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ON THE EVOLUTION OF THE EARLY IRANIAN FIRE TEMPLE

Within the pages of Mary Boyce's *A history of Zoroastrianism*¹ it is not difficult to detect a salient concern to take account of every aspect of evidence from the field which could in any way illuminate the early history of religion in Iran. This same approach is one to which she has long adhered; and it is with a lively sense of admiration—and in gratitude for instruction and encouragement of long standing—that I offer the present remarks on a topic which is far from new, but which may repay fresh scrutiny.

In a single volume, published in 1971, K. Schippmann was able to provide an analysis of the then known religious monuments of Iran from Achaemenid to Sasanian times². Five years later R. Ghirshman took the opportunity to comment on several aspects of Achaemenid and later religious architecture against the background of his findings at Masjid-i Sulaimān and Bard-i Nishandeh³ while, again in 1976, P. Bernard drew attention to the more than local interest of the newly discovered Bactrian house forms of the 3rd and 2nd centuries B.C.⁴. It is, then, with the aid of such studies and with the aid, not least, of insights contained in *HZ II*, that new suggestions can be advanced as to certain of the steps that may have intervened between the use of open air sanctuaries in early Achaemenid Fars and the introduction of the *chahār tāq* in Sasanian times.

In this treatment it will not be possible to consider the history and function of a number of enigmatic stone-built towers of Achaemenid and later date, the earliest example of which is the Zendan-i Sulaimān

¹ M. Boyce, *A history of Zoroastrian I and II* (hereafter *HZ I* and *HZ II*), Handbuch der Orientalistik, Leiden 1975 and 1982.

² K. Schippmann, *Die iranischen Feuerheiligtümer*, Berlin and New York, 1971. Schippmann's valuable survey may be consulted for most prior references of the sites treated here.

³ R. Ghirshman, *Terrasses sacrées de Bard-è Néchandeh et Masjid-i Solaiman I*, Paris, 1976 (hereafter *Terrasses sacrées*), 164 f.

⁴ See P. Bernard, 'Les traditions orientales dans l'architecture gréco-bactrienne', *Journal Asiatique* CCLXIV, 1976, 245-76.

at Pasargadae⁵. Equally, it is beyond the scope of the present paper to comment on the buildings excavated at Tepe Nush-i Jan⁶ or those revealed at Shahr-i Qumis⁷, or to explore the characteristics of those sacred structures which reflect clear ties with a long line of Mesopotamian temples—a line which remained much in evidence in Seleucid and Parthian times⁸.

In the notes which follow it is intended instead to review the question of how—within the Iranian world—appropriate places for worship in the open air came, in time, to be enclosed. Those sites which it may be most useful to examine in this context are few in number; but, within broad bounds in time and space (Fig. 1), it may not be too much to claim that each example does something to document a still imperfectly understood chain of construction.

Pasargadae

The north-western limits of Pasargadae include an isolated, sheltered area watered by a small stream and overlooked on two sides by low hills. The two original monuments in this locality, both of which can be dated on technical grounds to the years within which most building activity took place at Pasargadae, that is between 546 and 530 B.C., consist of a pair of limestone plinths each over 2 m. in height (Pl. XXXVIa)⁹. Excavated evidence indicates that only the southern plinth was equipped with a stone staircase; hence it would seem possible (not least on the analogy of the funerary relief of Darius I) that Cyrus mounted the southern, partly stepped plinth in order to worship before an altar that stood on the second plinth a little distance away (Pl. XXXVIa and Fig. 2)¹⁰. If a contemporary label should be sought for this type of open-air sanctuary, it could be surmised that it represents

⁵ Cf. D. Stronach, *Pasargadae, A Report on the excavations conducted by the British Institute of Persian Studies from 1961 to 1963* (hereafter *Pasargadae*), Oxford 1978, 117-37.

⁶ D. Stronach, 'Notes on Religion in Iran in the Seventh and Sixth Centuries B.C.', *Mélanges d'orientalisme offerts à J. Duchesne-Guillemin*, Acta Iranica 23, 1983.

⁷ On the buildings from Shahr-i Qumis, see most recently, J. Hansman and D. Stronach, 'Excavations at Shahr-i Qumis, Iran, 1971', *National Geographic Society Research Reports*, Washington D.C., 1979, 237-58.

⁸ Cf. P. Bernard, *op. cit.*, 266-75.

⁹ For a recent description of the structures within the 'Sacred Precinct', see *Pasargadae*, 138 f.

¹⁰ For the relief carved on the facade of the tomb of Darius, see E. F. Schmidt, *Persepolis III, The royal tombs and other monuments*, Chicago, 1970, Pl. 19, cf. also *Pasargadae*, 141.

