



The Evolution of Religious Architecture in the Sasanian Period

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Introduction

The *chahārtāgh* – meaning ‘four arches’ – was the most distinctive and emblematic religious architectural form produced in ancient Iran, particularly in the Sasanian period (ca. 224-650 CE). It is a true Iranian national architectural symbol (Godard 1371/1992: 78). The essential architectural plan of the *chahārtāgh* was a form much employed for religious buildings of Iran in the pre-Islamic period and after, either in standalone form or as an element of a larger complex (Neyestāni et. al, 1391/2012: 173). The *chahārtāgh* is a symmetrical architectural form on a square plan with four corner piers that form the pillars for the arches and support a domed roof. The Dehkhodā Persian Dictionary defines it as, “A cupola or dome that rests on four piers and pillars, which presents [a view of] a crescent (semi-circular) arch from all four sides, each of which sits on two of the piers and pillars. The ceiling, cupola and dome are then set atop these foundations and arches”.¹

Dietrich Huff divides *chahārtāghs* into three categories: 1. *chahārtāghs* that are simple square forms having four entrances into the domed area on the building’s foundation platform; 2. *chahārtāghs* with piers at the corners that enclose the central room that is then ringed by an ambulatory passageway; 3. *chahārtāghs* similar to the second group, but that have auxiliary rooms and *iwans* (*ayvans*) instead of a simple ambulatory passageway (Huff, 1975: 245-246).

Fire Temples in the Historical Period²

The excavations undertaken at Nush-i Jān Hill on the Jowkār Plain, Malāyer by David Stronach uncovered the remains of a building dating to the Iron Age 3 phase (Median period or ca. 800-550 BCE) at the site’s oldest occupation level (*plan 3*) (Stronach and Roaf, 2007). The excavators believed they had identified the remains of an ancient temple in the western sector of the site, with a more recent temple located at the center of

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¹ See Dehkhoda Persian Dictionary:

² For further information about fire temples see: Schippmann, 1968: 353-362; Khlopin, 1968: 276-281; Wright, 1968: 380-388.



the site. This finding has been contested by some scholars who suggest the central temple should be considered the earliest part of the complex (Tourovets, 2005: 361).³

Both fire temples identified at Nush-i Jān Hill were built on an ordinal (intercardinal) alignment, with the difference that the entrance to the central temple is gained from the south, while the entranceway to the earlier western temple is positioned on the east. Both buildings have two sections. In the front section of both Nush-i Jān temples, before entering the inner sanctum – the room of the sacred fireplace – there is a rectangular room which has a sloping surface in one corner which enables access to the upper portion of the building. The second part of the building is the room where the fireplace/hearth was sited. The fireplace itself was located, in both temples, to the left of anyone entering the hearth room. However, the main difference between the two buildings, apart from their alignments, is in their building plans. The second room of the earlier western temple was rectangular, but the second room of the central temple was semi-cruciform.

In the Achaemenid period (ca. 550-330 BCE), sites that can perhaps be termed ‘fire temples’, such as the ritual precinct at Pasargadae, were places where worship took place in the open-air. Two platforms were found at the western end of the site’s defensive wall. One of these has steps (Stronach, 1379/2000: 193). Achaemenid tomb bas-reliefs show the king-of-kings facing a fire place, although the form of the temple in which the fire place was positioned is not depicted.

One of the most important monuments of the Achaemenid period is Persepolis. At the center of the complex of structures on Persepolis’ main terrace is a building called the Tripylon (three-gated) Hall, and sometimes, ‘the Council Hall’ (*plan 2*). This building connects the eastern part of the complex with the western part (Wiesehöfer, 1383/2004: 42). The construction of the building is thought to have begun in the reign of Darius (522–486 BCE) and to have been completed in the reign of Xerxes (586-465 BCE) (see Roaf, 1381/2002: 168). The building is oriented on an ordinal (intercardinal) axis and entry is enabled through two doorways. The northern door gives access to a pillared *iwan* via a symmetrical ‘Persepolitan’ type stairway. The stone column capitals are in the form of a human head. The building’s interior space is square, with the ceiling supported by four columns. On the eastern side of the room, another doorway leads to a long, broad passage. The southern doorway connects to another pillared *iwan* which provides access to the outside. Right at the center of the room, between the columns, is an area showing the stone remains of the terrace foundation fill, which appears similar to the base core of other column foundations at Persepolis. However, if we assume this indicates the former presence of a column, such an element would have damaged the building’s overall structure. Therefore, one among a number of possible alternatives should be suggested: the core material was for the foundation for a sacred fireplace, the form of which was represented in the bas-reliefs of the rock-cut tombs (sepulchers) of the Achaemenid monarchs above Persepolis itself, and at the Naghsh-e Rostam tomb complex 12 kilometers away. Thus, by the time of Darius, Zoroastrian rites and rituals had become

