional date of A.D. 1560 in some publications for the construction of the mosque is also doubtful. This date and the claim that the building was constructed by ‘Ādil Şah seems to have been first suggested by Dr V.T. Gune in 1965 (p. 21), when he was Director of Historical Archives of Goa. Gune did not give his source, or reasons for suggesting such a date, nor did he specify which of the ‘Ādil Şahis would have been responsible for the construction of the mosque, but 1560 corresponds with A.H. 968–969, and the reign of ‘Ali ‘Ādil Şah (965–988). Gune’s account has been repeated in later guide books without any further investigation (Richards, 1981, pp. 105–106 (giving the name of the sultan of the time erroneously as Ibrāhim); Hutt, 1988, pp. 63–65; Hall, 1992, p. 30; Ardeleann-Jansen, 1992, p. 157).

While the mosque may indeed be datable to the ‘Ādil Şahi period or perhaps even earlier, there seems to be little evidence to suggest an exact date of A.D. 1560 (A.H. 968–969), as the mosque does not bear any inscription, nor is there any other historical record mentioning the construction of the Şafā Masjid—or indeed any other mosque—in Ponda under any of the ‘Ādil Şahs. On the other hand Ponda was until 1763 a Muslim town, and would have had several mosques of different periods. To establish a more informed view of the building, and perhaps suggest an approximate date for its construction we should consider not only the architecture of the building, and its possible original form, but also the history of Ponda and the fate of the mosque, both under the Muslims and under the Portuguese.

History

Ponda is situated about 20 km (12 miles) southeast
of Old Goa and, until the appearance of the Portuguese in Goa in 1510, Ponda was a small inland town of little importance. Goa itself was, of course, a long established port, and had a large community of Muslim merchants, many of whom were Arab and Persian settlers. Gaspar Correia (1869, pp. 245–247) describes Goa as: “the principal seaport... which was a place of great trade; it kept at sea a fleet of swift vessels with which they used to make the ships which passed by come into their port to pay them their dues.” Zain al-din (Ar. p. 72; Eng. tr. p. 162) records that Goa was once amongst the ports under the jurisdiction of Jedda in Arabia. His account indicates the independence of the Muslim settlers from the local rulers—as was commonly the case with the Muslim settlements of Malabar. Goa, however, did not remain an independent Hindu state, and at least from the beginning of the 15th century was included in the territory of the Deccan sultans [1]. Goa was also known as a centre for learned Muslim scholars, among them Firishta (vol. II, p. 13) names Sayyid Ahmad Hirawl, whose name suggests he was originally from Herât in Khurâsan, and Shâh Tâhir, a companion of Yûsuf ‘Âdîl Shâh and Ismâ’il ‘Âdîl Shâh.

At the time of Albuquerque’s first attack on Goa, on 25th November 1510, the ‘Âdîl Shâhî garrison in Goa Fort included four thousand Turks and “Coraçones” (Persians from Khurâsan), in addition to the same number of local men, many of whom were massacred when the town fell, or captured and herded into the mosques, which were then set on fire. Those who fled went to Banastari, five kilometres east of Goa, on the way to Ponda (Danvers, 1894, vol. I, pp. 207–212). The news of the fall of Goa was taken to the 74 year old Yûsuf ‘Âdîl Shâh, who immediately took a force of 2,000 to 3,000 men and marched with them in four days from Bijapur to Goa, arriving early in the morning of the fifth day, when he made a surprise attack on the Portuguese asleep in the fort. Many were killed while others woke up, escaped to their ships and fled (Firishta, vol. II, pp. 12–13; Zain al-din, Ar. pp. 43–44 Eng. tr. pp. 101–102).

A year later Yûsuf ‘Âdîl Shâh died, and Albuquerque found another opportunity to retake Goa. The Portuguese and Muslim sources give similar accounts, except that Firishta and Zain al-din mention that Albuquerque bribed the governor (tahâna dar) and other leaders of the town, and took it over with ease, while the Portuguese sources omit this detail. The new successor of Yûsuf, Ismâ’il ‘Âdîl Shâh, busy with securing his own position in the Deccan, had no time to repulse Albuquerque’s forces again, and made a peace treaty with him, leaving the fort of Goa to the Portuguese on condition that they remain content with the fort, and not interfere with any other region.

According to Firishta (vol. II, p. 14) after the peace treaty Ismâ’il gave the governorship of the region to Kamîl Khan, who, as it appears from later events, established a new seat of government for the region at Ponda, where a permanent garrison close to Goa could be kept, and the Portuguese movements monitored. The peace treaty was as a whole maintained, perhaps because the political will and military power on both sides were in a state of equilibrium, but the Portuguese and ‘Âdîl Shâh courts never established friendly relations, and on many occasions continued to confront each other.

One of these incidents occurred in 1516 (Whiteway, 1899, pp. 186–187; Danvers, 1894, vol. I, pp. 336–337), at the time of Lopo Soares’s governorship, when he was engaged in the Red Sea, leaving Goa under the command of Dom Goterre de Monroyo. One Fernão Caldeira, a former page of Albuquerque, came with Soares to Goa in a ship captured by Monroyo. Caldeira quarrelled with the captain, and fearing punishment escaped to Ponda, at the time under the governorship of Ankás Khân. Monroyo sent one of his men, João Gomez, to gain Caldeira’s confidence and kill him, and Gomez successfully carried out his mission, but was captured by Ankás Khân who cut off his head and tied it to the tail of his horse which was whipped back over the water to Goa. The fragile peace was broken, and Goa was cut off from overland supplies. When Soares returned, he sent Dom Fernando de Monroyo with a force against Ponda, who made some advances, but was forced to retreat, with the loss of 200 men. Muslim historians are silent about this event, but as it appears from the Portuguese accounts the ‘Âdîl Shâhî forces took the opportunity to gather a force of several thousands, and set a siege on Goa, during which the Portuguese were under great strain. Eventually, however, three ships, one from Portugal, another from Quilon, and the third from China arrived with fresh supplies and reinforcements. The ‘Âdîl Shâhî army was forced to abandon the siege, and the former peace treaty
was renewed. Ponda remained the front line of Muslim power in the continuing struggles against the Portuguese, many of which are recorded by the Muslim historians, but none of the events altered the status quo [2].

In the 17th century, and with the decline of 'Adil Shāhī power, the area broke up into a number of small independent states ruled by rival local rajas. The Portuguese — themselves also in decline — took the opportunity of expanding their territory, but found themselves faced with the rising power of the Maharrattas, who made alliances with the local rajas and surrounded the Portuguese on all sides. In a treaty dated 18th September 1740 between Balagi Bagi Rao Pardane and the Portuguese, the Rao agreed to withdraw his troops from Salsette and Bardez, and return to the Portuguese the forts of Cocuslim, Damão and St. Hieronimo, which had recently been captured. In turn the Portuguese agreed not to interfere with the affairs of the neighbouring regions which included Salsette, Chaul, Bindur and Ponda (see Danvers, 1892, p. 99 giving a translation of Tratados, T. VI, p. 202).

The struggle over the control of Ponda, however, continued, and in February 1756 the Maharrattas invaded the state of Sunda which at this time included Ponda, under the pretext that certain tributes were in arrears. The Raja of Sunda, unable to pay, offered to give one of his forts as security, and the Maharrattas selected Ponda. This event alarmed the Viceroy of Goa, who in April took a force to Ponda, and took up a position on the top of a hill overlooking the town. For several months the Portuguese bombarded the town, and finally, encouraged by the damage caused to the fortifications, Portuguese troops rushed forward to assault the fort, but were repulsed with heavy casualties, and on the 28th June the Viceroy himself lost his life. The remaining army retreated to Goa (see Danvers, 1892, p. 101, giving a translated extract from Evora, Codex CXVI, pp. 2-11). The Portuguese were now firmly determined to take over the region of Ponda and other neighbouring regions. The struggle between them and the Maharrattas continued for another seven years until 1763 when Ponda was finally taken over, and annexed permanently to the territory of Goa (Lopes Mendes, 1886, vol. II, p. 56). In the 19th century one of Goa’s two infantry regiments was stationed at Ponda (Burton, 1851, p. 143).

### The Şafā Masjid

The mosque is situated just outside the present town, and to the north of the main road to Banastari Panjim. It appears that the mosque was originally outside the fortification walls of Ponda, and from the small size of the prayer hall it seems unlikely that the Şafā Masjid was the Jāmī or even a major mosque of the town. This may be one of the reasons for the survival of the building — even in its ruinous form — after the Portuguese take over. In Goa, if the Portuguese did tolerate the presence of some Muslims, they did not permit them any place of worship [3]. This was still the case in the mid-19th century, when Burton (1851, p. 106) visited Goa in its poor and wretched state under declining Portuguese power. In the case of the Şafā Masjid, after the Portuguese conquest of Ponda they seem to have destroyed the building, perhaps by their usual practice of setting fire to it. This may account for the fair preservation of the stone walls, but the almost complete disappearance of the original roof.

An early mention of the mosque appears in Lopes Mendes’ report of the region in 1886 (p. 55). He gives an engraving of the building (figure facing p. 104), and records it as “the old ruins of the palacio da justiça of the Moors, called Sabamossudo.” It is interesting that while the word masjid is reflected in the recorded name, Mendes had apparently no notion of the true function of the building, nor, of course, of its age, let alone its founder.

More interesting, however, is the engraving reproduced here (Fig. 1), showing the building to be partially roofless, and with a tree growing apparently in the middle of the prayer hall. However, some features, particularly the lower parts of the original roof, which have since been lost, were still extant at that time, and, as we shall discuss, provide valuable information on the original form of the structure, and have enabled us to produce conjectural reconstruction drawings of the building in its original form.

The building was still in ruins in 1981 when it was described by J.M. Richards (pp. 105-106) as “a square structure with blind arcading on its walls, raised on a platform and surrounded by the remains, overgrown with vegetation, of a large tank and gardens. Though the building is little more than a ruin, large crowds still come to it on the big Muslim
The gathering of the Muslims during festivals is worthy of attention. The small community of Muslims still living near the mosque seems to have been mainly responsible for maintaining the tradition of preserving the site as a place of worship. Furthermore, the location of the mosque outside the town walls, and the gathering of the Muslims only of festive days may be an indication that the mosque was perhaps the ‘idgah of the town, although in the absence of any other place of worship it would not be surprising for the Muslims to gather around the only surviving ruins of one of their mosques. From the Mendez engraving it also seems that the tank had remained in use.

The tank

The tank (Figs. 2 to 4 and 8) is set in the centre of a platform about 48 m long and 32 m wide, with six flights of steps, each 3 m wide, leading to the water level, arranged with one set of steps at the east, another at the west, and a pair of steps on the northern and southern sides. Between each pair of steps there is a landing area, 11 x 4 m, set four steps below the surface level, providing additional access to the water when the tank is full. The whole structure is constructed with blocks of roughly dressed red sandstone, and on each wall of the tank there are a number of arched niches, all of the same size, except those at either side of the steps, which are narrower in width (Fig. 4). Below the level of the niches, four steps, which run all around the walls, lead to the bottom of the tank. Altogether the depth of the tank is about 5.50 m. For most of the year the niches are submerged partially under the water, and even in the dry season water covers the four bottom steps of the tank.