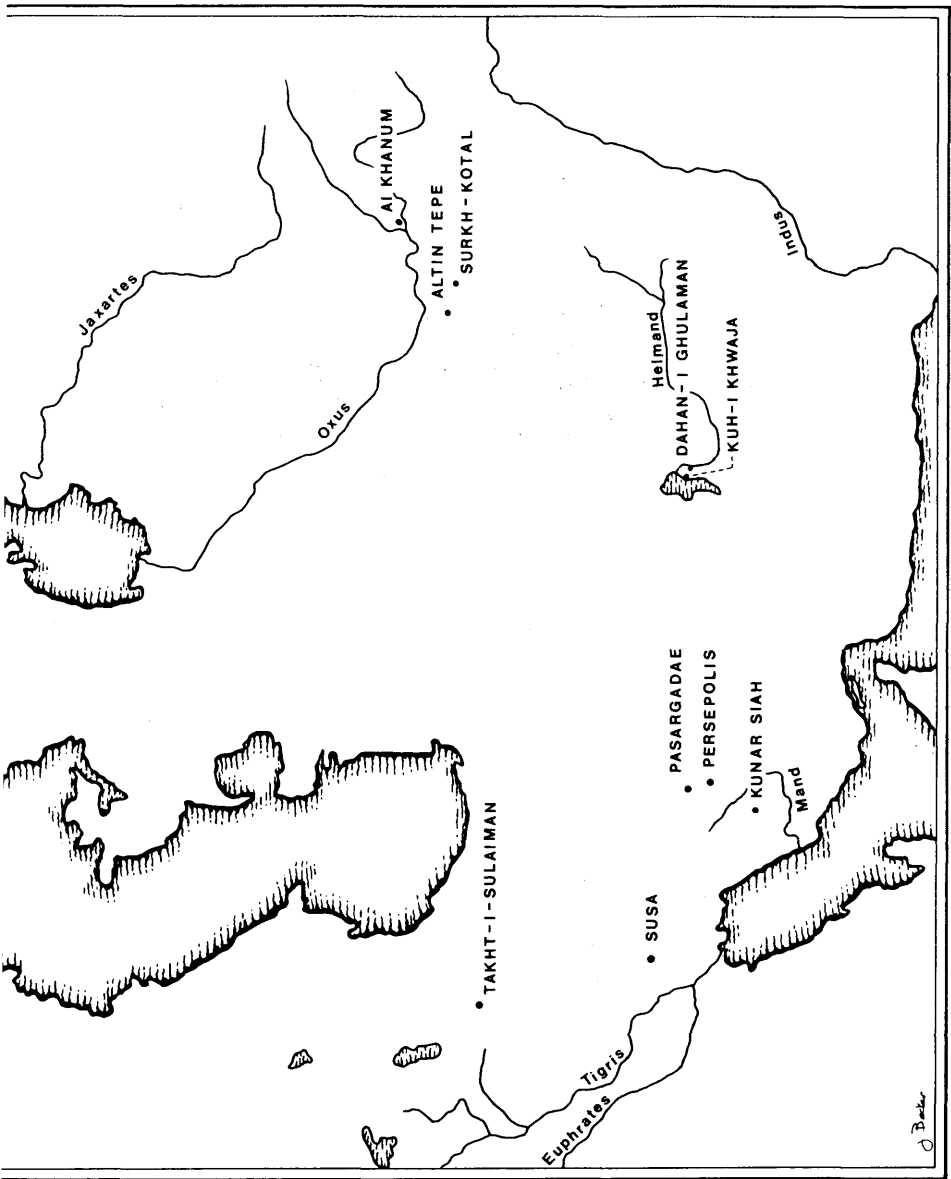


Fig. 1. Map showing principal sites mentioned in Iran and Afghanistan.

one of the 'places of worship' *āyadanā*, to which Darius makes reference in his inscription at Bisitun¹¹.

Dahān-i Ghulāmān

A second region that has yielded Achaemenid remains of relatively early date is Seistan, ancient Drangiana, where the absence of fine limestone presumably served to fortify a tenacious East Iranian tradition of building only in mud-brick, or with other structural units made of compacted mud. In the course of his excavations at Dahān-i Ghulāmān, an Achaemenid administrative centre located not far from the Helmand river, almost on the border of Iran and Afghanistan, U. Scerrato was able to distinguish a number of substantial structures, including a 'sacred building' with three large altars marching in a line across a central courtyard (Fig. 3,1)¹².

While the religion practised in the temple of Dahān-i Ghulāmān is not likely to have lain in the mainstream of Achaemenid belief¹³, it may still be useful to consider the possibility that the plan of the building did not differ too radically from other local constructions with more orthodox affiliations¹⁴. In particular, experience may have indicated that it was not practical in Seistan—the land of the 180-days wind—for a place of worship, distinguished by a fire 'exalted upon an altar-like stand'¹⁵, to consist of little more than a reserved part of an open plain or, as at Zela in the Pontus, of the summit of a man-made

¹¹ Cf. *HZ* II, 89. In response to the claim of Darius to have restored the *āyadanā* which 'Gaumata the Magus' had destroyed (DB I 63-4), and the seemingly incompatible circumstance that neither plinth at Pasargadae shows any sign of early damage, Boyce has remarked that, in fact, it would have been less than helpful to any individual contending for the erstwhile throne of Cambyses II to have embarked on such a programme of destruction. Hence the claim of Darius was purely formal; and we may understand it (*HZ* II, pp. 88-9) as part of a traditional formula that was designed on the one hand to discredit Darius' immediate predecessor and on the other to underscore his own fitness to rule.

¹² U. Scerrato, 'Excavations at Dahan-i Ghulaman (Seistan-Iran)', *East and West*, XVI, 1066, pp. 12 f. and Figs. 6-32. I am indebted to Jane Becker for the drawings of the site plans shown in Fig. 3 where, as in the case of Fig. 3, 1, an attempt has often been made to concentrate on selected elements in a given plan.

¹³ Cf. *HZ* II, 130.

¹⁴ It is perhaps notable that Boyce takes the mingling of animal bones 'in the embers of fire' as the prime indication of the site's non-Zoroastrian character. *Ibid.*, loc. cit.

¹⁵ Cf. M. Boyce, *Zoroastrians, Their Religious Beliefs and Practices*, London 1979 (hereafter M. Boyce, *Zoroastrians*), 60.



Fig. 2. Sketch showing the approximate relationship of the two limestone plinths at Pasargadae.

mound¹⁶. In this one area a more 'enclosed' ambience may have been seen to be nothing less than a necessity.

As for the type of protection that was sought, it is possible to contend that a relatively familiar form of Achaemenid building—namely one with a square hall, four corner towers, and three or more open porticoes—was, in a sense, turned inside out¹⁷. In this process an open central court, reached from a single narrow entrance, came to be given the protection of four corner towers and four inward-looking porticoes. Moreover, in so far as the introduction of a square hall in the Apadāna of Darius I at Susa did not signal a simultaneous change to square halls in all monumental construction begun after 521 B.C., the Dahān-i Ghulāmān temple may also be dated, I would like to suggest, to the first half of the 5th century B.C. rather than to any earlier juncture¹⁸.

Altın Tepe

Settlements of Achaemenid date in the broad vicinity of northern Afghanistan are beginning to be identified with some frequency¹⁹ and it is of marked interest in the present context that two buildings from Altın Tepe in the Bactrian oasis (Fig. 1) provide an indication of shared traditions with Seistan. The structures in question consist of a rectangular 'summer palace' (Building 1) and a square edifice (Building 2)

¹⁶ On the temple at Zela, reputedly founded by Cyrus in the course of his Anatolian campaigns, see Strabo XI, 8, 4-5.

¹⁷ Compare, for example, the plan of an Achaemenid building which stands in the low lying plain south of the Terrace at Persepolis. E. F. Schmidt, *Persepolis I, structures, reliefs, inscriptions*, Chicago 1953 (hereafter *Persepolis I*), fig. 14. Note also, of course, the plans of the two internal courtyards found in the Treasury at Persepolis. *Ibid.*, fig. 65.

¹⁸ Scerrato's 6th-5th century B.C. dating (U. Scerrato, *op. cit.*, 15) would seem to have depended in part on Schmidt's high date—either placed before 513 B.C. or, at the latest, before 511 B.C.—for the foundation of the Persepolis Apadāna (E. F. Schmidt, *Persepolis II, contents of the Treasury and other discoveries*, Chicago 1957, 110f.). For arguments favouring a somewhat lower date for the foundation of the Persepolis Apadāna, probably within the first years of the 5th century B.C., see most recently D. Stronach, 'The Apadana: a signature of the line of Darius I', *volume d'hommage for J. Deshayes*, (forthcoming).

¹⁹ F. Allchin and N. Hammond, *The archaeology of Afghanistan*, 1979, 214f. Cf. also A. Cattenat and J.-C. Gardin, 'Diffusion comparée de quelques genres de poterie caractéristiques de l'époque achéménide sur le Plateau Iranien et en Asie Centrale', *Le Plateau Iranien et l'Asie Centrale des origines à la conquête islamique*, éditéu by J. Deshayes, Paris, 1977, 225f. and J.-C. Gardin, and B. Lyonnet, 'La prospection archéologique de la Bactriane orientale (1974-1978): première résultats', *Mesopotamia*, XIII-XIV, 1978-9, 99f.