³ Tourovets writes, “Based on its position, the central temple is in the central building space, and clearly originally appears to have been an individual [free standing] building, which was sited on top of the hill because of the direct view it gave over the area around the hill.”



well established, albeit with some differences to those that scholars are more familiar with from later periods (Koch, 1377/1998: 333).

If this is the case, it implies that one may be able to read other architectural elements at Persepolis as having had religious significance (see Borumand, 1381/2002: 238), and compare the Apadana Palace with the hypostyle (pillared) hall at Nush-i Jān Tepe, and the much later iteration, the Sasanid hypostyle hall at Takht-e Soleiman.⁴ Other features that may be adduced include perhaps the presence of *lamassus* at the gates of Xerxes' Palace⁵ (the *Kidan Pākitan* of the Elamites, which were placed at the entrances to temples); the symmetrical bi-directional stairways of the Persepolitan type (that offer only oblique rather than direct access into a building), with shallow, broad steps (in order to facilitate a dignified ceremonial entrance and exit); the large stone trough that was positioned behind Xerxes' Gates (possibly indicating ritual cleansing was required before entry to the complex), amongst other things.

In any case, whether we accept that the building had a religious function or not, it has parallels with the sub-Achaemenid structures in Susa and the town of Pāseh, which their respective excavators considered to have been religious buildings associated with fire. The *apadana* (a stone columned/hypostyle audience hall) at Susa (*plan 3*), described as an Achaemenid building by its excavator, has been attributed by a small number of scholars to the period following the Achaemenids. This group of researchers believes the building had a religious function, although there are still differences of opinion regarding the period of its construction. Another group describes the building as an aristocratic or royal residence.⁶

The central core of the *apadana* building at Susa is a square room (labeled A on the plan) supported by four columns at the center with two entranceways in the corners of the room's southern wall which lead first into a rectangular room (V), through which one must go to get outside via a doorway through a pillared *iwan* (B). Two doorways on either side of the room connect to an ambulatory passageway (L) that goes around the outside of the pillared room. The ambulatory passageway allows separate access into each of the two parts (C) within the pillared *iwan* from the brick-paved courtyard (P). On either side of this passage and pillared *iwan* are two anterooms (S).⁷ Another path on the other side of the building possibly enabled access to the outside via a bi-directional symmetrical 'Persipolitan' staircase. The main difference in the plan of the *apadana* in Susa, with the Council Hall (Persepolis), may be the existence of the ambulatory passage around the pillared room of the *apadana*. In addition, the interior space (V) that prevents

⁴ Masoud Āzarnoush provides a comprehensive comparative discussion of the hypostyle hall temples of Nush-i Jan Tepe with the Temple of Anāhitā, the Ceremonial Hall at Bishāpur, rooms 104 and 114 of the Hājīābād complex at Dārābgerd, and the hypostyle hall at Takht-e Soleiman; however, he makes no mention of Persepolis (see Āzarnoush, 1987).

⁵ These are colossal statues that act as gate guardians and have a particular symbolic meaning as a defense against devils/evil spirits (Wiesehöfer, 1383: 41-42).

⁶ Mirābedin Kāboli in remarks made to the author in person.

⁷ Among Sasanian fire temples, Farāshband in the Jerah Valley is most similar to the plan of this building, and Andre Godard believes it to have been a Sasanian church.



direct entry into the building's main room (A), (created by the rectangular room between the pillared room (A) and the pillared *iwān* (B)), is not present in the Council Hall.

Another building that has been attributed to the sub-Achaemenid period is the fire temple of the town of Pāreseh (*plan 4*). Herzfeld found a large number of Greek dedicatory inscriptions inside the altar at the base of the main *iwān*. The date of construction can be ascribed to an interval very shortly after the time of Alexander (323 BCE) based on the representation of Zoroastrian deities alongside Greek gods, stylistic elements in the inscriptions, the carving style and the date of coins found (reported by Godard, 1992: 65). This building's plan shares both similarities and has differences from the *apadanas* of Susa and Persepolis.

