



ČAHĀRṬĀQ II. IN THE ISLAMIC PERIOD

ii. In the Islamic Period

It is often very difficult to determine whether particular structures of the *čahārṭāq* type belong to the Sasanian or early Islamic period (see i, above), as the form seems to have continued in use without interruption and to have been widely adopted in the Islamic architecture of Persia. It is also difficult to separate the history of the domed chamber (*gonbad*) in general from that of the *čahārṭāq* form in particular. This continuity, however, makes it more understandable why the form should have remained of such importance in subsequent Islamic architecture.

The *čahārṭāq* can be associated in Islamic Iran with four main building types: the mosque, the mausoleum, the palace, and the garden pavilion.

The mosque. It appears that in the early Islamic period many existing buildings, both religious and secular, were converted into mosques. There is evidence to suggest that several *čahārṭāqs* were among them, though such a conversion has been definitely established in only one instance, the mosque at Yazd-e K̄vāst (Siroux, 1947). The rough stone masonry of the lower walls, the nearly parabolic profiles of the four main arches, and the crude squinches suggest a Sasanian or early Islamic date. A similar history has been suggested for the mosques of, for instance, Kūhpāya, Qehī, and Harand (Siroux's "Gehi



and Akhand”) in the Isfahan area (Siroux, 1966; idem, 1973) and Qorva near Qazvīn (Hillenbrand, 1972). The Masjed-e Bīrūn (extramural mosque) at Abarqūh and the congregational mosque at ‘Aqdā between Yazd and Nā’īn, both in an area that had remained a stronghold of Zoroastrianism, may have been converted to mosques as late as the 9th/15th century (Shokoohy, 1985); they differ from the others mentioned in that the structures adjoining the *ĉahārtāqs* may also date from the Sasanian or early Islamic period. A unique survival occurs in the Moṣallā-ye Jadīd at Yazd, where *ĉahārtāq* stands alone in the center of a courtyard, now adjoining a two-story madrasa (Afšār, pp. 614-45). Inscriptions refer to constructions of 958/1551 and 1035/1625, but it is not clear whether the mosque was completely rebuilt or simply repaired. The geographical range of these examples is sufficient to suggest that transformations of ancient *ĉahārtāqs* were not uncommon; many more such buildings have probably been lost.

With one exception all these mosques are in small villages; the Masjed-e Bīrūn at Abarqūh stands, as its name suggests, some distance from the town and the main mosque. In larger towns, on the other hand, small domed chambers would not have been spacious enough to accommodate the congregations during Friday prayer. Furthermore, most of the larger Persian towns had surrendered to the Muslim conquerors by treaty, which guaranteed that preexisting places of worship could continue; the Muslims thus built new mosques in those towns.

Although the surrounding ambulatories that have been postulated for the Sasanian *ātaškada* seem to have persisted in the examples around Yazd, in others they are absent, suggesting that many of the converted buildings were simple *ĉahārtāqs* without ambulatories or other constructions. It is true that traces of surrounding constructions have frequently been overlooked in reports of existing Sasanian *ĉahārtāqs* (see i, above), but the type of Sasanian domed chamber usually incorporated into Islamic structures nevertheless seems to confirm the existence of the *ĉahārtāq* as an independent unit in the Sasanian period. Such isolated structures could not, of course, have functioned as *ātaškadas*, but what their functions were has not yet been established.

A superficial resemblance to the plan of a *ĉahārtāq* surrounded by an ambulatory may be observed in three nine-bay mosques that survive from the



‘Abbasid period in Afghanistan and Central Asia; Masjed-e Noh Gonbad at Balk, Masjed-e Dīggarān at Hazāra, northeast of Bukhara, and Masjed-e Čahār Sotūn at Termeḍ. The resemblance is greatest when, as in the Masjed-e Dīggarān, the central dome is taller and of greater diameter than those of the surrounding bays (for a possible medieval example near Isfahan see Siroux, 1973, fig. 14). This plan is, however, widespread in the Islamic world, and it has also been proposed that it originated in the bays preceding the *meḥrāb* of the Friday Mosque at Wāseṭ in Iraq (Allen, pp. 79-83). The plans of many mausoleums and even domestic buildings are closely related (see below). Mosques based on multiplication of the domed unit can also be seen as variations of this type; examples survive from the Il-khanid period (and possibly earlier) in the Isfahan region (Šāpūrbād mosque and Masjed-e Kūča Mīr at Naṭanz; Siroux 1973, fig. 17; Kleiss, fig. 5) and from the Timurid period around Herat (the Ōba mosque; Masjed-e Ḥawż-e Karbās at Ġalvār, and Masjed-e Čehel Sotūn at Zīāratgāh; O’Kane, 1987, nos. 11, 21, 44).