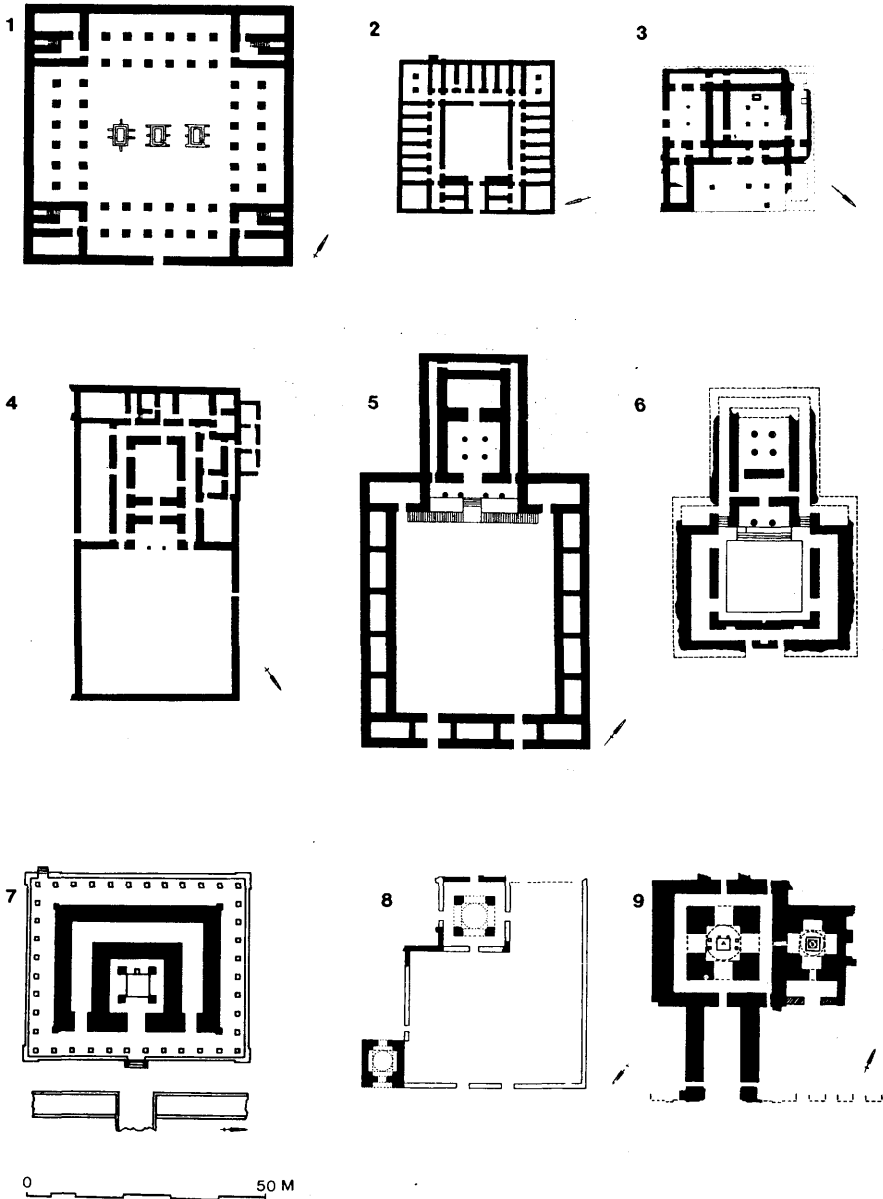


Fig. 3. Plans of buildings discussed from (1) Dahān-i Ghulāmān, (2) Altin Tepe, (3) Persepolis (detail), (4) Ai Khanum, (5) Kūh-i Khwāja, (6) Susa, (7) Surkh Kotal (detail), (8) Kunār Siāh (detail) and (9) Takht-i Sulaimān (detail). Scale approximate only.

with spacious corner chambers and numerous narrow magazines ranged round a central courtyard (Fig. 3, 2)²⁰.

A new motif can be discerned for the first time in Building 2 at Altın Tepe. The court is surrounded by a circumambulatory corridor (Fig. 3, 2) which effectively divides the building's core from its periphery. An innovation of this kind may have been introduced as no more than a practical device to prevent dust from swirling into rooms that would otherwise have opened off a wide unroofed space²¹. But however this may be, later local evidence would suggest that little time was lost in experimenting with the novel possibilities of separating 'central space' from 'peripheral space' in part through the introduction of arterial corridors.

Persepolis

In the course of a visit to Persepolis in 1923, E. Herzfeld noted two post-Achaemenid reliefs, one of a male figure and one of a female figure, on the jambs of a stone window that had once been part of a building on the level plain some 300 m. north-west of the Terrace. Herzfeld took the male personage to be a 'Fratadāra of Pars' and the second figure to be that of his consort²². He dated the reliefs to c. 250 B.C.²³. Nine years later he returned to the same location where he opened an extensive area approaching 90 m. from north to south and 60 m. from east to west. These excavations were never published, save that E. Schmidt, in the first part of his final report on Persepolis, duly reproduced the plan of the excavated area (Fig. 4) plus three views of the stone reliefs and one of the somewhat unusual elements in Room 5, an adjacent 'tetrastyle' or four-columned cella (Fig. 3, 3)²⁴.

²⁰ See V. I. Sarianidi, *Drevnie zemledel'tsy Afghanistana*, Moskva 1977, 165 and figs. 59 and 60; *idem*, 'Pamyatniki monumental'noi arkhitektury Baktrii', *Sovetskaya arkeologiya* 1, 1977, fig. 11 and 216 f.; and Allchin and Hammond, *op. cit.*, figs. 4.23 and 4.24. While Sarianidi dates Building 2 to the 6th/5th centuries B.C., the considerations mentioned in n. 18 above may point, once again, to a bracket after 500 B.C. Indeed, since it is manifest that the Altın Tepe (or Altın-10) square building is further removed from its Achaemenid prototype than the temple at Dahān-i Ghulāmān, a date late in the 5th century B.C. would probably meet the case.

²¹ A refinement not likely to be lost on those who have lived for any length of time in say, a Safavid caravanserai.

²² E. Herzfeld, 'Rapport sur l'État Actuel des Ruines de Persepolis...', *Archaeologische Mitteilungen aus Iran* I, 1929-30, 33.

²³ *Ibid.*, loc. cit.

²⁴ *Persepolis I*, figs. 16 and 17 A-D.