While reservoirs associated with mosques and
tombs are common in India, the large tank at Ponda is somewhat different from the North and West Indian reservoirs (known as ba'oli or vaw) both in its form and in its relatively large size in proportion to the mosque. In North and West India the more common type is a step-well which consists usually of a long rectangular tank with a flight of steps in one end a circular well at the other [4]. Such step-wells are seen both in Hindu and Islamic architecture, but the form is of early mediaeval origin and flourished extensively during the Islamic period. In some of the step-wells the walls of the reservoir, usually built in several tiers or registers, may be elaborately decorated with arched niches, and are sometimes constructed with arcades and colonnades. The other type — with which the Ponda reservoir is perhaps associated, and which is common in South India, Gujarat and Rajasthan — is square or rectangular in plan with steps running around at all sides, and usually has little or no ornamentation. This type is of pre-Islamic origin, and while some later examples are associated with Muslim buildings, it is represented on a grand scale in the reservoirs of the temple complexes of South India. Among the
Fig. 3. Ponda, Šafā Masjid, plan of the tank at the level of the niches.

Fig. 4. Šafā Masjid, section A - A of the tank, also showing the south elevation of the mosque.
few Islamic reservoirs, the nearest example is the Taj Khān Baʿoli at Bijapur (Cousens, 1916, pp. 123-124, pls. 110, 115), which is not only of ‘Adil Shāhī origin, but is also comparable in size to that of Ponda. However, in the case of the Taj Khān Baʿoli, while at ground level there are associated colonnaded structures, the walls of the tank itself are plain. The inspiration for the arched niches in the reservoir at Ponda may, therefore, have come from the step-wells of north and west India.

While there is at present no other Islamic monument on the west coast of South India known to be attached to a reservoir of the form and size of that of Ponda, such tanks were not an unfamiliar sight in the past. A tank, in the town of Dahfatan situated between Mangalore and Calicut, was described in some detail by Ibn Baṭṭūṭa (1987, pp. 570-571):

“In this town there is a large reservoir (bāʿin), 500 feet long and 300 feet wide, lined with large dressed red stones. Around it were erected twenty-eight stone domes (pavilions), each with four stone seats and a set of stone steps. In the middle of the reservoir there is another dome (pavilion) in three tiers, with sitting places at each level. They said that the reservoir has been built by the father of the present king. On one side of the reservoir is the Jāmiʿ mosque of the Muslims. It is linked to the reservoir with a set of steps, and people use the reservoir for ablutions (wudu and ghusl). Faqih Husain told me that the mosque and the reservoir were built by one of the ancestors of Kuwail who had embraced Islam.”

Kuwail was the Hindu ruler of the region, who was himself involved in maritime trade, and owned a large number of ships. The reservoir of the Jāmiʿ of Dahfatan seems to have been on a much grander
scale than that of Ponda, but this type of reservoir, already existing in the region, seems to have provided a local prototype for that in Ponda, and there is perhaps no need to seek an ‘Ādil Shāhī or North or West Indian association for its form. A local Hindu example of such tanks can be found in the temple of Śrī Manguesh at Priol, near Ponda (Hutt, 1988, pp. 155–157, colour pl. 40; Hall, 1992, pp. 114–115). The tank, probably of 16th century origin, and reconstructed in the 19th century — on the model of the Šafā Masjid reservoir — has European style semi-circular arches but also has a small shrine in the centre.

In the Šafā Masjid there is no evidence of any pavilion in the centre of the tank, but such pavilions are common in South Indian temple reservoirs, and are also seen occasionally in the Muslim examples of North India, particularly those of the Mughal period. An example is the “bath” in the middle of the reservoir in the Red Fort of Delhi.

The mosque

The mosque itself is a relatively small building consisting of a single prayer hall (Fig. 7) set on a high plinth divided into two registers: the lower is plain, and the upper decorated with blind arched niches at all sides (Figs. 4, 6, 8 and 9). The two registers are separated by a projecting string course. The niches have ogee arches, with a smaller blind niche of a similar form, but with a more pronounced ogee arch inside each niche. The niches under the projection of the mihrāb, however, do not have the smaller inner niche.

As with the reservoir the mosque is constructed with local dressed red sandstone, but the prayer hall has now been painted on the inside, and whitewashed on the outside, except the plinth which displays the bare surface of the stone. The walls, rising above the plinth are 75 cm thick (Fig. 5), and decorated on the exterior with three blind niches at each side (Figs. 8 and 9), filling up each of the façades, except the western side where there are four niches, two at either side similar to the other niches, and two smaller ones in the middle on the back of the projection of the mihrāb. The niches all have the ogee profile comparable with ‘Ādil Shāhī arches, but the upper concave segments are more pronounced than the usual arches of Bijapur, making

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Fig. 6. Šafā Masjid, east elevation and longitudinal section C-C.

Fig. 7. Šafā Masjid, transverse section B - B also showing the profile of the minbar.
Fig. 8. Safā Masjid and its tank from the southeast, showing the upper part of the niches of the reservoir above the water line, and the columns of the south and eastern sides of the colonnade of the mosque.

Fig. 9. Safā Masjid, east façade, with steps leading to the entrance, also showing the remains of the colonnade with its projection at the eastern side.
the ogee relatively tall and with a sharp pointed peak (Fig. 6). Another noticeable difference is the absence of the decorative winged form (Shokoohy, 1995, pp. 65–78), which in ʿAdil Shāhi architecture crowns the arch and spreads wide into the spandrels. Instead, in the Ṣafā Masjid the main arches are each decorated with a pointed spindle-like finial, uncommon—but not unknown—in the architecture of the Deccan, and widely used elsewhere in India, as well as in the rest of the Islamic world. On the other hand the pointed arch, and particularly the ogee form, are unusual features in the architecture of the Malabar coast before the late Mughal period, and the few examples in Calicut, Kodangalor and Cochin have a semi-circular profile (Shokoohy, 1991, p. 77). In Ponda the appearance of the ogee arches—which is indeed the most pronounced feature in the façades of the mosque—must be a form imported from the Deccan, perhaps an indication of ʿAdil Shāhi control over this strategic town. Nevertheless, the differences in detail between the arches at Ponda and those of ʿAdil Shāhi buildings elsewhere may be an indication that the mosque is the work of local builders, whose familiarity with the architecture of the Deccan would have been limited.

The whole of the arched façades of the mosque seem to have been under a colonnaded portico, which would have once run all around the building. Almost all the columns of the colonnade, and the paving upon which the bases of the columns were set have survived without much alteration, although none of the column shafts, each built of several drums of stone, seem to have survived up to their full height (Figs. 8 and 9). The columns are octagonal in plan, each set on a square base 80 x 80 cm, bevelled across each corner to form an octagonal top, on which is set the first octagonal drum. The best preserved columns are at the northern and southern sides, and have preserved between 9 and 11 of the drums, with the upper drums eroded. In the 1886 engraving the columns are not presented accurately, as only some of the
taller columns are shown, and one of the southern columns is represented as complete, with the eroded upper drum shown as a finial. This representation suggests a building surrounded by monumental or ornamental free standing columns not supporting a roof: perhaps a 19th century European engraver's romantic view of a classical ruin. Decorative free-standing columns around buildings are unknown in the Islamic world, and the arrangement of the columns in plan (Fig. 5) leaves little doubt that they were set as supports for a roofed verandah: a common feature in both the Hindu and Muslim architecture of South India.

At the east side of the mosque a wide flight of steps leads to the only entrance to the prayer hall (Figs. 8 and 9). Each wall of the prayer hall is decorated with three tall flat arched niches, with smaller blind arched niches in between (Figs. 6, 7, 10 and 11), reflecting the decorative features of the exterior. The single mihrāb (Fig. 10) is located opposite to the entrance, and is a deep niche, square in plan, but in its façade similar to the other flat niches of the mosque.

To the north of the mihrāb is a stone minbar in the form of a solid throne with five steps (Figs. 6, 7, and 10). The upper step forms the speaker's seat and has solid curvilinear arms at either side. In front of the arms, and at either side of the second step are two small stone pedestals, apparently for lamps and candles. The back of the minbar is in the form of a small arched niche built into the wall, and it seems that the minbar has been built together with the wall, and there has been little or no alteration to its original form. While a number of stone minbars have been preserved in North India and in Bengal, on the coasts of South India only two other old stone minbars have, so far, come to light, both to be found in the two Jāmi's of Kayalpatnam.

Fig. 11. Safā Masjid, Section B - B showing the conjectural reconstruction of the original roof of the prayer hall and the colonnade.
(Shokoohy, 1993, p. 155, pls. 5, 10). Other—and later—minbars are usually in the form of some simple steps with no decoration. The example in the Ponda mosque, smaller in size than the other two, gives us a better understanding of the form of South Indian minbars, but there may be other examples, yet to come to light.

As we have noted, the prayer hall has been re-roofed in recent years (Figs. 6 and 7), without much attention having been paid to the traditional form, or the original structure of the roof. As a result, the original form of the roof, which must have had a dramatic effect on the appearance of the building, has been lost totally. Nevertheless, both on the exterior and on the interior of the walls sufficient evidence remains, which, when analysed and compared with other standing roofs in the region, helps our understanding of the original form and structure of the roof.

On the exterior are four corner pilasters with capitals which are set about 20 cm below a plain string course running all around the building, and about 20 cm above the frame of the main niches (Figs. 8 to 9). Above the string course runs a plain frieze with four corner pilasters, narrower than the main pilasters (Figs. 8 and 9). The string course may have been used as the support for the joists of the sloping roof of a colonnade which once ran around the mosque, an option shown in our reconstruction drawing of the section (Fig. 11). However, the joists could have been set just below this string course, as can be seen in some other buildings in South India, such as the Mandapa extension of the 15th century Chandranatha Basti at Mudabidri (Michell, 1995, pp. 58-61, pl. 30) where the string course stands as a pronounced decorative feature above the roof of the colonnade. In the Chandranatha Basti the roof of the colonnade is made of stone imitating a wooden structure, but in the wooden roofs, the joists would have been jointed into a timber support fixed on the walls, as is the case with the Jâmi, the Idrispalî, and other mosques in Calicut (Shokoohy, 1991, pls. 13a, 14). In the Şafâ Masjid, if the string course was above the roof of the colonnade, it could perhaps have served to deflect the water at the meeting point of the wall and the roof.