If a *čahārṭāq* did serve as the starting point for some small mosques, then a natural development would have been its extension along the *qebła* wall, as in the Masjed-e Sar-e Kūča in Moḥammadiya (with a Kufic inscription very similar to that in the Davāzdah Emām of 429/1037-38 at Yazd), where two barrel vaults flanking the dome define a space three times as wide as the dome chamber (plan in Godard, 1965, p. 284 fig. 203). In this instance the domed chamber was not the earliest building on the site; a niche similar to a *meḥrāb* (prayer niche) has recently been found behind one of its piers (not yet published). The 6th/12th-century Talkatan Bābā mosque in Turkmenistan (Pugachenkova, 1958, plan on p. 249) is another example of this type, though the side extensions are much narrower. Both buildings can, however, also be seen as variants of another Sasanian type, exemplified by the Ayvān-e Karḳa in Kūzestān, a barrel-vaulted gallery with a dome in the center.

Some early Islamic domed mosques do not appear to have been converted from Sasanian *čahārṭāqs*. André Godard promulgated the theory that, as many Persian domed chambers of Saljuq date are either isolated or surrounded by later elements, they must originally have been built as free-standing mosques; he referred to such domed squares as “kiosk mosques” (1936; 1965; cf. Hillenbrand, 1976, pp. 100-02; 1985, pp. 175-77; Grabar, pp. 38-39; Ettinghausen; Blair, pp. 85-86). The main difficulty with this theory is not its basic premise—that free-standing domed squares were built to serve as mosques, possibly in imitation of *čahārṭāqs*—but the inappropriate examples



chosen to illustrate it. Archeologists have subsequently investigated three of the mosques that Godard cited in this connection. In the case of those in Isfahan and Ardestān the domed squares were found to have been added to earlier hypostyle buildings (Galdieri; Bāqer Šīrāzī); at Naṭanz the domed chamber was originally a mausoleum (Blair). Eugenio Galdieri also referred to imminent excavations at Barsīān, another mosque mentioned by Godard; the intent was to determine whether or not traces of a preexisting ‘Abbasid mosque could be found around the Saljuq domed chamber there (p. 46). No such excavation has been published, but the presence of a minaret antedating the dome chamber by 37 years is sufficient to confirm the existence of an earlier mosque (see, e.g., Sauvaget). The first scholar to challenge the kiosk-mosque theory was Jean Sauvaget, who suggested that the domed chambers should rather be understood as *maqšūras*, princely enclosures inserted in preexisting mosques. More recent studies of textual and epigraphic evidence have tended to confirm his view. For example, in contemporary sources the terms *qobba* “dome” and *maqšūra* “enclosure” were used interchangeably to designate the domed chamber of the congregational mosque at Qazvīn (Sourdel-Thomine, p. 34 n. 1), though the word *maqšūra* does not occur in the inscriptions in the chamber itself. In the congregational mosque at Qorva the domed chamber is explicitly referred to as a *maqšūra* in the inscriptions recording repairs carried out in 574/1179-80 (Hillenbrand, 1972). In addition, Sheila Blair (personal communication) considers the domed chamber in front of the *qebla* in the Great Mosque of Isfahan to have been built shortly after the repair of the *maqšūra* in the Great Mosque of Damascus by Malekšāh in 475/1082-83; she argues that the Isfahan chamber was an imitation of the Damascus *maqšūra*, whereas subsequent Saljuq examples were imitations of the prestigious Isfahan chamber. It could also be argued that, because of the conversions of *ĉahārṭāqs* to mosques and the presence of the kiosk mosques mentioned below, Iranian culture was more receptive to the idea of the insertion of large *qebla* domed chambers in mosques.