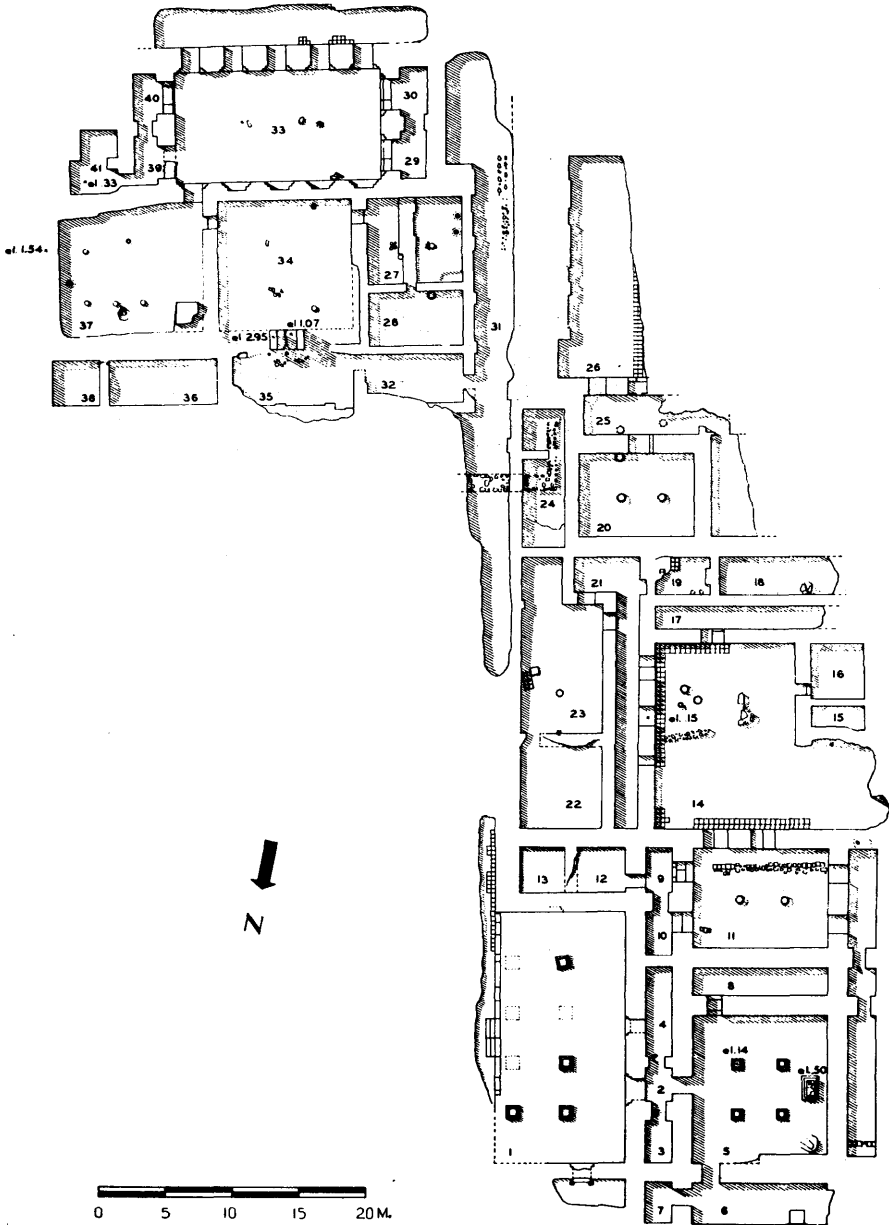


Fig. 4. Plan of structures excavated in the plain 300 m. north west of the Persepolis Terrace. Scale 1:300. (After Schmidt.)

Herzfeld's own interpretations of these remains can only be pieced together from more or less incidental references²⁵. Above all, it is clear that his early discovery of the reliefs coloured his whole view of the site. Thus the reliefs were seen to belong to one building—and this was necessarily defined as a 3rd century B.C. fire temple, such as befitted the presence of a Fratadāra or 'Keeper of the Fire'. Even certain stone votive inscriptions from this general vicinity²⁶, engraved in Greek with the names of Greek gods, in a script which is undoubtedly early Hellenistic²⁷, were not seen to be a possible reflection of Greek and Macedonian rites once briefly but undeniably practised at Persepolis²⁸, but rather an invocation to Iranian deities and, hence, an illustration of a very developed taste for syncretism on the part of the local dynasts of Fars²⁹.

The first analysis of Herzfeld's findings is owed to Schmidt, who was clearly justified in pointing out that Herzfeld had exposed two distinct buildings separated by a street³⁰. Schmidt also took close account of Herzfeld's field catalogue, which contains drawings of the objects recovered even if it fails to list any of the exact find-spots³¹.

As Schmidt has indicated, the work yielded many pieces of stone vessels identical in shape and material to those found in the Persepolis Treasury as well as, perhaps still more remarkably, broken elements of green chert mortars, pestles and other vessels such as again find a close identity with those from the Treasury³². These and other 'typical Persepolitan-Achaemenid objects' are all taken, however, to be 'salvaged' from the ruins of the Persepolis Terrace³³ rather than representative of an original Achaemenid occupation. Herein lies a reading of the evidence which would well merit re-examination on the ground.

It may be recalled that nearly all the stone vessels and all the green chert objects from the Terrace were located in the Treasury, where both

²⁵ Cf. Schippmann, *op. cit.*, 178, n. 528; also E. Herzfeld, *Archaeological History of Iran*, London, 1935 (hereafter *AHI*), 44 and *idem*, *Iran in the Ancient East*, Oxford, 1941 (hereafter *IAE*), 275 and 286 with Pls. 85 and 86.

²⁶ Apparently once attached to walls or altars not of stone. Cf. *Terrasses sacrées*, 201, n. 7.

²⁷ L. Robert, *CRAI*, 1967, p. 282. 'Encore une inscription grecque de l'Iran', *Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres* 1967, p. 282.

²⁸ Cf. Diodorus Siculus, XIX, 22.

²⁹ Cf. *AHI*, *loc. cit.* and *IAE*, 275.

³⁰ *Persepolis I*, 56.

³¹ *Ibid.*, 56, n. 14.

³² *Ibid.*, 56.

³³ *Ibid.*, *loc. cit.*

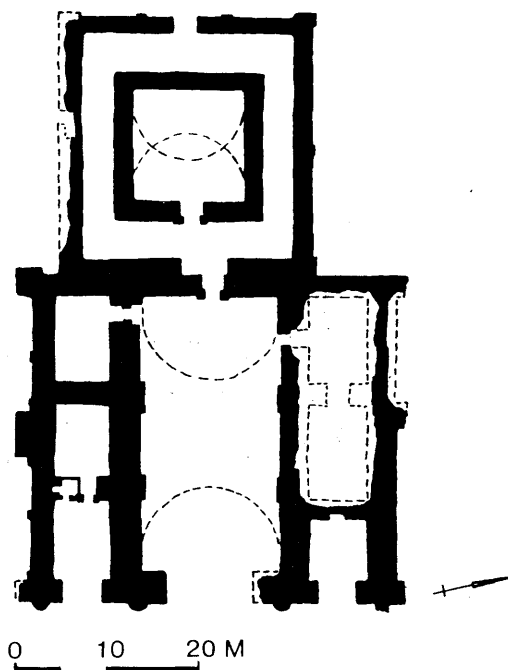


Fig. 5. Plan of the main iwan and sanctuary hall at Hatra. (After Andrae.)

classes of material, probably because they were not deemed worthy of transportation elsewhere, had come to be shattered in an apparent orgy of destruction³⁴. Given these circumstances (which would certainly have militated against any very successful programme of salvage), it has to be asked if specific ceremonial activities could not have accounted for the presence of such distinctive objects in an Achaemenid structure other than the Treasury—and if such a building could not have also fallen victim to Macedonian pillage?³⁵

While the mouldings on the terraced pedestal in the cella of Room 5 are unlike any other Persepolitan moulding, and while the three-stepped column bases from this same context find no extant Achaemenid

³⁴ *Ibid.*, 56 and 182.