Entry is gained to the building by a staircase that leads through a four pillared *iwān*. At the far end of the temple is a room with four columns, around which are four long, wide independent corridors. The pillared room has access into three of them. The passage on the right of this room was the fire temple, with a small room built into the end of it. In this building the boundary between the pillared room and the pillared *iwān* was demarcated by a passageway that is similar to the *apadana* at Susa, although instead of the ambulatory passageway discovered in the *apadana*, passages blocked off from each other are located around the outside of the room. As in the Council Hall at Persepolis, one of them is located on the eastern side of the pillared room.

The Parthians appear to have permitted freedom of religion in the different regions of their realm (Boyce, 1386/2007: 32). The temple of old Nisa in present-day Turkmenistan (Herrmann, 1373/1994: 35), the temples of Hatra (Safar et.al. (1376/1997: 371-382; Said, 1992: 103-111), the Castle of Zahāk near Hashtrud in East Azerbaijan Province, the temple of Gach Gombad in Rizhāv/Rijāb Sar-e Pol-e Zahāb and the remains of the Mithraeum in Dura Europos (present-day Syria) (Herrmann 1373/1994: 72) all attest to the breadth of Mithra-worship at this time. The form of Mithraic temples of this period, while similar in some respects to those that preceded and followed them, also show some divergence.

Possibly one of the earliest of these temples is that in old Nisa. "The tower of the structure is the most distant part of the citadel on entry, and despite having three entranceways, gaining access to it is not that easy... The main entrance of the building is in the southern part... there is a possibility that official ceremonies and celebrations took place in this circular towering space" (Invernizzi, 2005: 138-139). The wall paintings of Nisa depict armed horsemen (Pilipko, 2005), and the thematic similarities with the Mithraic paintings at Dura Europos (Goldman, 1980) bring to mind the phrase encapsulating one of the divinity's hypostases – *Mitras Ephippos* – 'Mithras the Horseman' (Dāvani, 1385: 178).

The bas-relief on the stone bolder at Bisotun, attributed to one of the six Parthian monarchs named Balāsh (Valgash or Vologese), leads us to consider the possibility that this type of worship happened alongside that which took place in a Fire Temple. Strabo



wrote sometime between the years 19 and 63 CE, “The Magi start their worship with the fire before turning to venerating their other divinities” Benveniste, 1383/2004: 38.

The city of Hatra, in present day Iraq took its name from the “sacred region of Shamsh” (htr' d šmš) and one of the most interesting examples of a sun temple is found here (Duchesne-Guillemin, 1385/2006, p. 189). Here, the Shamsh Temple is located behind one of the triple *iwans*. Its design is similar to the temple of Nisa and also the building at Gach Gombād in Rizhāv (Rijāb).

In western regions, worship in caves was apparently the norm in the Parthian period. “Zoroaster paused and engaged in thought in a cave” (Russell, 1377: 87). This practice may have been the result of the historical memory of Xerxes’ edict that adherents of Mithraism should be harassed. Some may have been forced to immigrate to places beyond the reach of Imperial power or create secret societies to keep their beliefs and rituals alive, but then continued this manner of worship into the more tolerant Parthian period.

The Early Sasanian Period: ca. 240-420 CE

It wasn’t until the second period of Empire of the Persians – the reign of the Sasanians (ca. 224-639 CE) – that unified central government again began interfering in religious affairs (Boyce, 1386: 32). The first Sasanian monarch, Ardashir I Pāpākān (r. ca. 224-244 CE) embarked on an extensive building program, establishing towns such as Ardashir Khoreh, and constructing monuments including the Qaleh Dokhtar and the Palace of Ardashir, all in the region of Firuzābād, Fars Province.

Dietrich Huff identified the remains of a fire temple near the still standing tower or ‘minaret’ at the center of Firuzābād (Huff, 1993: 45-61). Also, in the audience hall at Firuzābād are the remains of four simple piers which suggest a cruciform structure once stood here (*plan 5*). On the third level of the Ghaleh Dokhtar, behind the *iwān*, is a square-shaped room with four doorways. From the outside it appears to be circular. Only one of the room’s entrances leads outside, with the rest connecting it to small anterooms (*plan 6*).