The main roof over the prayer hall would have rested on the top of the wall, but the evidence as to its original form can be seen only on the interior. Here, between the main arches of the eastern and western walls, are four pilasters, the capitals of which are well below the present roof (Fig. 10). At the level of the capitals a string course runs around the wall, with corbel stones jutting out of the wall at the same level at the four corners. This string course appears to be at the level of the original ceiling of the prayer hall, and the pilaster capitals and the corner corbel stones would have once supported four main beams of the ceiling, above which would have been the timber rafters and floor boards of the loft space. Above the level of the ceiling the stone walls are plain with no decoration, presumably as they could not be seen from the prayer hall. This part of the wall, as can be seen in the traditional roof structure of other mosques of South India, such as the Mithqâlpali, and the Jâmi of Calicut (Fig. 12) constitutes the wall of the loft space, supporting the lower tier of the roof. Above the wall and between the lower and the upper tiers of the roof there are usually louvres or trellises admitting air and light to the loft space. In all these mosques the trusses of the main roof are supported by small wooden columns, set on the main beams of the ceiling, over the wall, or sometimes over columns below. The same structural principle can also be found in many Hindu monuments, and even in houses and other vernacular buildings. In the Şafâ Masjid there is no reason to suppose any other structural method could have been used, except that the columns of the loft would have been positioned on the beams of the ceiling over the capitals of the pilasters and corbelled stones at the corners. The old engraving of the mosque (Fig. 1) also indicates that the roof of the prayer hall of the mosque must have had a two tiered structure, as what the engraving shows is not a single hipped roof in a ruinous state, but rather the lower tier of a roof, in a fairly good state of preservation, while the entire upper tier has disappeared. In the mosques of South India the loft space is always accessible by a step-ladder, usually at the north side of the mihrâb (Fig. 11). The loft space is used traditionally as the office of the imâm, or sometimes as a madrasa (theological school), or sometimes simply as a store room, for items such as religious texts, floor coverings of the mosque, and decorations for festivals.

Our reconstruction drawings of the transverse section (Fig. 11) and south elevation (Fig. 13) of the mosque, show the most probable form of the original roof structure, with the two tiered roof of
The prayer hall and a third tier as the roof of the colonnade. The general appearance of the building would have, therefore, conformed to the local architectural traditions, and the mosque would have been of a familiar type in this coastal region of South India. Nevertheless, the unusually high plinth of the prayer hall, the decorative niches and the ogee form of their arches would have been a reminder that the town is within the territory of the Deccan. In short, the mosque represents a traditional local structure, but with references to the authority of the sultanate.

As far as the date is concerned, the attribution of 1560 (A.H. 968–969) should remain uncertain unless in the future strong evidence comes to light to support such a date. Nevertheless, as Deccani influence is apparent in the decoration of the mosque, and the building lacks the features specifically associated with the independent trading communities of the cost, such as semi-circular arches, or a mihrab with a semi-circular plan, it could only have been constructed when the area was firmly in the hands of the sultans of the Deccan. The building therefore, must have been constructed sometime between the mid-15th to mid-16th century and certainly not later than the beginning of the 17th century.

Acknowledgements

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NOTES

1. Richard F. Burton (1851, pp. 43–44) points out that the Hindu town of Goa was not exactly the same as the Muslim town, but was at a site on the south coast of the island, and about two miles away from the present Old Goa. After the region was taken over by the Bahmani sultans of the Deccan, the Hindu town was gradually abandoned and it was the newly developed Muslim town which was taken over by the Portuguese. He notes: “of the ancient Hindoo town no traces now remain, except some wretched hovels clustering round a parish church.” If Burton’s claim of a Hindu and a Muslim Goa is true, this would add to the evidence that in some parts of South India there were neighbouring towns with the same name; one Hindu and the other Muslim. For other evidence concerning the existence of such towns see Shokoohy (1991, pp. 36–42; 1993, p. 164).

2. See, for example the account of Firishta (vol. II, pp. 30–31) on the affair of Prince ‘Abdullāh, who in 956/1549–50 escaped from the blade of the executioner of his brother, Ibrāhīm ‘Adī Shāh, and fled to Goa. The Portuguese, with the help of Burhān Nizām Shāh Bahri, Jamshid Quli Qub Shāh, and some people of Bijapur set him up as the ruler to depose Ibrāhīm. They prepared an army and marched towards Bijapur, at that time under Asad Khān Lāri, in the absence of Ibrāhīm. Asad Khān remained faithful to the Sultan and killed the “Brahmins” of the town, with seventy of the conspirators, and did not open the fort. When the other sultans saw that the campaign was not bearing fruit, they returned to their territories, and the Christians, finding themselves abandoned by their allies, returned Prince ‘Abdullāh to Goa.

A few years later, in 979/1571–72, the Muslims launched another campaign to liberate Goa. Apparently encouraged by the Hindu ruler of Calicut, a sworn enemy of the Portuguese, ‘Ali ‘Adīl Shāh made an alliance with his rival, Murtīdā Nizām Shāh, to attack Goa. In the events which followed the Calicut forces achieved some success and surrounded the port of ‘Allāt, but the two Muslim sultans were less successful. Nizām Shāh attacked the fort of Revadunda, near Choul, but could not capture it, and ‘Adīl Shāh was also unsuccessful, owing to a conspiracy among his own people, who intended to kill him. He privately withdrew from his troops, later punishing the conspirators, and made a truce with the Portuguese. For the events of 979 see Firishta (vol. II, pp. 42, 372–373) and Zain al-din (Ar. p. 72–74, Eng. tr. p. 161–165. Also see the events of 986/1578 in Zain al-din (Ar. p. 79, Eng. tr. pp. 175–176) who mentions another venture of ‘Adīl Shāh, when he dispatched certain ministers and troops to form a chain of communication round Goa, and prevent the people of the neighbouring provinces from conveying provisions there.

3. In Diu, however, a large mosque, known as Karao Masjid and datable to the 14th or 15th century, has survived, and is still in use. It seems that in spite of the Portuguese intolerance towards the Muslims in Goa, in Diu, where the Muslim population was dominant, and the Portuguese in the territory had to live and carry on their commerce with the strong Gujarat sultanate, and later the Mughals, the Portuguese had adopted a much softer policy towards the local Muslims. The present author has carried out a study of the Diu mosque but the report has not yet been published. The mosque is a relatively large stone structure with a colonnaded prayer hall, roofed by six corbelled domes, at the west of a courtyard which has three entrances each in the form of a domed pavilion supported by columns (chatri). In general form the building is in the style of the provincial Gujarati mosques of the sultanate period. For a brief note and an illustration of an entrance of the Diu mosque see Gune (1965, p. 22, Plate 63).

4. For examples of this type of the step-wells in the Delhi region see Yamamoto (1967–70, vol. I, pp. 94–97; Vol. II, pp. 34–39, 40–45); and for some Gujarati examples see Burgess (1905, pp. 1–5, 10–14, pls. 2–3, 6, 13–16, 22–23, 30). Among the examples of the other type, the few Islamic tanks in Rajasthan are usually of an arachaic form with a very different configuration of steps. See the Jachchew ki Ba’oli at Hindaun (ASIAR, 1925–26, 128) and the Jhalar Ba’oli at Bayana built by the governor of Mubārak Shāh Khaljī in 718/1318 (ASIIR, XX, 1885, 69–70). The tank in Hindaun may be of pre-Islamic origin, but has been utilized by Muslims, and several tombs and also another building — probably a mosque — have been erected near it.

BIBLIOGRAPHIC REFERENCES


Correa, Gaspar. 1869. The Three Voyages of Vasco da Gama and His Vicereignty from the Lendas da India. Tr. by Henry E. J. Stanley, London.


Danvers, Frederick Charles. 1894. *The Portuguese in India*. (2 Volumes), London.


THE ARCHITECTURE OF BAHÁ’AL-DÍN TÚGHRLUL IN THE REGION OF BAYANA, RAJASTHAN

“Malik Bahá’al-Dín Túghrul was a personality of excellent disposition, extremely just, kind to strangers, and adorned with humility,” according to the historian of the court of Delhi, Minhaj-i Siraj. As Bahá’al-Dín was not, so far as we can see, in favor at court, the historian’s praise is surprisingly effusive. He continues his account as follows:

He was a slave of long standing of the victorious sultan (sultán-i gházi) Mu’izz al-Dín [Muhammad ibn Sam], who had brought him up and given him a good education. The fortress of Táhángar was in the territory of Bhayana, and was part of the realm of the rai.3 When the sultan conquered it, he gave it to Bahá’al-Dín, who made that territory prosperous. Merchants and men of distinction from different parts of Hindustan and Khurasan joined him, and he gave all of them houses and resources which were to be their own property, and for this reason they settled near him. As he and his army found the fort of Táhángar unsuitable, he built the town of Sultankut in the territory of Bhayana, and there made his abode. From there he sent groups of cavalry toward Gálíwar [Gwalior] constantly, because when the victorious sultan [Muhammad ibn Sam] had returned from the foot of the fort of Gálíwar he had commanded Bahá’al-Dín to take over that fortress. On this order Bahá’al-Dín Túghrul stationed a troop of his army at the foot of the fort of Gálíwar, then at a distance of two leagues he built another fort to house the Muslim cavalry at night, and they attacked the fort every day. They continued in this manner for one year, and when the people of Gálíwar were reduced to dire straits they sent emissaries to Sultan Qub al-Dín [Aybak], and surrendered the fort to him. There was a speck of the dust of vexation between Bahá’al-Dín Túghrul and Sultan Qub al-Dín. Malik Bahá’al-Dín Túghrul was extremely benevolent, and in the region of Bhayana numerous beneficent monuments of his have remained. He died and was received into the mercy of the Lord.

Minhaj-i Siraj’s description of Bahá’al-Dín Túghrul is brief, but it makes some significant points. He tells us that Bahá’al-Dín was operating in the region of Bayana under the direct orders of Muhammad ibn Sam, and that he was not only independent from Qub al-Dín Aybak, the sultan’s commander in Delhi, but was his rival. This means that the surrender of the fort of Gálíwar to Qub al-Dín must have taken place after the death of Muhammad ibn Sam, when Qub al-Dín was already the sultan of Delhi, as there is no record of Muhammad ibn Sam’s having interfered in the matter. Minhaj-i Siraj’s use of the title sultan for Qub al-Dín also helps assign a date to the event, as Qub al-Dín bore the royal title for only a little more than four years before he died in 1210-11. The date of Bahá’al-Dín Túghrul’s death is not recorded, but from the Tábágáti Ná’ír it appears that he predeceased Qub al-Dín. Bahá’al-Dín’s fiefship of Bayana therefore spanned the period 1195-1210, less than fifteen years.

Minhaj-i Siraj also tells us that several “beneficial monuments” built by Bahá’al-Dín remained in the region of Bayana. The expression he uses indicates that the monuments were of a religious nature, either mosques or the type of prayer wall on open ground called a namázgah⁴ in the early Sultanate period, but now known in India as an ‘idgáh, and there are indeed two mosques and a prayer wall datable to this period within the old borders of the province of Bayana. One of the mosques is in the village of Káman; the other mosque and the prayer wall are in the town of Bayana.

The mosque of Káman, known locally as the Chaurasi Khambá (the Eighty-four Columns), dates from the first two decades of the Ghurid conquest. It is a colonnaded building constructed around a central courtyard in an Arab type of plan. Its inscription is of particular importance as it throws light, not only on the origin of the building, but also on some obscure details of the history of the early Sultanate period. The inscription is carved around the rectangular doorway of the main entrance on blocks of sandstone reused from earlier buildings. It is badly damaged and only some parts can be read.⁵ When Cunningham⁶ first reported the building in 1885, the inscription was already in poor condition. He could not read the date, but sug-
gested that the damaged name of the sultan might be Iltutmish. In 1965 the Annual Report of Indian Epigraphy mentioned the same inscription and gave its date as Ramadan 600 (May-June 1204), but noted that the name of the sultan was lost. In Ramadan 600, however, the ruler of Delhi was still Qutb al-Din Aybak, and he was still the governor of the region under Muhammad ibn Sam, so he would not have referred to himself as sultan. Iltutmish did not come to power until seven years later.