³⁵ In such a reconstruction it goes without saying that any building located on the plain would have been despoiled at the moment of Alexander's arrival, when the lower town was excluded from the protection extended to the Terrace. Cf. Diodorus Siculus, XVIII, 7; also *HZ* II, 290.

parallel³⁶, the general character of the partly exposed building in the western half of Herzfeld's excavation (Fig. 4) is consistent with what could be expected of a late Achaemenid construction. At the same time the adjacent eastern structure has every appearance of a later, less well ordered building. It stands on a different axis, reveals a number of thin walls and possesses at least one wall which departs from any predictable angle. Moreover, even if there may be a slight doubt about the relationship of the stone window to the rest of the building³⁷, the reliefs themselves can hardly have been carved much before 250 B.C.³⁸

Of particular interest is Ghirshman's recent proposal to see in the two juxtaposed reliefs not a Frataraka (as the long mislabelled 'Frata-dāra' must become)³⁹ and his consort, but rather a local prince sacrificing before the goddess Anāhitā⁴⁰. Such a still unconfirmed identification brings several possibilities to mind. It suggests the western structure could itself have been an earlier shrine dedicated to Anāhitā and, by the same token, it enhances the odds that this same structure was either built by Artaxerxes II (404-358 B.C.) or was at least modelled on the closed temples which this monarch introduced at the time of his formal adoption of the cult of Anāhitā⁴¹.

Whatever the separate life span of these two ill-documented buildings may have been (and it would certainly come as no surprise if the stone elements in and near Room 5 were secondary and, hence, post-Achaemenid in date), it may be useful in future to distinguish the structure to the west as the 'Pedestal Temple' and the structure to the east as the 'Window Temple'. It is also worth noting that the key portion of the plan of the 'Pedestal Temple' (Fig. 3, 3) includes a number of features that find more sophisticated expression in a whole range of later

³⁶ An attempt to relate such bases to those of Palace P at Pasargadae (G. de Francovich, 'Problems of Achaemenid Architecture', *East and West*, XVI, nos. 3-4, 1966, 207) carries little conviction.

³⁷ Cf. *Terrasses sacrées*, 201, n. 1.

³⁸ Cf. *AMI* I, 33. An alternative date given by Herzfeld, close to the beginning of the 3rd century B.C. (*IAE*, 286), is too high—not least if the coin hoards from Pasargadae can be said to document a more or less active degree of Seleucid control in Fars down to c. 280 B.C. (*Pasargadae*, 155-6 and 198). Cf. also *Terrasses sacrées*, 203, where Ghirshman would not even place the reliefs as early as the 3rd century B.C.

³⁹ On the corrected reading of Frataraka ('Governor') for Frata-dāra, see P. Naster, 'Note d'épigraphie monétaire de Perside: FRATAKARA, FRATARAKA, FRATA-DĀRA?' *Iranica Antiqua* VIII, 1968, 74-80.

⁴⁰ *Terrasses sacrées*, 202.

⁴¹ Cf. *HZ* II, 226, especially with reference to A. B. Tilia's observation that the stepped stone pedestal in Room 5 still bears 'traces of a heavy metal dowel, such as might have been used to fix a statue in place'.

temples. Such features include a square cella with four columns, long narrow rooms on three sides of the cella, a columned portico such as may well have opened off a partly paved court, and a further intermediate space between the portico and the tetrastyle cella. Thus, if there should be an expectation on other grounds of probability that the numerous image shrines of Artaxerxes II did more than a little to inspire the construction of the first fully closed fire temples⁴², it can only be said that the extant remains of the 'Pedestal Temple' at Persepolis do nothing to oppose such a view.

Ai Khanum

The Greco-Bactrian site of Ai Khanum, located at the confluence of the Oxus and the Kochka (Fig. 1), has produced numerous surprises. Not the least of these is the highly original design of the large Greco-Bactrian house of the 3rd and 2nd centuries B.C.⁴³.

The plan of such a residence is conveniently represented by an early second century mansion situated in the southern part of the city⁴⁴. The plan can be seen to consist of a forecourt and of a residential block of nearly equal size (Fig. 3, 4) with a columned portico giving onto the court. Set at the heart of the residential unit is a principal room framed by passage ways and flanked on three sides by peripheral rooms.

A house of this kind is radically different from the traditional Greek house with a central court. Its possible origins are to be sought, as P. Bernard has indicated, in two main directions: in the elegant traditions of Achaemenid architecture, notably as they are represented in south-west Iran, and in those more strictly local forms of construction that are beginning to be known from the eastern reaches of the Persian empire at sites such as Dahān-i Ghulāmān and Altin Tepe⁴⁵.

In terms of the present discussion it is of interest to note that the Bactrian house falls into three discrete units. These consist of the court, the reception room and the living quarters ranged around the reception room. Furthermore, this division finds unequivocal expression in the location of the building's corridors for, while one double-angled corridor runs round three sides of the central room (Fig. 3, 4) a shorter

⁴² HZ II, 221.

⁴³ P. Bernard, *op. cit.*, 257 f.

⁴⁴ *Ibid.*, 258 and fig. 4. Cf. also H.-P. Francfort, 'Le plan des maisons gréco-bactriennes et le problème des structures de type "megaron" en Asie Centrale et en Iran', *Le Plateau Iranien et l'Asie Centrale des origines à la Conquête islamique*, edited by J. Deshayes, Paris, 1977, 269 and fig. 4.

⁴⁵ P. Bernard, *op. cit.*, 261 f.

corridor intervenes between the reception room and the portico—a detail which underlines not just the separateness of the principal room but also the perceived unity of the court and the portico. In other examples of this basic plan it is of interest to find that the court itself could be surrounded by a corridor and that, more rarely, a pair of columns could appear in the central room⁴⁶.

Kūh-i Khwāja

Kūh-i Khwāja, an isolated table-mountain which rises just off the eastern shore of the Hamun lake (Fig. 1), is likely to have been the site of an important fire temple from at least the early Parthian period onwards⁴⁷. The first two superimposed temples on this dramatic site⁴⁸ are not a little remarkable for the extent to which their ground plans recall those of the Greco-Bactrian residences discussed above. Already in the earliest plan (Fig. 3, 5) it is possible to detect a clear allusion to two of the three basic divisions that are found in the carefully articulated Bactrian house: that is to say that the Kūh-i Khwāja temple contains reflections of the Bactrian reception unit and court/portico unit at the expense of the inverted 'U' of the living quarters.

If living quarters were no longer called for, the reception unit needed only a few changes to meet the requirements of a temple cella. The multiple side and rear doors were presumably given up⁴⁹; the small room behind the columned chambers may have served as an innovative inner *sanctum* for a permanent fire⁵⁰; and, in keeping with the new-found sanctity of these axial rooms, both this section of the structure and the adjacent portico were raised above the level of the court.