The Palace of Ardashir in Firuzābād may also be considered. Here, the boundary between the *iwān* and the private area of the palace is marked by three square rooms (Bier, 1982: 29-36), above which was a dome, with the middle room having four columns or doorways (*plan 7*). At the start of the Sasanian period the *chāhārtāgh* form within a building complex has been found to have had a range of different functions. Although there are still doubts concerning the function of some buildings (including the Palace of Ardashir, the Firuzābād ‘minaret’ and the audience hall all scholars are in agreement in attributing them to the early Sasanian period.

The arrival on the throne of Ardashir Pāpakān’s son and heir, Shāhpur I, (ca. 244 CE) appears to have marked a change in architectural styles. The city of Bishāpur was established (in ca. 266 CE west of Firuzābād), and a hall was constructed on a cruciform plan where the temple of Ānāhitā was built (*plan 8*). The cruciform hall was a



chahārtāgh and was built on an ordinal (intercardinal) alignment. An ambulatory passageway hemmed it around three sides. On the northern side, the passage is so narrow in places that the term ‘passageway’ can perhaps not be justified, but it does create a separate small narrow room that acts as a demarcatory buffer between the cruciform room and the northern external doorway into the *chahārtāgh*. The temple of Ānāhitā is located on the north-western side of the cruciform hall.

Some scholars consider the cruciform hall to have served as a fire temple (Azarnoush, 1987: 344). Whether we accept this view, or are deterred by certain doubts, the proposition that the building may have been a model for fire temples in the early Sasanian period is hard to refute out of hand.

The general plan of early Sasanian fire temples was formed by four piers which created pillars, which, with the use of squinches, were surmounted by a dome. All have ambulatory passageways around the outside of the piers. An example of this type of fire temple that has recently been excavated is the one at Shiyān⁸ (Rezvāni, 1384/2005) at Islāmābād-e Gharb (*plan 9*). The four-piered fire temple had the sacred fireplace (hearth) installed at its center, but developments in religious doctrine through the middle of the Sasanian period would lead to concomitant changes in the layout of this fire temple which will be mentioned later in this paper.

Another Sasanian period building that documents the evolution of fire temple design is the temple of Āzargoshasp (the Takht-e Soleiman) (*plans 10 and 11*). The main fire temple and central core of the building, which is a *chahārtāgh* (marked as room A on the plan), is composed of four simple piers with an ambulatory passage around it, which may indicate it was constructed in the early part of the Sasanian period. A study of the remains of other fire temples at Takht-e Soleiman provides insight into the historical development of the plans of Sasanian fire temples, with which we will engage further on (Naumann, 1382: p. 75)

Kuh-e Khwajeh is a site in Sistan with a building that was dated to the Parthian period (ca. 220 BCE-224 CE) by Ernst Herzfeld. Gullini (1964)⁹ documented Sasanian additions to the Parthian phase of this building. Trudy Kawami also investigated the possibility that some of the building’s wall paintings date to the Sasanian period (Kawami et.al., 1987). In the northern Sasanian portion, the remains of a *chahārtāgh* built around four simple piers surrounded by an ambulatory passageway was discovered. The entrance into the *chahārtāgh* is via the southern doorway, with the northern doorway giving access to a rectangular room (*plan 12*). Another point about the structure’s architecture is the existence of passages around the east, west and northern external walls of the building. It has been persuasively argued that this building plan dates to the middle of the third century CE (Besenval, 1379/2000: 209).

⁸ This site was excavated for five months by Hasan Rezvāni in the second half of 1384 (2005-2006).

⁹ G. Gullini suggests that 3 appears to date to the beginning of the Sasanian period and the early third century CE, and the state of 2 would appear to relate it to the conquest of the region by Khosrau I Anushirwan (531-578 CE): see Besenval, 1379/2000: 207.



The plans for the Negār *chahārtāgh* (*plan 13*), and the Farāshband (*plan 14*) and Zarshir *chahārtāghs* (*plan 14*) can also be attributed to the early Sasanian period. These buildings are composed of four simple piers around which runs an ambulatory passageway. Zarshir does not have any other rooms, but there is one on the south side of the Negār *chahārtāgh*, and some rectangular rooms were attached to the south side of the Farāshband *chahārtāgh*, through which the building was exited via a doorway or doorways.