What actually remains of the inscription reads (fig. 1):

... al-sultan [al-ṣālim al-ṣādil al-aṣam al-malik al-
mulūk al-fārāb wa al-ṣālim al-ṣāam al-
malik al-fārāb wa al-ṣālim al-ṣāam al-
nasrallah wa al-ṣālim al-samīr] ... [Bahā al-
dawlat wa al-dīn] ... pādshāh wa al-sultan jahān
pahlavān Tughrul al-sultānī wa amara bi bina? ḥādha al-
burqat al-lātif Īyāz ibn al-amīr Ḥusaynīyar? al-sultānī. ... 

The date no longer survives, but Jahan Pahlawan Tughrul al-Sultani—the title al-sultānī shows that he was a royal slave—seems to be none other than Baha al-Din Tughrul, the governor of Bayana. The surviving part of the sultan’s title is similar to the titles used by all the early sultans of India, including Muhammad ibn Sam and Iltutmish. However, the end of the title, pādshāh wa al-sultan jahān pahlavān before the name of Tughrul is especially worthy of attention since it suggests that at the time of the building of the Chaursai Khamba mosque, Baha al-Din had declared himself an independent sultan. The mosque may therefore date from the short period of his independent rule after the death of Muhammad ibn Sam in 1206. The region of Bayana, which included Kaman, must have been annexed to Delhi when Iltutmish unified the whole of northern India under his empire.

The present town of Bayana is on the site of Sultanpur, founded by Baha al-Din Tughrul on the western foot of a hill below the fort of Bayana. The fort had been the stronghold and capital of the Yaduvanasi Rajputs, who claimed descent from Krishna. The town was later recorded by the early Muslim historians of India under the name Bhayana-Sultanpur, but subsequently the name Sultanpur seems to have been abandoned, as both the fort and the town are referred to by later historians only as Bayana.

Bayana is located to the southeast of the state of Rajasthan, 70 kilometers east of Agra and 160 kilometers south of Delhi. The town was the only important staging post in this part of the route to the south, and it was important for the sultans of Delhi to keep it under their control. After the death of Baha al-
Din, Bayana appears to have been threatened by the local Rajputs, but was retaken by Shams al-Din Iltutmish, and later many of the sultans of Delhi used the fort as their stronghold for campaigns against other states. From the time of Iltutmish until the fall of the Mughal Empire the town remained in the hands of the Muslims, and was part of the Delhi sultanate. Firuz Shah Tughluq spent some time there, and a fragmentary inscription mentioning his name has been found in a ruined mosque in the town.

Bayana was not, however, always under the control of the Delhi sultans. After the death of Firuz Shah it fell into the hands of a powerful local family who were known as the Auhadis after their ancestor Auhad Khan, an important governor of Bayana. They bore the title of majlis-i ʿāli (“of the noble assembly”) and held Bayana mostly as independent rulers, but when necessary as tributaries of the Delhi or Sharqi sultans, from about 1378 to the first quarter of the sixteenth century. Not until the time of the Lodis, after the defeat of Husain Shah Sharqi, was the Sharqi kingdom annexed to the territory of the Delhi sultans; Bayana then again became part of the Delhi Sultanate. Sikan-
dar Lodi (1488-1518) made Khān-i Khānān Farmūlī the new governor of Bayana and built a new town there, which he called Sikandra (not to be confused with the Sikandra near Agra). At the time of Ibrahim Shah, Bayana was the place of residence of one of his high-ranking generals, Haybat Khan. The Tarikh-i Shāhī mentions that Haybat Khan was holding court in “a garden in Sikandra near Bayana,” and on one occasion he gave a generous offering to one of his court poets, known as Muʾmin of Bayana.

After Sikandar Lodi developed Agra as his new capital, Bayana gradually lost its importance until, under Akbar, it was reduced from a state to a district of Agra. According to the Aʾnin-i Akbarī, even at the time of Akbar, Fatehpur Sikri was not regarded as the capital, but only as one of the thirty-three towns of the district of Bayana. When the Mughal Empire broke up, the local Jat rulers made Bayana part of the kingdom of Bharatpur. It seems that only the town was used by the Jats. The fort is now totally deserted.

We know that in the early Sultanate period one of the towns under Bayana was Kaman, since apart from the inscription of Baha al-Din Tughrul, another inscription found in a reservoir there mentions that it was restored by one Ibrahim Abubakr Nushirwan on the
Fig. 1. Kerman, Chahar Khandan Mausole. The historical inscription around the entrance.
order of the *malik-i muluk-i sharq* Nusrat Khan, the governor of the province of Bayana during the reign of Balban, on the first day of Ramadan 669 (15 June 1271).

Today the village of Kaman is in the state of Rajasthan and the district of Bharatpur, 58 kilometers north-northwest of the town of Bharatpur. It is situated between Delhi and Bayana on the ancient route that connected Delhi with the south. Though now only a village, it was once a fortified city and probably one of some importance. Remains of the Gupta period found there indicate that its history goes back to long before the Islamic conquest. At the time of the conquest it appears that the town fell into the hands of the Ghurids when the army marched toward Bayana and Ajmer. Kaman must have remained as part of the province of Bayana until Sikander Lodi developed Agra as his new capital and reduced the size of the district of Bayana by including the eastern part into the province of Agra.

The *A’in-i Akbari* records Kaman as a town in the province of Agra during the reign of Akbar and indicates that no fortification existed there at that time, although in fact foundations of a large stone-built fortification wall are still visible. It can be assumed that this fortification wall had disappeared before Akbar’s time.

**THE CHAURASI KHAMBA MOSQUE**

The Chaurasi Khamba mosque is inside the area of the ruined fortification wall, to the west of the village. It is a colonnaded building measuring $36.58 \times 24.24$ m. built around a central courtyard and constructed on an Arab type of plan (figs. 2-9). The mosque has a mihrab in the center of the western wall, a main entrance to the east, and another smaller entrance at the western corner of the northern wall which leads to the women’s gallery, a small balcony in the northwest corner of the

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**Fig. 2.** Kaman, Chaurasi Khamba Masjid. Ground plan.
The mosque is twice been restored. In the first restoration parts of the walls and the parapets were repaired with stone rubble set in mortar, and in the second the upper parts of the walls and parts of the parapet were reinforced by brick faced with sandstone. Both restorations were minor, however, and, except for the main entrance gateway (fig. 5), do not affect the original appearance of the mosque.

The gateway is entered from the east, and projects out on the exterior to form a chamber with thick walls and heavy piers. The piers appear to be original, but the upper part of the walls and the roof have been reconstructed. The reconstruction includes the two shallow four-centered arches over the threshold leading to the chamber. The profile of the arches suggests that they must be of the Mughal period. The threshold leads to the chamber, the floor of which is three steps lower than the present ground level (the steps themselves are now broken). On the opposite side of the chamber is the entrance to the mosque; it has kept its original rectangular form. Above the doorway are two reused monolithic slabs carved to form a row of miniature shrines. The stonework around this entrance has been re-dressed and carved with the inscription already mentioned. In the north and south walls of the gateway are two flights of steps leading from the colonnade of the mosque to the roof of the gateway.

Inside the walls and the raised platform is the main colonnade of the mosque (fig. 6), which consists of one aisle and eight bays on the north and south sides of the courtyard. The columns on the south side do not line up with those of the raised platform, which are more closely spaced and produce eleven bays. The eastern colonnade is two aisles deep and seven bays wide, and that on the qibla side is three aisles deep and seven bays wide.
Fig. 5. Kaman, Chaurasi Khamba Masjid. View of the eastern elevation showing main entrance gateway.

Fig. 6. Kaman, Chaurasi Khamba Masjid. Exterior view of western end.
wide (fig. 7). As in the mosque of Quwwat al-Islam in Delhi, the columns are each formed out of two reused monolithic column shafts placed one on top of the other to give the required height. The interior of the southern wall has three rectangular niches.

The main mihrab (fig. 8) set in the center of the qibla wall is rectangular in plan and projects behind the back wall. It has a slightly ogee two-centered arch framed by an inscription bearing Qur’an 68.1-5. The inside of the arch is carved with a border decorated with a pierced scroll motif, which is now badly damaged, supported by vase-shaped capitals that originally rested on pilasters, which are now lost. The spandrels of the arch are inscribed with the Muslim profession of faith. One of the four slabs of stone used for the back wall of the mihrab has been replaced by later brickwork restorations. The stones are carved to represent an arch with pilasters and a carved border, imitating the design of the real arch. The carved decoration of the mihrab was all executed specifically for it. The same designs appear on the mihrab of the mosque in Bayana.

To the right of the mihrab is a stone minbar (fig. 9). It has a flight of steps leading to a platform, with a passage underneath. The blocks of stone chosen come from a former temple, but the way in which they have been set—in three registers standing alternately in recess and relief between four longer horizontal slabs—appears to be an imitation of the wooden minbars common in Iran during this period, such as that of the mosque of Na’in. The back wall of the platform has an arch-shaped backrest, and over the platform is a carved stone canopy made out of a carefully reassembled Indian dome with a lotus motif on the underside. No balustrade remains. The reused stones of the minbar are so like those of the mosque as to suggest that both were salvaged from the same temples, and therefore that both were built at the same time. The minbar is the only existing example dating from the early Islamic period in India—no trace of any minbar survives in the mosque of Quwwat al-Islam at Delhi or in the mosque of Arhai din ka jhonpra at Ajmer. Since a minbar is one of the liturgical requirements of a mosque, all early mosques must have had one. The unique minbar of the Chaurasi Khamba therefore gives us some idea of what the early minbars must have looked like. Originating from the wooden minbars of Iran, they were executed in India in stone and perhaps in other materials.

In the northwestern corner of the qibla colonnade is a women’s gallery (figs. 3 and 7), supported on four columns and originally screened from the general gaze by pierced stonework screens known in India as jāli. The stone screen is now lost, but slots in the lintels around the gallery show how it was fixed there. The

Fig. 7. Kaman, Chaurasi Khamba Masjid. View of the qibla colonnade from the courtyard, showing women’s gallery.
women's gallery has its own small undecorated mihrab. The gallery is entered from the outside (fig. 6) by a flight of steps in the western corner; the landing at the top has a pierced stonework screen and a flat roof supported by columns and lintels. Two of these columns rest on bases made from reused capitals; their carved decoration includes elephants' heads.

The mosque is roofed by stone slabs resting on lintels, but the northern gallery has no cross lintels. In front of the mihrab is another small corbeled dome, reassembled and retaining its original carvings. There are eave stones around the inside of the colonnade, but like those of the exterior of the mosque they are set in rubble and brick and are a later addition. Most of another addition—a parapet formed of rubble and brick and faced with stone carved to represent a row of arches in the form of battlements—is now missing.

The Chaurasi Kamba is the only extant early Sultanate mosque which has retained all its original features. Situated in a provincial town it was built on a fairly modest scale and was not lavishly embellished. Although it lacks the decorative screen wall and minaret found in the Quwwat al-Islam and Arhai din ka jhonpra, its intact colonnade in Arab plan, its elaborately decorated mihrab, and its unique minbar nevertheless combine to provide an excellent example of a mosque of the period.