It is noteworthy that a narrow corridor was retained on three sides of the cella (Fig. 3, 5). Such a passage was presumably intended for circumambulation but, even if this were not the case, it undoubtedly

⁴⁶ As in the residence built outside the walls of Ai Khanum in the second half of the third century B.C. *Ibid.*, fig. 5.

⁴⁷ While the earliest building level has been ascribed in one study to the 6th/5th centuries B.C. (G. Gullini, *Architettura iranica dagli Achemenidi ai Sasanidi: Il 'Palazzo' di Kuh-i Khwāja, Seistan*, Torino, 1964, 272), neither the pottery nor the brick sizes can be placed, on the basis of other excavated evidence from Seistan, at a date any earlier than the 3rd century B.C. Cf. G. Tucci, *East and West*, XVI, nos. 1-2, 1966, 144 f.

⁴⁸ Cf. G. Gullini, *op. cit.*, pls. V and VI and, conveniently, K. Schippmann, *op. cit.*, fig. 83.

⁴⁹ The plan given in Fig. 3, 5 is based on soundings of no more than modest extent.

⁵⁰ For the single stone fire altar that is assumed to have once stood in this vicinity, see *IAE*, 301.

served to underline the separate, sacred character of the space enclosed. Finally, whatever the precise purpose of the 'double cella' in the Kūh-i Khwāja plan may have been, paired axial rooms are not without parallel at Ai Khanum⁵¹.

Susa

Almost 100 years ago Marcel Dieulafoy exposed the greater part of a solitary, monumental structure located some 4 km. north-east of the palatial buildings at Susa. The incomplete plan was restored to show a square four-columned cella, framed on all sides by corridors and approached—approximately from the south east—by a two-columned portico⁵². At a lower level, at the base of a wide flight of baked brick steps, stood a square courtyard, flanked by a corridor on three sides (Fig. 3, 6)⁵³.

On the basis of a resemblance seen between the bell-shaped bases in this building and an inscribed column base of Artaxerxes II found at Susa, Dieulafoy had no hesitation in assigning his isolated discovery to this same monarch⁵⁴. The presence of gravel foundations—a feature familiar from numerous Achaemenid constructions at Susa—was taken as a further indication of an Achaemenid date, even if Dieulafoy denied the presence of any pottery⁵⁵ and never published any brick sizes from his excavations.

A distinctive label for the building was also put forward. In keeping with his eventually preferred view that he had uncovered a religious structure, and with the fact that the Babylonian version of the Bisitun inscription employs the expression 'house of the gods' for the Old Persian term *āyadanā*⁵⁶, Dieulafoy felt at liberty to conclude that he had cleared the remains of an *āyadana*⁵⁷. The validity of this claim will be taken up in a moment.

One of the more recent criticisms of Dieulafoy's dating is to be found in Ghirshman's *Terrasses sacrées*. He admits that the column bases

⁵¹ Cf. P. Bernard, *op. cit.*, fig. 1, rooms 83 and 84.

⁵² For this orientation, cf. *Persepolis I*, 33.

⁵³ See M. Dieulafoy, *L'Acropole de Suse, d'après les fouilles exécutées en 1884-86*, Paris 1893 (hereafter *L'Acropole*), 411 f., with plan and elevation.

⁵⁴ *L'Acropole*, 391.

⁵⁵ *Ibid.*, 412.

⁵⁶ Bisitun inscription, OP and Bab. §14. See L. W. King and R. C. Thompson, *The sculptures and inscription of Darius the Great on the rock of Behistun in Persia*, pp. 13 and 168.

⁵⁷ *L'Acropole*, 391.

found in this extramural Susian building (hereafter the 'Āyadana') are Achaemenid, but is seemingly only prepared to derive them from the great Apadāna at Susa following its final destruction, probably in or near the year 220 B.C.⁵⁸ He takes Dieulafoy to task, furthermore, for associating the use of gravel foundations with the Achaemenid period alone, when the local use of such foundations did not end with this horizon⁵⁹.

Since the first of these arguments passes over the large size of the columns that were used in the Apadāna, as opposed to the small size of those that were recovered from the 'Āyadana', it may be useful to see if more convincing grounds can be found to support Ghirshman's otherwise attractive thesis⁶⁰ that the Āyadana at Susa post-dates the 3rd century B.C. In the first place, it comes as no small surprise to read in Ghirshman's text of 1976 that nothing of the 'Āyadana' survives *in situ*⁶¹. The trenched and considerably eroded remains of the site are in fact still visible at a point a few hundred meters to the south-west of the small railway station which bears the name of Shush. Traces of gravel can be made out on the sides of the mounded deposit and, more significant still, the site is not without a modicum of surface pottery. Those potsherds that I was able to examine in the course of two separate visits were not overly diagnostic but, from those seen on the first occasion in particular, soon after 1970, it would be difficult to dispute an occupation in the Parthian period⁶².

Further clues can be derived, of course, from the column-bases themselves. Four column-bases were to be seen on the grounds of the Shush railway station as late as the early 1970's⁶³, and, at some date before 1980, at least three of the four were moved, no doubt directly down the railway line, to the Museum located at Haft Tepe.

From an examination of the bases in question, there would seem to be little doubt that, as Ghirshman surmised, they were re-used stones. One of the three bases (Pl. XXXVIb) appears to be the less well worked (especially at the top) than either of its companions (Pls. XXXVIIb and XXXVIIb) and, further, one of the three is nearly 3 cm. shorter

⁵⁸ *Terrasses sacrées*, 200.

⁵⁹ *Ibid.*, 198.

⁶⁰ *Ibid.*, 200.

⁶¹ *Ibid.*, 197.

⁶² Given that further ploughing and levelling is not out of the question, it may be useful to state, as a matter of record, that my second and last visit took place in the agreeable company of François Vallat in April 1980.

⁶³ Personal observation.

than its fellows. This last discrepancy is not likely to correspond to the difference in scale between the bases in the cella and the bases in the portico to which Dieulafoy saw fit to allude⁶⁴, but it could well be representative of the varied sources that were used to supply the four, at least superficially identical, bases within the cella alone.

Finally, the above two hints of a post-Achaemenid date are fortified by one further detail: namely the plan of the 'Āyadana'. The plan reveals a strong resemblance to the design of the Greco-Bactrian house⁶⁵ and, if nothing else, this circumstance would accord well with a foundation date within the 2nd century B.C.

With reference to the purposes of the 'Āyadana', it has to be admitted that the available evidence is less than satisfactory, however one might wish to interpret the structure. If, for example, there is less than enough evidence to support Francfort's thesis that it might have been one of a group of extramural mansions⁶⁶, there is also no clear evidence to prove that it was either a fire temple or an image shrine. Dieulafoy's published plan hints at the possible presence of a fire altar between the four columns of the cella⁶⁷ but his text makes no reference to any such installation. Equally, if the small niches near the entrance should have been reserved for cult statues, no traces of such statues have chanced to be found.