All of these buildings are oriented on an ordinal (intercardinal) axis. In the Negār *chahārtāgh* a room was eventually added, but the Farāshband *chahārtāgh* has a range of two rectangular-shaped rooms on the south-western part of the building, with doorways facing north (Huff, 1975: 243-255). André Godard believed the Farāshband *chahārtāgh* was a Sāsānian church or fireplace to which small alterations had been made. The builders, or perhaps more accurately, the Christians who endowed the building, embellished it with several Western architectural details they were familiar with (Godard, 1375: 64). However, elsewhere Godard explicitly states that “the plan of this building is clearly similar in design overall, to the Susa *apadana* (ibid). Thus, its plan was Persian but its ornamentation Western [Eastern Roman].

Excluding the Farāshband *chahārtāgh*, which Godard called one of the buildings of the Jereh valley, the other *chahārtāghs* functioned as fire temples. The architectural survey of Konar Siyāh revealed that the central part of the complex, like the architecture of other early Sasanian fire temples, was composed of four piers surrounded by an ambulatory passageway, with the whole building positioned on an intercardinal alignment (*plan 16*).

The Mid-Sasanian Period: ca. 420-530

In the Middle Sasanian period, fire temple design evolved. The old *chahārtāghs* with ambulatory passageways were transformed into cruciform chambers with complexes of anterooms. The Tureng Tepe fire temple on the Gorgān Plain (*plan 17*), can perhaps be cited as an example dating to this time, in which efforts were made to block entry to the rooms with partitions. The Karāteh *chahārtāgh* may be an unverifiable, though possible example dating to the early part of this period of architectural stylistic change. The internal core of this fire temple is composed of a cruciform chamber with four arches, oriented on an intercardinal axis. Only the eastern arch provided access to the outside through a small *iwan*. The northern, southern and western doorways probably led into rectangular anterooms.

Another example of a fire temple from the mid-Sasanian period is Bandiyān Dargaz (*plan 18*). Mehdi Rahbar has excavated this building for more than a decade and a half, gently bringing the remains of an important fire temple to the surface. The temple's main room is cruciform, in the middle of which, a chalk plaster hearth was installed. This building is also oriented on an ordinal alignment. The hypostyle hall with decorative plasterwork on its eastern flank gives us an approximate date for its construction. It is nearly certain that the building was erected in the reign of Bahrām V Gur (420-438 CE). The hypostyle hall is demarcated from the cruciform room by a rectangular room. Another doorway on its southern side leads to a smaller *iwan*. In the north-western corner of the hypostyle hall, a



cavity in the building's wall was found, which has been called a "Mehrābeh" (مهرابه), or Mithraeum by its excavator. In the north of the cruciform room, another doorway leads to a square room, around which plaster ossuaries were constructed. The presence of the plasterwork, the unique hearth, inscriptions and other finds make this fire temple one of extreme importance. Among other things, they enable us to pin a date on it of the first half of the fifth century CE.

The Bandiyān Dargaz fire temple appears to have had a significant influence on the architectural design and decoration of the Mil-e Haram fire temple¹⁰ in present-day Turkmenistān. Studies have shown that the decorative plasterwork at Mil-e Haram cannot date to before the start of the fifth century CE. Dating schemes for the building currently range between the end of the fifth to beginning of the sixth centuries CE (Wagner, 2006: 130).

Another important building that may be studied from the mid-Sasanian period is the Hājiābād Mansion at Dārābgerd (*plan 19*). This site was excavated by Masoud Āzarnoush who fixed its dating to this period. The religious part of the building (rooms 104 and 114), may be read as the remains of a cruciform room built on an intercardinal alignment and connected by a doorway to the eastern passageway, which in turn establishes a connection to the outside. There is another doorway on its west side, which connects to a temple of Ānāhitā.

If we accept that this evolution in fire temple architectural design occurred some time in the middle Sasanian period (ca. 420-530 CE), the alterations that appear to have been made to the fire temple of Shiyān can also be attributed to this interval. In the Shiyān temple the northern doorway was blocked up and an independent rectangular room was added to the north of the building, with an entrance on its eastern side. A chalk floor surface was laid along the reduced width of the western doorway and area in front of the eastern doorway (considered to be the building's main entrance). Thus, the main doorway of the building is on the east, and the importance of the ambulatory passageway was reduced by the "T"-shaped structure built on the western side. This annexed the major part of the passageway and made traversing it problematic (*plan 9*). What is interesting is that this "T"-form structure¹¹ on this western side of the Bandiyān Fire temple was found to be from the middle Sasanian period. Therefore, the changes seen in the Shiyān fire temple can also be ascribed to the mid-Sasanian period.