THE MOSQUE OF UKHA MANDIR

The two other buildings which appear to be associated with Baha al-Din Tughrul, in the town of Bayana where he was governor are a mosque converted
to a temple and known as the Ukha Mandir, and a prayer wall (ṣābāl), built outside the town.

The Ukha Mandir28 (figs. 10-21), a large mosque situated to the west of the town, is part of a complex which includes an extension dating from 1320 known as the Ukha Masjid (figs. 22-24), and an unfinished minar dated 926 (1519-20) and known as the Ukha Minar (fig. 25).

The original part of the mosque of Ukha Mandir has an Arab type of plan and is constructed of sandstone blocks and materials reused from earlier temples. It is a colonnaded building, measuring 37 × 17 m.; originally it was walled on its north, south, and west sides and left open on the east, where there is a monumental entrance gateway (fig. 16). In the northwestern corner of the colonnade is a women’s gallery (fig. 17) in the form of a balcony with its own separate entrance. There is also a small doorway to the mosque in the northern wall and windows in both the northern and western walls. The northern doorway and most of the windows are now blocked. There are three mihrabs in the main part of the mosque and a fourth in the women’s gallery. The conversion of the mosque to a temple (fig. 10) appears to have taken place more than two centuries ago and has superficially altered the appearance of the building. Parts of the colonnade have been walled up, and the eastern side is no longer open, but has a roofed portico. Platforms have been built under the north, south, and qibla colonnades, and between the columns facing onto the courtyard a series of lobed arches have been inserted (fig. 18). However, these later additions have not disturbed the original structure, most of which is still visible.

The main gateway (fig. 16) has kept all its original features. Like the rest of the mosque, it is built of red-sandstone blocks. It has a corbeled arch built in the same manner as those of the screen walls in the mosques of Ajmer and Delhi—a form used only in the early years of the Sultanate period. Under the arch the gateway is divided into two tiers: the lower tier is a roofed passage leading to the entrance doorway; the upper tier has a window with a pierced stonework screen, and in front of it a balcony which corresponds to the level of the roof of the mosque. The flat roof of the passage is supported by two stone lintels standing on corbeled brackets, and a chamber has been built on the roof of the passage and behind the window of the

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Fig. 10. Bayana, the mosque of Ukha Mandir. Plan of the building showing its present condition. The shaded areas show later additions at the time of its conversion to a temple.

Fig. 11. Bayana, the mosque of Ukha Mandir and the Ukha Masjid. Ground plan, original condition.
upper tier. This chamber is a later construction, however, probably built at the time of the conversion of the mosque to the temple, and perhaps replacing an earlier chamber with a view through the surviving window. Above the doorway to the mosque the remnants of an almost obliterated two-line inscription can be seen but not read. It must have been defaced sometime before 1871 when Carley first visited the building, as he makes no mention of it.

As in the Quwwat al-Islam and the Chaurasi Khamba, so in the mosque of Ukha Mandir each of the columns of the colonnade are formed of two reused monolithic column shafts placed one on top of the other (fig. 19). The roof is made from slabs of stone resting on lintels supported by brackets, with one small corbeled dome, reconstructed from an earlier building, in front of the central mihrab.

The central mihrab (fig. 20) is rectangular in plan, and projects from the back wall. It has a two-centered arch carved out of a large slab of stone and a pierced scroll motif very similar to that of the mihrab of the Chaurasi Khamba. This mihrab also had carved engaged columns, now broken, below the impost of the arch, and again as in the Chaurasi Khamba the back wall has carved decorative pilasters and a border carved with a scroll motif. The inscription of the central mihrab, like that of the entrance, has been defaced, but the fine decorative carving remains. The two smaller mihabs (fig. 21) on either side of the central one are also rectangular in plan, but do not project from the outside. They are elaborately carved and have roundels on the spandrels and in the wall behind, but no pierced decoration. There is now no minbar to be seen, and no
Fig. 14. Bayana, the Ukha Masjid Section B-B.

Fig. 15. Bayana, the mosque of Ukha Mandir and the Ukha Masjid. Exterior view from the northeast.
indication whether the one that once must have existed was constructed of stone or of wood.

The women's gallery (fig. 17) in the northeast corner of the qibla colonnade is built on slabs of stone resting on lintels supported by columns and brackets. Column shafts standing on the platform support the roof, and the balcony is screened from the mosque by pierced stonework; similar screens were used to let in light from the outside through two windows, now blocked. The original entrance to this gallery was from the outside via a flight of stone steps built into the north wall. This entrance has been blocked, and access to the gallery is now from steps inside the mosque, through a new opening in the screen. These reconstructions again seem to be part of the conversion, but the secluded area, with its own mihrab, is otherwise in its original state.

The exact date of the construction of the mosque of Ukha Mandir is not known: no dated inscription or other source providing a date has survived. Its extension, known as the Ukha Masjid, is dated 720 (1320-21); since the original building must be earlier, it was presumably built sometime in the thirteenth century. The construction of the gateway of the Ukha Mandir is similar to that of the screen walls at Ajmer and Delhi. The similarity of the mihrab to that of Kaman is another indication of an early date. This suggests that the building must have been constructed at the time of Baha al-Din Tughrul who may have built it as the jami masjid for his new town of Sultanput.

The extension, the Ukha Masjid, is attached to the south side of the original mosque. It was once connected to its colonnade through a doorway, but this is
now blocked. The extension is also a colonnaded building on an Arab plan (figs. 10-12). Its general layout follows that of the Ukha Mandir, but the extension is narrower, measuring only $19 \times 37$ m. The eastern elevation of the building (fig. 22), although different in its detail, corresponds broadly with that of the Ukha Mandir, and consists of a monumental gateway flanked by open colonnades. The gateway consists of an arch leading to a doorway into the colonnade, and is ornamented with two small turrets (fig. 23), only the bases of which remain. They are stellate in plan, imitating on a smaller scale the form of the Qutb Minar, and are similar to the turrets of the screen wall of Arhai din ka jhonpra. Inside the mosque and in front of the entrance (fig. 23) are two columns larger in size than the rest, which support reused carved serpentine brackets that still retain their figurative decoration.

Above the doorway of the entrance is an inscription. It was defaced during the disturbances of 1947, but had earlier been recorded. According to that record, the inscription said that the extension was built by Kafur al-Sultani, the governor of the town, in the year 720 (1320-21), during the reign of the Khalji Sultan Mubarak Shah.

Like the Ukha Mandir, the Ukha Masjid has a colonnade built of reused materials, but the column shafts...
Fig. 20. Bayana, the mosque of Ukha Mandir. The central mihrab.

Fig. 21. Bayana, the mosque of Ukha Mandir. The mihrab to the north of the central mihrab.

of the qibla colonnade (fig. 24), used one on top of the other to support the high ceiling, have been re-dressed. The north, south, and east colonnades have an upper level, which was probably used as a women's gallery. The mosque also features some more advanced methods of construction which were in common use during the early fourteenth century. These include the four-centered true arch of the gateway, and the small dome in the roof in front of the central mihrab (fig. 14). The latter is set in a position similar to that in the Ukha Mandir, but rather than being corbeled, it is a true ribbed dome, a type unknown in India in the early Islamic period.

The central mihrab projects from the back wall; it has a finely carved lobed arch shaped out of large blocks of stone, and it also once had an inscription, but it is now defaced and illegible. The two smaller mihrabs on either side of the central one have true arches, slightly ogee and two-centered. When the extension was built the wall of the original building was opened to make a connection between them. An arched window with a pierced-stonework screen was placed between the two qibla colonnades. Both the door and the window line up with the colonnade of the extension.

The Ukha Minar\textsuperscript{31} (fig. 25) is a separate circular minaret 9.5 m. to the northeast of the mosque. Accord-
Fig. 22. Bayana, the Ukha Masjid. View of the eastern elevation.

Fig. 23. Bayana, the Ukha Masjid. View from the courtyard looking toward the east.
ing to an inscription above its entrance, it was constructed during the reign of Ibrahim Shah Lodi in 926 (1519-20 by Nizam Khan ibn Mujahid Khan, the governor at that time. It is circular in plan, and stands on an octagonal foundation. The entrance faces south-east and leads to a spiral staircase which was to reach to the top of the minaret. The minaret was, however, only built up to the base of the first balcony, and must have been left unfinished when Babur attacked the region.

THE CIDGAH

The cidgah (figs. 26-27), a prayer wall about 60 m. long built of reused blocks of sandstone laid in courses, is located one kilometer northwest of the town. It has a central mihrab flanked by four smaller niches on either side, with a tower at each end of the wall and a large platform in front. Prayer walls of this kind, suitable for large open-air gatherings, are common in India. They remain a normal feature of any town with a Muslim community, and new ones continue to be built even today. The word `cidgah means "a place for festivals," and one of their functions is to provide a place of assembly where all the Muslims of a whole town can gather together.

How the custom of using a prayer wall as a mosque originated is not clearly known, but prayer walls appeared in India as early as the beginning of the Islamic conquest, and `cidgahs bearing inscriptions dating back to the time of Ilutmish existed in India until recent times. No such walls existed in Khurasan or elsewhere in the Islamic world before the fourteenth century, but the remains of a mosque uncovered at the camp (lashkargah) of the Ghaznavid Sultan Mahmud and his son Mas'ud in Lashkari Bazar near Bust in Afghanistan may provide some information on Indian `cidgahs. This mosque consisted of an arcade with a central iwan at the qibla side of large open space, and was apparently used by the Ghaznavid army encamped there. It does not appear to have had any entrance or enclosure wall, but only a qibla wall under the arcade, with a mihrab in the center. In large assemblies the sultan and the commanders of the army presumably stood in the shaded space under the arcade and its iwan, with the rest of the army gathered behind them in the open. The Ghurids may have adapted the idea when they came to India. In any town they conquered they could quickly build a prayer wall in an open field to use for religious observances involving the whole army.
place of assembly where all the Muslims of a whole town can gather together.

The 'idgah of Bayana consists of a central mihrab set in a square recess which projects behind the back of the wall, flanked by four smaller niches on either side and two round towers, one at either end of the wall. The recess of the central mihrab is in the form of a square chamber roofed by a corbeled dome. A flat mihrab is carved on the qibla wall to represent a lobed arch in a larger two-centered arch, with roundels in the spandrels and under the arch. A border of flordiated serpentine decoration closely resembles the pattern carved on the part of the screen wall of the Quwwa al-Islam built by Qutb al-Din Aybak. The stones are reused materials from earlier temples, but the surface has been re-dressed and the decoration carved specifically for this building. In front of the mihrab is a corbeled arch standing on two round columns taken from an older building.

Eight niches, four on each side of the mihrab, are all of the same form and have corbeled arches built in the same way as the central mihrab. In this case, however, they are carved to represent the form of a lobed arch within a four-centered arch. The lobes follow the horizontal lines of the stonework, producing an effect very different from the lobed arches executed in brickwork and imitated in stonework that are found in early Indo-Islamic buildings (including the central mihrab of this one). The niches are now surmounted by battlements in the form of pointed arches, which also function as weights to hold the blocks of corbeled stone of the niches in place. These battlements may be a later
addition, as it appears that some upper courses of the wall have been restored. The present minbar is not the original one; it has been improvised out of three blocks of stone placed to the right of the central mihrab. Traces of an earlier minbar can still be seen beside it on the wall.