All that can perhaps be said is that the plan of the 'Āyadana' not only points to a conceivable date in the 2nd century B.C., but that it also provides a possible link between the plan of a known, earlier fire temple in Seistan (Fig. 3, 5) and the plans of other temples of distinctly later date which, even if they occur much further to the west, still undoubtedly reflect Iranian influences⁶⁸. In other words the 'Āyadana' must lose all claim to have been one of the first examples of a Persian temple; but at the same time none of the evidence reviewed here would necessarily disqualify it from being a fire temple—or would preclude it from being representative of one strand of Iranian temple-construction in a late Selucid or early Parthian context.

⁶⁴ *L'Acropole*, 412.

⁶⁵ Cf. Fig. 3, 4.

⁶⁶ H.-P. Francfort, *op. cit.*, 280.

⁶⁷ See, conveniently, Schippmann, *op. cit.*, fig. 38.

⁶⁸ Cf. Schippmann, *op. cit.*, 481 f. and especially p. 485.

The 'Āyadana' label

Unless new excavations at Pasargadae and Persepolis (or new interpretations of the existing remains at these two sites) should begin to paint a very different picture to the one at present available, it would seem distinctly unlikely that the early Achaemenids worshipped in closed temples⁶⁹. At the very least the plinths at Pasargadae indicate the formal importance that was given to worship in the open air in the 6th century B.C. Hence, as has been noted above, there could be a case for associating such monuments with the *āyadanā* of the Bisitun inscription.

The validity, on the other hand, of transferring this same name to the much later 'Extramural Temple' at Susa is not very evident on any count. It cannot be argued that Old Persian *āyadanā* was accurately represented by the Akkadian formulation for 'houses of the gods'; there is a long gap in time between the composition of the Bisitun text and the moment when the Extramural Temple at Susa was founded; and, last but not least, we know that significant changes in practice and doctrine took place during the interval in question. In short, if the now ingrained habit of referring to the Extramural Temple at Susa by Dieulafoy's colourful term should be hard to give up, I would at least make plea for consistent reference, within quotation marks, to the 'Āyadana', i.e. for the conscious application of a time-honoured 'archaeological label' which is no longer intended to be any more than just that.

Surkh Kotal

For more than thirty years the flat-topped hill of Surkh Kotal in eastern Bactria has been recognised as the location of a leading sanctuary of the early Kushans (Fig. 1)⁷⁰. The sanctuary was founded by Kanishka and is therefore thought to date back to either the last decades of the 1st century A.D. or, more probably, to the first half of the 2nd century A.D.⁷¹. While the sanctuary contained representations of princes or gods, and may have served above all as a dynastic

⁶⁹ The best, if still not very likely, example of an early closed temple from the vicinity of Persepolis is the building which stands to the south of the Terrace (*Persepolis I*, fig. 14) and which contains a prominent stone podium, 60cm. in height, within its central columned hall. Cf. also, *ibid.*, 56.

⁷⁰ Cf. D. Schlumberger, 'Le temple du Surkh Kotal en Bactriane', *Journal Asiatique*, CCXL, 1952, 433 f.

⁷¹ Schippmann, *op. cit.*, 492.

shrine⁷², it documents, in the design of its square four-colomned cella (Fig. 3,7), a number of arrangements that can be seen to be intermediate between those of earlier and later Iranian fire temples⁷³.

The choice of a prominent hill-top, and the interest shown in a ceremonial ascent, could owe more than a little to local Zoroastrian precedents⁷⁴. But this same concern for elevation may not have infrequently produced—as here—a signal effect. Gone at one stroke was the lower courtyard such as had been such a feature at Kūh-i Khwāja and Susa (Figs. 3, 5 and 6) and instead attention came to be concentrated on certain more or less irreducible elements that directly surrounded the fire: that is to say on a raised platform for the altar or fire-holder, on the four columns which now stood close to the corners of such a platform and, not least, on the side walls of the cella and on the four-sided ambulatory⁷⁵.

Kunār Siāh

The transition from trabeate to arcuate roofing appears to have taken place, at least in Mesopotamia, during the 1st century A.D.. In the Sun Temple at Hatra, for instance, the sanctuary hall came to be constructed as a domed, not a columned, chamber; and, as can be seen in Figure 5, it was complemented by yet another arcuate form: that of the *iwan*, a completely open-ended hall with a barrel vault.

This elegant combination of a dome preceded by an *iwan* was quickly taken up by the Sasanians. It is notable, however, that the *iwan* itself was only rarely introduced in contemporary religious constructions; indeed most religious monuments of Sasanian Iran, outside those that were representative of either a capital site or a major fire, appear to have been simple in the extreme.

In one of the better preserved provincial shrines, namely that found by L. Vanden Berghe at the site of Kunār Siāh in southern Fars⁷⁶, this straightforward, almost utilitarian approach is at once in evidence. The monuments include both an enclosed, domed repository for the permanent fire, i.e. an *āstashgāh*, as well as a more open domed

⁷² A. Maricq, *Journal Asiatique*, CCXLVI, 1958, 371.

⁷³ Schippmann, *op. cit.*, 496.

⁷⁴ At least one open air shrine was found on the flank of the citadel mound at Ai Khanum. P. Bernard, *op. cit.*, 245 f.

⁷⁵ For a particularly clear view of the central area of the Surkh Kotal cella, see Schippmann, *op. cit.*, fig. 82.

⁷⁶ L. Vanden Berghe, 'Récentes découvertes de monuments sassanides dans le Fars', *Iranica Antiqua*, I, 1961, 175 f.

construction set within an ambulatory (Fig. 3, 8). The latter building —itself a linear successor to the trabeate cella—describes, needless to say, the standard shape of a Sasanian *chahār tāq*: a domed square structure with a tall arch on each side, within which, on appropriate occasions, the fire could be displayed.

Takht-i Sulaimān

In the one unquestionably major Sasanian religious complex that can be included in this short survey, it is manifest that the core of the temple at Takht-i Sulaimān (Fig. 1) still consisted of a *chahār tāq* (Building A) beside an *ātashgāh* (Building B), even if the former building was now approached on one side by a deep iwan (Fig. 3, 9)⁷⁷. The *chahār tāq* at Takht-i Sulaimān also serves, thanks to its massive corner piers, as a reminder that this type of Sasanian domed chamber harks back to an older form: a compact inner room surrounded by an ambulatory. Whether or not it is legitimate to go yet further, and to find an echo of earlier trabeate traditions in what seems to have been a column-supported canopy beneath the dome of the *ātashgāh*⁷⁸, it cannot be denied that the *chahār tāq* and *ātashgāh* at this celebrated site reveal the kind of evolved central appointments, adjacent to the fire, that first found clear expression at Surkh Kotal.

Conclusion

The large gaps that remain, in both time and space, between the few monuments that have just received some degree of notice will conceivably leave many aspects of the evolution of the Iranian fire temple only a little less obscure than they already were. Within the bounds of any fresh debate it is to be hoped, however, that every effort will be made to establish more precise dates for each relevant monument—and that due account will be taken of the testimony of 'secular' as well as 'religious' remains.