True kiosk mosques can be found, however, not as congregational mosques in the larger towns but, like the converted *ĉahārṭāqs*, in small villages, for example, the Masjed-e ‘Alī Qūndī in Fahraj (possibly ‘Abbasid and perhaps originally a mausoleum; Zipoli, pp. 51-52, pls. 14-15) and the Masjed-e Gonbad (domed mosque) in Sangān-e Pā’in (531/1136-37, Hillenbrand, 1971); as each village also possesses a congregational mosque, these two must have been built as neighborhood mosques. The domed chambers in the villages of Borābād and Nūk in Khorasan (Saljuq period, unpublished) and the Masjed-e



Gonbad of Āzādān near Isfahan (766-67/1364-65) may also belong to this group (Wilber, cat. no. 105). The ultimate refinement of the type is the Safavid Masjed-e Šayḡ Loṭf-Allāh in Isfahan; documents published recently by R. D. McChesney contradict the notion that this building was originally conceived as a mausoleum (Blair, p. 93 n. 75).

The mausoleum. Instances of the conversion of *čahārṭāqs* into mausoleums are much less common; a rare example is the Safavid shrine of Šāhzāda Abu'l-Qāsem (Shokoohy, 1983) at Herat. The plan of the celebrated mausoleum of the Samanids at Bukhara (before 331/943), a domed square with four axial entrances, has often been compared to that of the *čahārṭāq*, though it is difficult to find parallels for the fine brickwork and external gallery topped by four subsidiary domes at the corners of the square. The most impressive mausoleum of the Saljuq period, that of Sultan Sanjar at Marv (Mary), has two axial entrances and an upper gallery that may be related to that at Bukhara. The subsequent course of development of the Persian mausoleum is foreshadowed in the Arab Ata at Tīm (possibly 367/977-78), where three of the four facades are blank and the decoration is concentrated on the fourth. The entrance is framed by *pīšṭāq* (lit. “front arch,” a section of wall rising higher than the roof and adjacent walls, with an arched opening in the center). Although most medieval domed squares have single entrances, there are frequently recesses in the other three sides (e.g., at the 6th/12th-century mausoleum of **Bābā Ḥātem** near Balk); this design may be an echo of the *čahārṭāq*. In the 9th/15th century the recesses became deeper (O’Kane, 1987, nos. 13-15, 24, 25), and the plan thus more closely approximated that of the *čahārṭāq*, but this change is more likely to have resulted from Timurid spatial and vaulting innovations than from a revival of earlier forms.

The most distinctive feature of the *čahārṭāq*, the four axial entrances, persists in some other mausoleums in Turkmenistan, but their dates are uncertain: the mausoleum in the Emām Bāb cemetery at Marv, perhaps of the late 4th/10th century (Pugachenkova, 1958, p. 176), and the Aq Saray Ding mausoleum at Taḡta in Turkmenistan, with a very tall drum suggesting a date 400 or more years later than the 5-6th/11-12th-century dating proposed by G. A. Pugachenkova (1983, no. 6). Domed chambers with four axial entrances are also found in 9th/15th-century Persia in the mausoleum at Sangvar near Mašhad (O’Kane, no. 29) and, surrounded by an ambulatory (and other rooms), in the Masjed-e Šāh in Mašhad (855/1451; O’Kane, no. 26), thus recalling at a relatively late date the ancient fire temple (see i, above). In



another 9th/15th-century monument, the mausoleum of the Sufi Bābā Monīr near Būšeher in Fārs (Herzfeld, p. 31 fig. 20), the plan with ambulatory and subsidiary rooms is perfectly symmetrical, a variation on the nine-bay plan used in mosques (for two related mausoleums of indeterminate date, see Siroux, 1973, figs. 12-13). Outside Persia the *ĉahārtāq* form is found in numerous Fatimid mausoleums in Aswān and Cairo.

In several medieval texts the *ĉahārtāq* is associated with the fourth level of heaven, the domicile of the sun and therefore the source of light, an appropriate attribute for a saintly figure (Daneshvari, pp. 22-25). In view of these associations, it is not surprising that the *ĉahārtāq* should have been a popular form for mausoleums, especially those of saints.