The round towers at each end of the wall serve not only visually to balance the building, but also to strengthen the structure. Inside they each have a round chamber with a door to the east. The chamber of the northern tower is now filled with stone and its door blocked, apparently to make the tower more rigid, but the southern chamber is still accessible. At the northern side of this chamber is a flight of steps leading to the top of the wall, which may have been used by the muʿadhīn, or caller to prayer. Both towers were originally roofed with corbeled domes, but they have long since disappeared. On their base ring other domes were later built, but these too have collapsed.

The ʿidgah of Bayana has the characteristics of an early Indo-Islamic building, including a corbeled dome and corbeled arches. As true arches and domes were built in Bayana as early as 1320, we can assume that this building predates that time, for craftsmen would be unlikely to have abandoned a new and successfully used technique for a less advanced one when constructing a sizable building. The ʿidgah (which thus far seems completely to have escaped the attention of scholars) must therefore date from the time when Bayana was under the control of Baha al-Din Tughrul, and perhaps from the earliest stage of the construction of Sultankut. If so, the ʿidgah would be one of the first of the buildings mentioned by Minhaj-i Siraj to have been constructed by Baha al-Din in Bayana, and the earliest example of its kind still standing. The combination of a larger arch for the central mihrab and smaller niches on either side in the ʿidgah of Bayana is reminiscent of the form of an arcade with a central iwan. The effect

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Fig. 27. Bayana, the ʿidgah. Plan and elevation.
NOTES

1. This article has resulted from a project initiated by the authors in 1977 to survey the unreported monuments of the Sultanate period in northwest India. The authors wish to thank the Corpus Inscriptionum Iranicarum, the Twenty-seven Foundation, the School of Oriental and African Studies of the University of London, and the Spalding Trusts for their support of the project.


3. The Persian form of the Sanskrit word rasa, the title of the Indian kings.

4. The word appears in the inscriptions of early prayer walls such as that of Jhalor dated 718 (1318-19), see Epigraphica Indica, Arabic and Persian Supplement (henceforth cited as EIAPS), 1972, pp. 12-19.


7. ASIR 20:54-60.


12. Muhammad Qásim Hindu Shah, Táirkh-i Firštá (Lucknow, 1864), vol. 1, p. 66.


15. The historians of the court of Delhi only refer to the Auhadis when they were directly involved in the affairs of the Delhi sultans. See Vábyá ibn Ahmad ibn ʿAbdulláh al-Sihirí, Táirkh-i Mubárák Kháshí (Calcutta, 1931), pp. 169-73, 185-87, 202-15, 237-42; ‘Abd al-Qádir ibn Muláák Khásh al-Badáuní, Muntakhab al-tawáiríkh i (Calcutta, 1868); 272-74, 282-316. For modern studies on the history and inscriptions of the Auhadis, see Cunningham, ASIR 20: 61-67; A. Halim, “Some Minor Dynasties of Northern India during the Fifteenth Century,” Journal of Indian History 26,3 (December 1949): 223-33, Shokoohy, Rajasthan 1: 15-16.


18. Sikandrá of Bayana is located three miles east of the town and on the plain to the southeast of the fort. See map of Dholpur Region, no. NG 43-8, published by the U.S. Army map service, Washington, D.C., 1968.


29. ASIR 20: 71-72; unusual for Cunningham, his plan (pl. 13) is incorrect. It shows an additional row of columns forming a second aisle open to the outside on the north, where in fact there is a single aisle closed by the party wall with the Ukhá Mandir. His description of the building reflects the incorrect drawing. The drawing shows only one of the three mihrabs.

30. Ibid., p. 72.


33. Horovitz, “Inscriptions of Muhámad b. Sám (cited above, n. 9), p. 28. Horovitz reports an ʿidgah in Hansi built on the order of Abu al-Fath Mahmund ibn Ilíutmish when he was the governor of the region. Mahmund died during the lifetime of his father and was buried in Delhi in the tomb now known as Sultan Gharí. The ʿidgah of Hansi was damaged at the time of Partition, when all the Muslims left the area. Over the years its stones were used for building new structures, and by 1981 when we surveyed the Sultanate remains in Hansi, only a foundation trench about 1.50 m. deep remained where the last blocks had been unearthed. From the trench the general layout of a free-standing wall with a central mihrab and a tower at each end could be established.

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In the fourteenth century in the Deccan in Central India, a well-known Sultanate dynasty was established whose sultans called themselves Bahmani. They claimed to be descended from the Sasanians, and in their buildings they decorated the crowns of the arches with a device which varies in its details, but has as its main components two open wings surmounted by a crescent and sometimes a disk that closely resembles the emblems on the crowns of the Sasanian emperors. At a period when there is little evidence that the Sasanian royal emblems were still known to the Persian-speaking world it is difficult to see how the Bahmani sultans could have been aware of them. Yet the close resemblance between the Bahmani motifs and those on the Sasanian crowns should not be dismissed as merely coincidental. So far scholars have offered no explanation for the origin of the motif or its probable connection with the Bahmani’s claim of noble origin.

To what extent the Bahmani claim had any validity is not certain. The founder of the dynasty, which lasted for nearly two centuries, was Zafar Khan Hasan Gangu, a Persian adventurer at the Delhi court. Muhammad b. Tughluq made him governor of Gulbarga, from where he led a successful rebellion against the sultan in 1347-48. Zafar Khan claimed to be a descendant of Bahman the son of Isfandiar, through his lineage with Bahram Gur. In the works of the early Muslim historians, who used the Khuday näma and other Sasanian sources, Bahman appears as a real historical character, while his legendary life is celebrated in Firdawsi’s Shahnäma, which in the fourteenth century was regarded as the standard history of pre-Islamic Iran. According to A. D. H. Bivar, the legends of Bahman may indeed have some historical basis, and may allude to the post-Alexandrian power struggle in northern Iran between Eumenes (whom), the former secretary of Alexander, and Antigonus, Alexander’s successor.

In the court of Delhi in the fourteenth century Zafar Khan was not the only personage who claimed a noble origin. Ibn Battuta records that at the time of Muhammad b. Tughluq the governor of Qanuj was Amir Firuz Badakhshani, who traced his genealogy back to Bahram Gur. Malik Karay, another personage at the court, also claimed descent from Bahram Gur. A third was Amir Ghiyath al-Din Muhammad b. Abd al-Qahir, a descendant of the Abbasid Caliph al-Mustansar. In fact Delhi was full of Arab and Persian fortune hunters who had heard of the gold of India and left their homelands to seek wealth and power at the sultan’s court. Muhammad b. Tughluq, whose brutality matched his generosity, welcomed them and often gave them more than they deserved, but he frowned upon any one who ever wished to leave his court. Some who tried to escape in secret paid the price with their lives. Many others, such as Zafar Khan, stayed and were raised to positions of power.

The earliest Bahmani buildings are in Gulbarga, which was made the capital of the sultanate until 1424 when the ninth sultan, Ahmad Shah Wali (1422-36), moved his capital to his newly reconstructed town of Bidar. The early examples of the winged motif are therefore to be found on the arches of the buildings of Gulbarga, particularly in the few original structures inside the fort and on the tombs attributed to the first sultans, situated to the west of the town. A good example of the device is on the exterior of the entrance arches of a square tomb chamber distinguished by its segmented melon-shaped dome. The emblem (fig. 1) consists of two winged forms with foliated decoration on the wings, spreading upwards and outwards and cradling the crescent moon, within which is a disk carved in the form of a

Fig. 1. Motif on the entrance arch of an anonymous tomb chamber with a segmented dome in Gulbarga.
rosette. A similar motif also appears in the interior of the tomb of Firuz Shah Bahmani, in Haft Gunbad, the necropolis of the later sultans, situated to the east of the town.

While the general form of the motif always remains the same, the details vary in different buildings and sometimes among the motifs on a single building. For example, in the tomb of Firuz Shah Bahmani (fig. 2) the motifs on the interior over all the arches, including those of the squinches, differ slightly from each other; and some have the word Allah in the center. On the exterior the motifs (figs. 3 and 4) are quite different and are simplified. They appear over the niches and windows on two levels, and although each motif varies slightly from the others, they all fall into two general categories: those with the wings stretched outwards, and those with the wings pointing upwards. In both forms the surface of the wings is plain and the outline foliated. The disk is absent, but the crescent is designed so that its center is in the form of a circle. In another building, an anonymous and little-known tomb chamber (figs. 5 and 6) south of the fort and now in the middle of the built-up area of Gulbarga, the crescent is more pronounced, and its center is circular, again bearing the word Allah carved in relief (fig. 7). The word suggests that there was a religious symbolism behind the motif, as was indeed the case with the Sasanian emblems. The tomb seems to date from the early decades of the Bahmani period, and probably belongs to one of the first Bahmani sultans. The winged form on this tomb chamber is more compact, and the
whole motif is comparable to the emblem on the crown of Firuz I, shown on some of his coins,\textsuperscript{13} where the crescent almost touches the sphere, an arrangement which is not common to all Sasanian crowns.

In the Deccan the motif is seen in a variety of forms, and most Bahmani buildings, whether religious or secular, display one or more versions. In the fort of Gulbarga, for example, the device is present on the arches of the shops in the bazaar leading to the western gate. The example illustrated here (fig. 8) is particularly interesting, as the outward curve of each wing and a twist in the foliation of the tips is carried out in a manner which gives the impression of a flying bird to each wing, an allusion, perhaps, to the true function of wings. In this example the space within the crescent is filled with a three-petaled flower. Variations on this pattern can be found in many later motifs, for example in the mosque of Kamali Mujarrad where the wings and the floral pattern are simplified and the crescent moon is more pronounced (fig. 9).

As with the Bahmani motifs the Sasanian emblems appear in great variety. The problems associated with reading Pahlavi texts and monograms on coins have in fact made the distinctive features of the emblem of each crown a useful source for distinguishing the emperors not only on their coins but also on bas reliefs and uninscribed silverware. Most scholars agree that each component of the Sasanian emblems represents a particular religious symbol, but their views on the meaning of each symbol vary. For example, Edith Porada\textsuperscript{14} associates the wings with Verethraghna and later Anahita, merlons around the crown with Ahura Mazda, the moon with the 

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Mah, and other features with other divine beings. Phyllis Ackerman\textsuperscript{15} notes that “the Sasanian king displayed on his crown sky, sun, and moon emblems. Thus his official headdress proclaimed him descendant of the sun and the moon.”

In Near Eastern cultures the representation of wings, crescent, and sphere or disk goes back far beyond Sasanian times, and can be traced to the first millennium B.C. and even earlier. In the Assyrian reliefs and paintings the devices are usually placed above the head of the king and denote the main deities. The features, however, are not combined but are set in a row, representing the deities in the form of the moon, the sun, and the wings of Assur the protector god of the Assyrians. Apart from these three, other deities are also sometimes present. For example, on a stele of Assurnasirpal II from Nimrod three extra deities are represented,\textsuperscript{16} as is the case with a stele of Shalmaneser III from Kurkh, and many others.\textsuperscript{17} However, the symbols of the additional deities vary, indicating that each king chose to represent only those whom he believed to be his main protectors. One of the more common additional deities is shown as a star,\textsuperscript{18} probably a representation of Sirius, which, as we shall see, also appears in many Sasanian coins.