Inasmuch as the impetus for the present study was drawn in part from discoveries made either close to or substantially beyond the eastern borders of modern Iran, it may not be out of place to ask if the transference, from about 200 B.C. onwards, of certain architectural

⁷⁷ For very full references to the long history of excavation and research at Takht-i Sulaimān, see Schippmann, *op. cit.*, 309 ff.

⁷⁸ Cf. R. Naumann, 'Takht-i-Suleiman and Zindan-i-Suleiman: various excavations in 1959', *A survey of Persian art*, XIV, 1967, 3054.

concepts from what might be termed the 'east Iranian world' to the 'west Iranian world' was not inspired by factors other than the mere utility of the innovations themselves. The roots of the Parthian dynasty in greater Khorasan, and the dramatic extension of that dynasty's rule to the banks of the Euphrates in the middle years of the 2nd century B.C., could be said to provide one set of grounds for supposing that this was so. Whether or not such a transference was already quickened by circumstances of a less overtly political nature, such as the enduring strength of Zoroastrian belief and practice in the eastern marches, is something that it may never be possible to determine; but at the very least such a possibility could be said to deserve further examination.

Finally, if the canons of East Iranian architecture are beginning to be a little better known than was hitherto the case, it may not be out of order to refer to one other still unresolved issue: namely the source of the four-iwan plan which suddenly emerges as a dominant form in Iranian mosques of the Seljuk period. It will be recalled that Godard gave it as his opinion that the Seljuks would have been able to draw on earlier prototypes from the East, notably from Khorasan⁷⁹, while Keall, in a more recent study, took issue with this view and stressed the long, well documented history of four-iwan construction within the more westerly sphere of Mesopotamia⁸⁰.

It is beyond the scope of this paper to speculate on precisely where the Seljuks may have found their inspiration for a central court flanked by four iwans; and indeed so long as we continue to be less than adequately informed about Buyid mosque construction it could be premature to speak of a Seljuk initiative in this respect. It will be closer to our purposes here to examine those sources which may help to explain the emergence of the much older Parthian four-iwan plan, such as seems to appear, more or less full blown, at various sites in Mesopotamia as early as the 1st century A.D.⁸¹.

Pride of place in this last context must go to the plan of the Parthian palace at Ashur (Fig. 6). Such a plan may prove, in fact, to be a product of both Mesopotamian and Iranian initiatives. With respect to the former, for example, it may well be that only the practised skills of the

⁷⁹ A. Godard, 'L'origine de la madrasa, de la mosquée et du caravansérai à quatre iwans', *Ars Islamica* XV-XVI, 1951, 1-9.

⁸⁰ E.J. Keall, 'Some thoughts on the early *Eyvan*', in *Near Eastern Numismatics Iconography, Epigraphy and History. Studies in honour of G. C. Miles*, Beirut, 1975, 123-30.

⁸¹ Cf. *ibid.*, loc. cit.

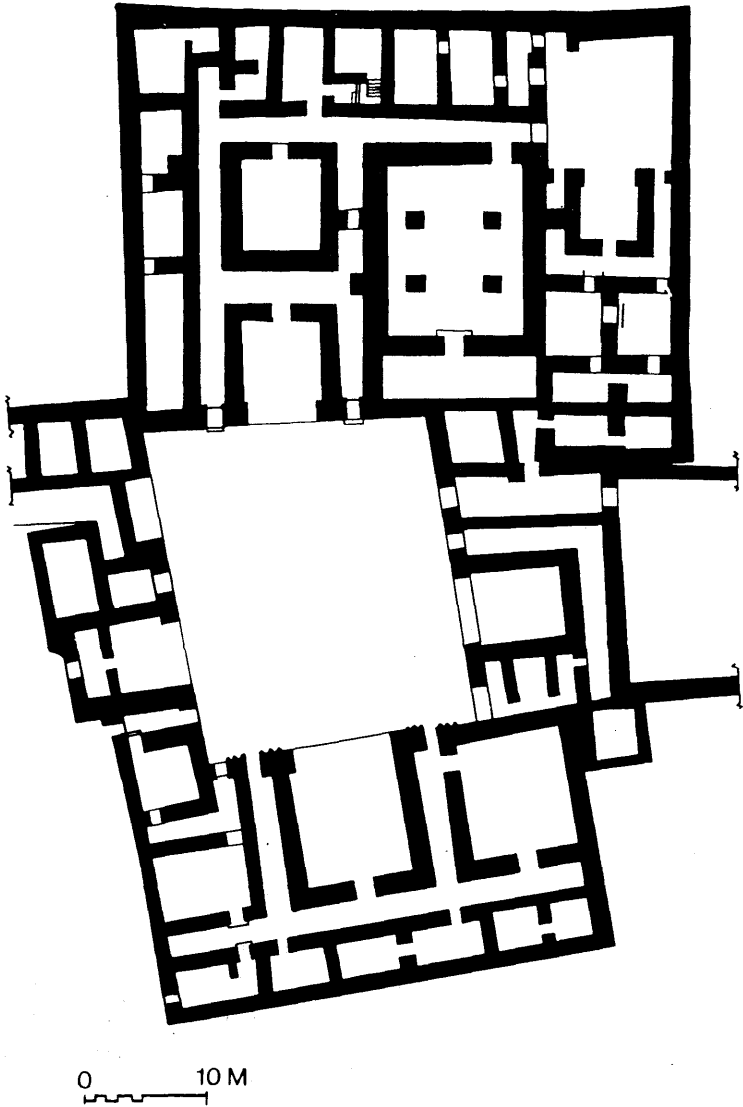


Fig. 6. Plan of the Parthian Palace at Ashur. (After Keall.)

Mesopotamian bricklayer⁸² could have produced the early, already impressive barrel vaults that are attested in this building⁸³. At the same time, however, the familiar position of the major room on the long axis, directly behind the barrel-vaulted iwan which now takes the place of the formerly standard portico, and the very general presence of corridors or circumambulatories (Fig. 6) would each seem to point, beyond any reasonable doubt, to a significant East Iranian contribution to the overall plan.

Less obvious at this remove is the extent to which the remainder of the plan may also derive from eastern prototypes, as was suggested by Godard⁸⁴. Nonetheless, if we choose to assume that the inward-looking four portico plan of Achaemenid Iran continued to be experimented with, particularly in the north-east, such a plan could have come to be combined in the end with still other local designs. More explicitly, a court with four side-porticoes could have been added, instead of a plain rectangular court, to the typical reception and living units of the Greco-Bactrian house type; and, if such a hybrid form did come into existence, it can only be added that it would have taken on a still closer resemblance to the Ashur plan at the very moment that trabeate construction, typified by long columned porticoes, was overtaken by arcuate construction, typified by deep iwans.

⁸² On the abilities of both Elamite and Mesopotamian bricklayers, cf. *ibid.*, 124.

⁸³ Down to as late as the 1st century A.D. Iranian builders were still constrained, at least in their own homeland, by a continued preference for curved mud-brick struts which could only readily span a distance of about 2.40 m.

⁸⁴ Godard, *op. cit.*, loc. cit.