The palace. As has been pointed out (see i, above), the *ĉahārtāq* is found in the great Sasanian palaces of Fīrūzābād and Bīšāpūr. Eṣṭakrī (p. 259) described the Dār al-Emāra (government house) of Abū Moslem at Marv (ca. 132/750) as having a domed chamber with four doors, each leading to an *ayvān*. The symmetry of this plan apparently also appealed to the builders of ‘Abbasid Sāmarrā, where it appeared in the throne rooms of the Jawsaq al-Ķāqānī (with basilical halls replacing *ayvāns*), the Balkowārā, the Qaṣr al-Jaṣṣ, and the Estabolāt palaces (Creswell and Allan, figs. 136, 210, 219, 221, 236). On the west bank of the Tigris, at Qaṣr al-‘Āṣeq (the lover’s palace), there was a throne room with four axial entrances, though it is unclear whether or not it was vaulted (Creswell, 1940, fig. 259). In the palace at Oḳayṣer (Ukhaidir) in southwestern Iraq there is also a throne room with four entrances; it is barrel-vaulted but may originally have been intended to carry a dome (Creswell, 1940, p. 67 n. 1).

Three dwellings in the Marv region also show the influence of the *ĉahārtāq*. The earliest, the *kūšk* (kiosk) at Tahmalaj, has a nine-bay plan similar to those mentioned above, though only the central *ĉahārtāq* communicates on four axes (Pugachenkova, 1958, plan on p. 167). A Saljuq house near Marv has a *ĉahārtāq* opening into four axial barrel vaults (p. 207), and at Bāšān west of Marv there is a Saljuq building consisting of rooms around a courtyard and an attached covered square with a *ĉahārtāq* at its center; it has been described as a caravansary but seems more likely to have been a dwelling (p. 241).

The garden pavilion. Very little medieval garden architecture has survived (See Āĉahārbāg; garden), probably owing to the flimsy nature of many constructions of this type, as well as to the abandonment and deterioration of secular



structures after the demise of the dynasties that built them. The plan of one of the earliest preserved garden pavilions, that of the palace at Laškārī Bāzār (see *bost*) in Afghanistan, is a miniature version of the symmetrical throne rooms discussed above (Schlumberger, pl. 31). The identical plan of the so-called *kānaqāh* at Afūsta (9th/15th century) suggests that it, too, was a garden pavilion (Ferrante and Galdieri, figs. 5-16). Most later garden pavilions were polygonal, but occasionally a *čahārṭāq* was constructed around a square pool, as in the [Safavid Bāg-e Fīn](#) near Kāšān.

In summary, it may be noted that it is difficult to separate the history of the dome chamber (*gonbad*) in Persia from that of the *čahārṭāq*. While the polygonal dome chamber, in the form of the tomb tower, obviously belongs to a different tradition, the Sasanian domed square was the major prototype for the domed chambers that occurred so frequently in Islamic Persia. In particular the transformation of the Arab hypostyle plan by the insertion of a *qebla* dome chamber (and later by the addition of courtyard *ayvāns*.) into the classical Persian mosque may be seen as the major legacy of the Sasanian *čahārṭāq* in the Islamic world.

BIBLIOGRAPHY

Ī. Afšār, *Yādgarhā-ye Yazd I*, Tehran, 1354 Š/1975.

T. Allen, *Five Essays on Islamic Art*, Sebastopol, Calif., 1988.

S. Blair, "The Octagonal Pavilion at Natanz. A Reexamination of Early Islamic Architecture in Iran," *Muqarnas* 1, 1983, pp. 69-94.

K. A. C. Creswell, *Early Muslim Architecture II*, Oxford, 1940.

Idem and J. W. Allan, *A Short Account of Early Muslim Architecture*, Cairo, 1989.