The earliest known device combining the three main elements is seen in the Assyro-Urartan culture in the symbols above the head of the god Tishub.\textsuperscript{19} The order of the form is close to that of the Sasanian and Bahmani motifs, and consists of the wings surmounted by the crescent which cradles the disk. It would be hard to believe that the Sasanians were aware of the Mesopotamian motif of over a thousand years earlier, however. The Sasanian motif had developed slowly, with each of the main components being gradually incorporated into the crowns.
The winged motif commonly represented in Mesopotamian culture is, of course, in the form of a ring with a bird's wings and tail. In Achaemenid Iran, while the older Mesopotamian form occasionally appears, the more predominant form is a bearded man with wings. The figure is commonly regarded as a representation of Ahura Mazda, and as in the Mesopotamian examples it is placed above the scenes which contain the figure of the king. Whenever the older, winged ring is presented, it is below the winged man, usually in a different frame but still above the head of the king. This lower winged symbol may be a representation of the royal Frawahr who is the heavenly link between the king and Ahura Mazda.20

Unlike the Mesopotamian reliefs, the early Achaemenid works never display the symbols of disk and crescent, and the sole deity represented is the winged figure, to confirm their inscriptions which mention Ahura Mazda, but never give the name of any other deity. On the tomb of Artaxerxes II or III, to the right of Ahura Mazda, however, is the bas relief of a crescent cradling a sphere. This is a significant departure from the Achaemenid tradition, particularly when compared with the inscriptions of Artaxerxes II, who acknowledges not only Ahura Mazda, but also Mithra and Anahita.21 It is usually considered that at the end of the Achaemenid period the cults of Mithra and Anahita, which were probably always strong in Iranian society, influenced the royal monotheistic religion. In the case of this relief it seems that the sphere represents Mithra and the crescent Anahita.

The association of the sphere or the sun disk with Mithra is perhaps more obvious. Although in the Avesta the sun and the moon are two separate divine beings (īsād) with their own prayer chapters relating to the appropriate rituals (yāsht), in the yāsht dedicated to the sun
prayers are offered to both the sun and Mithra. The association of the two izešs and the celebration of the birth of the sun on the festive days of mihragan (mithrahana) was also well known to ancient historians as well as to early Muslim scholars. Al-Biruni records:

Mihr is the name of the sun, who is said to have for the first time appeared to the world on this day; that therefore this day was called Mihr. This is indicated by the custom of the Ksiras of crowning themselves on this day with a crown on which was worked an image of the sun. On the same day, they say, God spread out the earth and created the bodies as mansions for the souls. In a certain hour of this day the sphere of Ifranjawi breathes for the purpose of rearing the bodies.

On the same day God is said to have clad the moon in her splendour and to have illuminated her with light, after He had created her as a black ball without any light. Therefore, they say, on Mihragan the moon stands higher than the sun, and the luckiest hours of the day are those of the moon.

The association of the word mihr (Mithra) with the sphere survived in Iran after Islam, and even today the silver or brass sphere set above the standards carried during the processions of Šāhūrā is called a mihr.

The association of the crescent moon with Anahita is
wings, the
Ahura
Mazda. The Sasanian emperors
Virgin, together with her other attributes
also to be present. We have already noted such an exam-
ple in the tomb of Artaxerxes. In the Sasanian carv-
ings of Taq-i Bustan the connection between the two can also
be observed. The main vault of Taq-i Bustan is devoted
to presenting the investiture of an emperor, probably
Piruz I (457-83), by Ahura Mazda and Anahita. On the
façade (fig. 10) the arch of the vault is crowned by the
crescent and two fluttering scarves, which represent the
divine diadem, and were an alternative to the wings of
Ahura Mazda. The Sasanian emperors are always shown
with a royal diadem of this kind, which is tied at the back
of the head. The divine diadem can also appear in the
crowns of the kings, and in the case of Qubad, for ex-
ample, it takes the place of the wings. In Taq-i Bustan
the emperor himself wears a crown surmounted by the
wings, the crescent, and the sphere (fig. 11), in a form
closely comparable to the later Bahmani emblems.

In the Avesta no mention is made of Anahita in the
short yasht devoted to the moon, but there are certain
similarities between the two deities. Anahita is the deity
of water and a mother goddess, protector of mankind
and responsible for the birth of human beings; the
moon is the deity of the reproduction of animals, as
well as being responsible for the tides of the sea. The
connection of the moon with the cult of the mother
goddess may be even more deeply rooted in Near Eastern
culture, and its manifestation in Christianity may be
seen, for example, in the symbolism of the crescent in the
iconography of the Immaculate Conception of the
Virgin, together with her other attributes such as stars
and the fountain of living water and her title Stella
Maris.

Whatever the true meaning of the moon of the Sasa-
nian crowns may be, this feature was not a part of their
emblems at the beginning. In fact the form of emblems
of the Sasanian crowns went through various changes
during the life of the dynasty. The sphere is seen from
the very beginning on the crown of Ardashir I, the
founder of the dynasty, but it took several generations
for the other elements to appear. The wings are first
presented on the crown of Bahram II (276-93), and the
crescent is first seen on the crown of Yazdigird I (399-
420) and at the same period on the crown of Shapur the
king of Armenia. At this time the crescent is a small fea-
ture set in front of the crown and not under the sphere.

On Yazdigird's crown the wings are replaced with the
diadem in the form of the scarf fluttering behind the
sphere. It is only at the time of Bahram V (Bahram Gur)
(420-38) that the moon is shown under the sphere, but
without the wings. The complete form, with the wings
and the moon cradling the sphere, finally appears two
generations later on the crown of Piruz I. In later Sasa-
nian crowns the sphere is first replaced by what seems
to be a bowl of flame, and later, from the time of Khusrav II
(Khusrau Parwiz) onwards, by a six-pointed star. The example of the coin of Khusrau II illustrated here (fig. 12) is from the Bishapur mint, the dies of which were reused by the Arabs in the early years of their rule, and on the margin the word bismillah has been added.

The changes of the emblems on Sasanian crowns may not be without significance, and may be closely associated with the social and religious conditions of the time. For example, the appearance of the moon on Bahram's crown may be associated with the events which followed the death of his father Yazdigird I. The nobles, apparently supported by the people, revolted against the royal family and set on the throne a Khusrau of a different lineage to Ardashir I. Bahram, who was in Arabia, took his force to the capital and reestablished the authority of the Sasanian house. His legendary feat of reclaiming the Sasanian crown by snatching it from between two lions may have been invented to emphasize his divine legitimacy to the throne. The change of the emblem on his crown may also reflect the gradual reemergence of the cult of Anahita in the Zoroastrian world which, since Parthian times and perhaps earlier, was dominated by the cult of Mithra.

The omission of the sphere by Khusrau Parwiz may also be associated with the late Sasanian internecine conflicts which came to a peak with the rebellion of the army commander Bahram Chubin, and ended with his defeat by Khusrau, but only after a long struggle. The star in Khusrau's crown and that of his descendants seems to represent Tishtar (most probably Sirius), a companion deity of the moon and a protector of water, particularly rainfall and springs. In this respect Tishtar is closely associated with Anahita, the main deity of water.

The adoption of the star and the crescent as a symbol by the western Islamic world is well known, but in the Bahmani emblems the star is never represented instead of the disk. If we agree that the similarity of the Bahmani motif with the earlier Sasanian emblems is not a coincidence, the question remains as to how Hasan Gangu and his immediate descendants could be aware of the Sasanian motif. It is of course possible to presume that while Hasan was in Iran he might have seen Sasanian coins. Such coins are still found in great quantities, and must have been even more frequently discovered in the past. As we have noted, Sasanian emblems also appear on silver bowls. Examples of Sasanian coins or perhaps silver
ware could have been in Hasan Gangu’s possession, and he might have taken the idea of his symbol from such pieces. However, if he were familiar with Sasanian coins, one would expect him to have imitated their forms on his own coins, or to have produced a Sasanian-style crown for himself. In fact the Bahmani coins show no trace of Sasanian influence, and in their layout and inscriptions follow the tradition of the earlier Sultanate coinage. Nor do we have any evidence that the Bahmani sultans had crowns resembling those of the Sasanians. We have, therefore, little choice but to conclude that the winged symbol was only used on the Bahmani arches, even if its linkage with the Sasanian emblems was understood. If this is the case the Bahmanis must have had reasons to associate the motif with arches in the first place, and perhaps copied it from earlier symbols which crowned Sasanian arches.

Today there are very few existing Sasanian arches which have preserved their stucco cover or stone casing. Those that have survived, such as the famous arches of Firuzabad with representations of Persepolitan style architraves above and the Roman-looking niches found in Bishapur, do not have the royal emblems on their crown. However, it seems that the crowns of many Sasanian arches were decorated with such symbols. We have already noted the arch crowned with a scarf and crescent at Taqi Bustan. The arch carved in stone is clearly an imitation of a royal iwan, and we may presume that many iwans were decorated with such emblems. A Sasanian ossuary fragment has also been found, decorated in relief with a human figure standing in an arch, with the arch crowned with such a motif (fig. 13). In this case the crescent rests on the diadem and cradles a circle with a rosette which must represent the sun or the star Tishtar. There is little doubt that on the ossuary the arch represents a door or a niche, and the similarity between the emblem crowning this arch and those of the Bahmanis is striking.
The best representation of wings crowning the Sasanian-type arches can be found, surprisingly, in India, in a carving of the early Christians who came from the Sasanian and post-Sasanian lands and settled in Ceylon and on the Malabar and Coromandel coasts. The Bahmanis, of course, had no control over these areas well to the south of their territory, and there is no evidence to show that they had any knowledge of the existence of these Christian communities, let alone their association with the Sasanians. Nevertheless, on the coasts of South India a number of Sasano-Christian crosses, carved on stone tablets and with Pahlavi inscriptions are preserved. The example which concerns us is the cross of St. Thomas near Madras (fig. 14). In this example the cross is carved to appear as a free-standing object fitted on a base, and above it is the Holy Ghost represented as a dove diving down towards the cross. The cross is within a Sasanian style semicircular arched niche supported by two columns, and above the arch are the two familiar wings. Framing the arch is the Pahlavi inscription with a religious text which includes a rare record of the word Messiah in Middle Persian. The composition of the arch is not only in the Sasanian style, but the position of the wings above the cross and the dove — the Son and the Holy Ghost — leave little doubt that the wings do indeed represent God the Father, and in the case of the Sasanian emblems Ahura Mazda.

While, as already noted, the Bahmanis could not have been aware of the existence of the motif in South India, in the fourteenth century there were still a great number of Sasanian buildings standing in the Iranian world. Although already in disrepair, they must have been in a...
better state of preservation than they are today, and many of their arches could still have had their stucco decoration, sometimes crowned with these emblems. It may well have been these arches that Hasan Bahman Shah saw in Iran, before imitating them in India.