Another Sasanian building that may be dated to this period on structural criteria is fire temple PD in the Takht'e Suleiman complex. This building is located on the western side of the main fire temple (A) (*plans 10 and 11*). On the south side, a hypostyle hall structure of two separate parts was positioned. The first part (PA) was constructed with

¹⁰ Concerning Mil-e Haram or "Mel Haram", several articles have been written by the site's supervising excavator and members of his team. What is interesting is that every one of them called the site something different! For example, Kaim writes 'Mel Haram', and elsewhere, Wagner uses 'Mele Heiran' in his own article. This orthographic variation may arise from the way Turkic words were filtered through the accent of the Polish scholar.

¹¹ This is a plaster structure beside the sacred fire place that may have been used to hold the specific implements required for carrying out rituals.



columns on angular rectangular bases and the second (PB) with round columns. From the hypostyle hall we proceed into a narrow rectangular room which separates the hall from the fire temple, and from there to a room in front of the fire temple (PC) and through a doorway in its north, into a cruciform room (PD). The presence of the hypostyle hall, the room separating the cruciform room from the hall, and the fact that other sides of the cruciform room do not have doorways are reasons for us to consider that this complex dates to the mid-Sasanian period alongside the examples of Hājiābād at Dārābgerd and Bandiyān Dargaz.

The cruciform temple at Takht-e Soleimān (B), located on the eastern side of the main fire temple (A), probably had to be added to the complex on account of certain doctrinal changes that were taking place at this point during the Sasanian period. This building is very reminiscent of the Bandiyān fire temple. Its entranceway is from the south. Small rooms were created in this part to ensure that direct access from outside could not be gained to the main ritual space. For this reason, it can be stated with a high degree of probability that the cruciform room is one of the additions to the complex made in the mid-Sasanian period.

The bas-relief of room 1 at Bisotun depicts a king between two gods. The ring of power [representing a sovereign's divine legitimacy] is held by Ahura Mazda, with Mithra standing behind the king holding the *barsom* [another symbol of royal power]. Studies of historical texts have revealed that the king depicted is probably Ardashir II (r. 379-383/4 CE), brother of Shāhpur II (r. 309-379 CE) who played a significant role in the defeat and death of the Roman Emperor Julian (363 CE) (Āzarnoush, 1375: p. 45). The image serves to confirm the influence of Mithaic beliefs at this moment in history.

The *chahārtāgh* of Qhaleh Dokhtar Bāzeh Hur (*plan 20*) has certain features that allow it to be included in the category of mid-Sasanian period fire temples. Ernst Diez (1923)¹², Ernst Herzfeld (1926)¹³, André Godard (1939)¹⁴, and Louis Vanden Berghe (1958)¹⁵, examined the building and all gave it a Sasanian attribution. All identified the building as a Sasanian fire temple, with the exception of Godard's more exhaustive description, in which he identifies the building not as a fire temple, but as one of the annexes of the two buildings comprising the Ghaleh Dokhtar and Ghaleh Pesar complex. Godard's reason for not accepting the building as a fire temple was that no sign of an ambulatory passageway could be found around it. He believed, "The building is one hundred percent Sasanian, without doubt dating to the third century CE" (Godard, 1375: 59. However, he adduces no other evidence in support of the contention that the building is in fact Sasanian.

Ernst Herzfeld, while not presenting any sketch or photos of the building (*ibid*: 59) did consider the building to have had an ambulatory passageway. In his view, the building had the characteristics of a Sasanian fire temple. Based on this account, Oscar Reuter in

¹² E. Diez, 1923, *Encyclopédie de L'islam*: 141. Quoted in Pope, 1373/1994: 274.

¹³ E. Herzfeld, 1926, *Rehsebeicht*: 275-6. Quoted in Pope, 1373/1994: 274.

¹⁴ Godard et.al. Vol. 1, 1375/1996: 59-61.

¹⁵ Vanden Berghe, 1379/2000: 15.



Sasanian Architecture called it “the probable ruins of a fire temple dating to the Sasanian period” (Reuter, 1938: 498). Louis Vanden Berghe makes a brief reference to the ruins of Ghaleh Bāzeh Dokhtar Hur in several paragraphs on Sasanian sites in his work on Khorāsān and Sistān. He too labels the building a fire temple. So these scholars, without exception, accept the building is Sasanian based on its structure and plan, with the majority also accepting that it is a fire temple.