A. Daneshvari, *Medieval Tomb Towers of Iran. An Iconographical Study*, Lexington, Ky., 1986.



- R. Ettinghausen, “Some Comments on Medieval Iranian Art,” *Artibus Asiae* 31, 1969, pp. 276-300.
- M. Ferrante and E. Galdieri, “Architettura persiana poco nota. Alcuni monumenti timuridi ad Afushtè, presso Natanz,” *Palladio* 23, 1972, pp. 163-86.
- E. Galdieri, “Quelque précision sur le Gunbad-e Nizam al-Mulk d’Esfahan,” *Farhang-e me’ārī-e Īrān* 2-3, 2535 = 1355 Š./1976, pp. 33-54.
- A. Godard, “Les anciennes mosquées de l’Īrān,” *Āthār-é Īrān* 1, 1936, pp. 187-210. Idem, *The Art of Iran*, London, 1965.
- O. Grabar, “The Visual Arts,” in *Camb. Hist. Iran* IV, 1975, pp. 329-51.
- E. Herzfeld, “Damascus. Studies in Architecture—I,” *Ars Islamica* 9, 1942, pp. 1-53.
- R. Hillenbrand, “Saljūq Monuments in Iran. I,” *Oriental Art* N.S. 18/2, 1972, pp. 64-77.
- Idem, “Mosques and Mausolea in Khurāsān and Central Iran,” *Iran* 9, 1973, pp. 160-62.
- Idem, “Saljūq Dome Chambers in North-West Iran,” *Iran* 14, 1976, pp. 93-102.
- Idem, “Abbasid Mosques in Iran,” *Rivista degli studi orientali* 59, 1987, pp. 175-212.
- W. Kleiss, “Hinweise zu einigen seldjuqischen und ilkhanidischen Bauten in Iran,” *AMI*, N.S. 10, 1977, pp. 197-99.
- R. D. McChesney, “Four Sources on Shah ‘Abbās’s Building of Isfahan,” *Muqarnas* 6, 1988, pp. 103-34.
- B. O’Kane, *Timurid Architecture in Khurasan*, Costa Mesa, Calif., 1987.
- G. A. Pugachenkova, *Puti razvitiya arkhitektury yuzhnogo Turkmenistana pory rabovladieniya i feodalizma*, Moscow, 1958.
- Idem, *Pamyatniki iskusstva Sovetskogo Soyuz. Srednyaya Aziya. Spravochnik-- putevolitel’*, Moscow, 1983.
- J. Sauvaget, “Observations sur quelques mosquées seldjoukides,” *Annales de*



l'Institut d'Études Orientales. Université d'Alger 4, 1938, pp. 81-120.

D. Schlumberger et al., *Laskari Bazar. Une résidence royale ghaznévide et ghoride*, MDAF XVIII, Paris, 1978.

M. Shokoohy, "The Monuments at the Kuhandiž of Herat, Afghanistan," *JRAS*, 1983, pp. 7-31.

Idem, "Two Fire Temples Converted to Mosques in Central Iran," in *Papers in Honour of Professor Mary Boyce II*, Acta Iranica 25, Leiden, 1985, pp. 545-72.

B. Širāzī, "Masjed-e Jāme'-e Ardestān," *Aṭar* 1, 1359 Š./1980, pp. 6-51.

M. Siroux, "La mosquée djum'a de Yazd-i-Khast," *Bulletin de l'Institut Français d'Archéologie Orientale du Caire* 44, 1947, pp. 101-18.

Idem, "Kouh-Payeh. La mosquée djum'a et quelques monuments du bourg et de ses environs," *Annales islamologiques* 6, 1966, pp. 137-70.

Idem, "L'évolution des antiques mosquées rurales de la région d'Ispahan," *Arts asiatiques* 26, 1973, pp. 65-112.

M. B. Smith, "Three Monuments at Yazd-i Khwast," *Ars Islamica* 7, 1940, pp. 104-06.

J. Sourdél-Thomine, "Inscriptions seljoukides et salles à coupoles de Qazwin en Iran," *REI* 42, 1974, pp. 3-43.

D. Wilber, *The Architecture of Islamic Iran. The Il Khanid Period*, Princeton, 1955. R. Zipoli, "Sopraluogo a Fahrağ," in A. Bausani and G. Scarcia, eds., *Studi iranici*, Rome, 1977, pp. 51-64.