The Sasanian tradition also seems to have continued in the early Islamic period, and a similar motif crowns an arch carved on a panel of the minbar of the Great Mosque of Qairawan (fig. 15). In this example, however, the form of the motif departs from the Sasanian emblem, and the wings are in the form of two narrow upward-pointing leaves, with the central motif in the form of a larger leaf. Another interesting feature of the arch is the representation of the Sasanian-style battlements.

Fig. 17. Chor Gunbad. Motif on the chatries of the roof.

Fig. 18. Chor Gunbad. Interior. Painted motif over the arches.

Fig. 19. Bidar. Tomb of Ahmad Shah Wali. General view.
above the arch. Such battlements were, of course, widely used in the buildings of the Umayyads and the Abbasids.

The winged motif appears to have continued in use on the early Islamic buildings of Iran, particularly in Khurasan, and a stylized version of it, in the form of two attached triangles, crowns the main arches of the well-known tomb of Isma'il the Samanid (fig. 16). The feature is much simplified, perhaps to render it in carved brick; nevertheless its use over the arch is significant as, like the Bahmanis, the Samanids also claimed Sasanian origin, and the feature on the tomb chamber may also be an allusion to this lineage.

It is, therefore, possible to assume that when Hasan Gangu was in Iran or Khurasan he became familiar with the winged motif from seeing so many early Islamic and Sasanian standing arches. The association of the motif with the Sasanians would have been obvious, although the original symbolism of the components of the motif could have been forgotten. When Hasan gained power in India, he employed the motif on the arches of most of his buildings, perhaps as a reminder of his origins. There was, of course, no reason for the builders to follow a single version of the design, as the earlier Iranian buildings must have displayed a variety of forms, as also seen on the coins.

The immediate descendants of Hasan Bahman Shah appear to have remained familiar with the significance of the form, and for several generations the main components of the motif continued in use without much alteration, but gradually the design became more decorative. Examples can be found in the later Bahmani buildings of Gulbarga, even before the transfer of the capital to Bidar. An example of the motif at a transitional stage can be found in the tomb known as the Chor Gunbad. The building is a square domed chamber with four chatries (small domed pavilions) on the corners of the roof. The arches of the chatries are crowned with the motif (fig. 17) which already shows departures from the traditional form, and while the foliated wings are comparable with the earlier Bahmani examples, they flank a motif similar to a fleur-de-lis, somewhat like that used in the Great Mosque of Qairawan. The similarity must be a coincidence, but it is interesting that the crescent and disk in both cases evolved to a fleur-de-lis. Inside the tomb the
building has preserved its fine stucco paintings, which are executed in red and include a triple band of floral motifs around the dome, and the familiar winged motif crowning the arches (fig. 18). Here the motif has still preserved the crescent, but the wings and the circle inside the crescent are filled with foliation. In the tomb of Ahmad Shah Wali, the first of the royal tombs of Bidar (fig. 19) after the transfer of the capital from Gulbarga, the original components of the motif are all absent, and the form is transformed to a purely decorative arabesque motif (fig. 20). The form of the tomb itself is far removed from the early Bahmani tombs, which had a chahār tāq layout with massive plain walls and squat domes.

Instead, Ahmad Shah’s tomb is a large building with small entrances in the center of the walls, which on the exterior are divided into three tiers of niches. The dome is further elevated by being set on a high octagonal drum. By this time the Bahmani dynasty was firmly established as a recognized power in central India, and the sultans no longer needed to rely on doubtful and distant noble origins for their legitimacy. The allusions to the Sasanian royal emblems were no longer a matter of prime concern.

The tradition of crowning the arch with the later version of the winged pattern, however, survived in central India for many centuries, and continued to be employed in the post-Bahmani buildings of the Adil Shahis and Barid Shahis. The idea was even imitated in the later buildings of the Vijayanagar kings, the arch enemies of the Bahmanis. In the later buildings of the Deccan, as can be seen in the mosque of the tomb of Ibrahim Adil Shah (1535-57) (fig. 21), the original components of the pattern, the wings, the crescent, and the disk hardly ever appear again and the motif, now always made up of arabesques, gradually increases in size until it fills the upper part of the soffit of the arch. In the seventeenth century the form was treated by the central Indian builders as an integral part of the decoration of an arch. Variations of the later motif appear in almost all Adil Shahi buildings of Bijapur, and in Gulbarga one of the latest examples of the motif is found in the Nizam Shahi tomb known as Chand Bibi. Only in the eighteenth century, after
Aurangzeb's domination of the Deccan, do the buildings of the region begin to come under the influence of Mughal architecture, in which this central Indian motif is not displayed.

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NOTES

1. The fourteenth- and fifteenth-century miniatures show the Sasanian emperors in contemporary Islamic costume with turbans or Turkish-style hats. When they are shown with a crown, the form of the crown seems to be that of the contemporary sultans, and the Sasanian symbols are never present. For example, see Laurence Binyon, J. V. S. Wilkinson, and Basil Gray, Persian Miniature Painting (London, 1933), pls. 12, 15-17, 25, 27; Thomas W. Arnold and Adolf Grohmann, The Islamic Book (London-Leipzig, 1929), pl. 43; Norah M. Tiley, Persian Miniature Painting and Its Influence on the Art of Turkey and India (London, 1985), pl. 3, fig. 26; Glenn D. Lowry and Susan Nezamee, A Jeweller's Eye (Seattle-London, 1988), pls. 13, 14, 16.

2. Art historians of Islamic India, probably unfamiliar with Sasanian motifs, have usually overlooked the Bahmani winged motif. For example, see Elizabeth Schotten Merklinger, Indian Islamic Architecture, the Deccan 1347-1686 (Warminster, 1981), p. 95.

3. ʿĪṣāmī, Futiḥ al-salātīn, ed. A. Mahdi Husain (Agra, 1938), p. 9; Khwajā Nizām al-Dīn Ahmad, Tabaqāt-i Akbarī, 3 vols. (Calcutta, 1935), 3: 2. Firishta records that he had seen many tales about the origin of Hasan Gangu, and gives a version in which Hasan appears as a poor man in the service of a court astrologer called Gangu Bahman. According to the story, the astrologer gave Hasan a piece of land to live on, and one day his plough hit a pot of gold, which he took to his master untouched. Bahman Gangu spoke of Hasan's honesty to the then prince Muhammad b. Tughluq, who in turn introduced Hasan to the sultan, his father, Ghiyāth al-Dīn Tughluq Shah, who raised Hasan to the post of a low-ranking commander (amir sada). His master, who had perceived Hasan's bright future in his horoscope, asked him to add the name of Gangu Bahman to his name so that, together with the name Hasan, Gangu Bahman would also become an eternal name, and Hasan accepted his master's wish early in his career. Elsewhere, however, Firishta follows the account of the other historians: that the commanders chose Hasan for the throne as he was a descendant of the legendary Bahman. See Muhammad Qasim Hindi Shāh known as Firishta, Tārīḵh Firishta, 2 vols. (Lucknow, 1864), 1: 273-274, 277. The various rumors may have been partly responsible for Hasan's insistence on publicizing his claim by every means at his disposal.


6. Muhammad b. ʿAbdullāh called Ibn Baṭṭūṭa, Tawḥīf al-muẓāfr fi gharaḍ al-am-yār wa ʿaṣīrāt al-asfār, ed. Talal Harb (Beirut, 1987), p. 553. Ibn Baṭṭūṭa confuses Bahārūm Gūr (Varahran V) and Bahārm Chūhnī, the rebellious commander of Hormazd IV and records "the amir of that town was Firūz Badakhsanī, a descendant of Bahārūm Gūr who was a courtier of the Kīrāt.

7. Ibid., p. 522. Amir Firūz may be the same as, or a relative of, Amir Karāy, as Ibn Baṭṭūṭa mentions that Karāy was also from Badakhsanī.

8. Ibid., pp. 478-81.

9. For example see the cases of Shaykh Hūd and Ṭāhir b. Sharīf al-Mulk Amir Bahktī in ibid., pp. 490-91, 507-9. Sharīf al-Mulk himself survived severe punishment, but was later forgiven and made governor of Chanderī.

10. The tombs bear no historical inscriptions, and views differ as to the attribution of the tombs to particular sultans. See H. K. Sherwani, The Bahmanis of the Deccan (Hyderabad, Deccan, 1953), pp. 67-68.


17. Ibid., figs. 39 b-c, 40 a-c.

18. Ibid., p. 71, fig. 79.

19. Ibid., pp. 77-79, figs. 86-89.


moon surmounted by a ball of fire, but has no wings, while in the later crown the wings are present, but the globe is replaced by a star. For a wider discussion on the identity of the emperor at Taq-i Bustan and a full bibliography, see Johanna Domela Movassat, *The Large Vault at Taq-i Bustan* (Ann Arbor, Mich., 1991), pp. 10–14, 28–32; for detailed photographs of the crown at Taq-i Bustan, see Shijiun Fukai and Kiyoharu Horihachi, *Taq-i Bustan*, 2 vols. (Tokyo, 1972), 2: pls. 1–9.


41. The crescent moon as a royal and religious emblem of the later Sasanian period was also known to the Muslim historians. For example, Hamza Isfahānī, *Tārīkh sīni mutāk al-ard wa al-anbā‘* (Berlin, 1844), p. 35, mentions that a gold crescent was set on the crown of Bahram b. Bahram, and Yaqut, *Mū‘jam al-Buldān*, 6 vols. (Leipzig, 1866–70). 3 (1868): 355, notes that above the fire temple of Shīr there was a silver crescent which people believed had supernatural powers.

42. Paruck, *Sasanian Coins*, table 1, pls. 2–3; also see the bas relief of the investiture of Ardashir I at Naqsh-i Rustam in Ghirshman, *Iran: Parthians and Sassanians*, p. 132, pl. 168.


48. Yt. VIII (Tishatar yast), 1.

49. Yt. VIII, 4–5, 8–9.

50. H. Nelson Wright, *Catalogue of the Coins in the Indian Museum*, *Calcutta* (Oxford, 1907), vol. 2, pt. 1, pp. 196–99; pt. 2, pl. 8; for a bibliography of Bahmani coins, see C. R. Singhal, *Bibliography of Indian Coins*, vol. 2 (Bombay, 1952), pp. 37–42. It should be noted that coins with the portrait of the ruler are not unusual in the Islamic world, and have been seen in the period of the Seljuqs and their successors, as well as later in India during the time of the Mughals; see Gille Hennequin, *Catalogue des monnaies musulmanes de la Bibliothèque Nationale, Asie Pré-Mongole, les Seljuqs et leurs successeurs* (Paris, 1983), pls. 8–14; Stanley Lane Poole, *The Coins of the Moghul Emperors of Hindustan in the British Museum* (London, 1892), pl. 9.


53. Pope, Survey of Persian Art, 7: pl. 145 C.


60. For the buildings of Bijapur, see Henry Cousins, *Bijapur and Its Architectural Remains*, Archaeological Survey of India, Imperial Series, vol. 37 (Bombay, 1916); the tomb and mosque of Ibrahīm Shah, pp. 70–77, pls. 43–54.

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