However, another group of scholars attribute the building to the Parthian era based on the way the building’s dome was constructed. Foremost among them is Arthur Pope, who considered the Bāzeh Hur structure to be one of the earliest examples of a Parthian domed fire temple (Pope, 1373/1994). Pope’s somewhat mystifying reasons for attributing this building to the Arsacid period were the primitive squinches and ‘inappropriate’ proportions of the structure. Therefore, he considered this building to belong to a period slightly earlier than Sasanian fire temples, proposing a date of early third century CE (Ibid: 52).

Mohammad-Karim Pirniyā followed this attribution and subsequently called the building “probably a pre-Sasanian temple” (Pirniyā, 1382: 108), and thought its squinches (گوشه سازی ها) would have been of wood. Donald Wilber¹⁶ also ascribed it to the period preceding the Sasanians, a period in which the practice of dome construction was still in its infancy. The reasons he gave are the simple manner of the [probable] squinches and the irregular proportions of the structure. However, the building’s form appears to include features of fire temples more at home in the middle of the Sasanian period.

The general ground plan of the building is approximately 12x16 meters in extent, sited on top of a natural hillock on a mountain piedmont. The *chahārtāgh* building itself is 12x12 meters in extent. Its alignment is neither cardinal nor ordinal, being rather somewhere in between. The material used in its construction included grey and grayish-green stone rubble in a rough gypsum mortar. Larger stones were used in the lower portions of the building; with stones becoming smaller the higher up one goes. Smaller stones were used in the construction of the dome. Access into the building was only possible through the main doorway on the western side. A small doorway off the northern passage gave access to the outside. There is no doorway in the eastern side of the building and the room in this part is a type of ‘blind’ (کلیل). The northern and southern doorways connected to narrow, dark passages. The remains of the northern passage and also the plaster floor surface of the southern passage are still visible. The remains of a niche or recess have been found in the passage on the northern side of the building. The dome was built atop simple wooden squinches. At some point in time not yet known to us, alterations were made to the building’s eastern side, employing that characteristic Sasanian rubble masonry building technique – ‘stones floating/suspended in mortar’ (*plan 20*). It is for this reason that the building lacks an ambulatory passageway and there is no sign of a *chahārtāgh*. This is one of the characteristics of fire temples from the middle of the Sasanian period.

¹⁶ *Bulletin*, December 1946: 21-28. Quoted in Pope 1373/1994: 275.



The Late and Post-Sasanian Period (ca. 531-1000 CE)

Fire temple architecture in the late Sasanian period again experienced change. A prominent example of this type of fire temple can be seen in the Ātashkuh Mahalāt *chahārtāgh*. Architectural evidence from this building indicates that it was erected during the reign of one of the Khosraus – Khosrau I Anushirwan (531-579 CE), or Khosrau II Parviz (591-628 CE), of dressed stone and Ashlar limestone blocks.

The building was constructed using the “Flemish bond” technique¹⁷. Evidence of the use of this technique can be seen in the south-east gates of the Takht-e Soleiman. A number of have proposed that this gate was one of the restorations undertaken following the beginning of the reign of Khosrau I, after the end of the Mazdakite unrest (early sixth century CE). Other scholars consider the gates to be part of rebuilding works ordered by Khosrau II, probably after the Roman invasion and destruction of part of Takht-e Soleiman in 627 CE.¹⁸ Other architectural elements comparable with elements at Ātashkuh may be the building’s piers which, in section, are heart-shaped in form. Something similar to this form is seen in the south-east and south-western piers of the building at Kangāvar, which Masoud Āzarnoush identified as a place associated with Khosrau II (Āzarnoush, 1377/1998: 18-55).

Therefore, in-so-far as this chronology is correct, the date of the *chahārtāgh* structure at Ātashkuh Mahalāt can be fixed to the late Sasanian period; not earlier than the reign of Khosrau I Anushirwān, and possibly contemporaneous with the reign of Khosrau II Parviz (591-628 CE) – that is to say sometime in the last half of the sixth to first quarter of the seventh centuries. If we accept this, we begin to see how fire temple construction might have been evolving at the end of the Sasanian period. An *iwān* was added to the building at Ātashkuh Mahalāt, and its alignment was more-or-less on an ordinal axis. In its north, an *iwān* with two anterooms was found.

This scheme allows us to tentatively date the stone *iwāns*, which were appended to the north and south sides of the main fire temple (A) in the Takht-e Soleiman, to this period. The Runi *chahārtāgh* (one of a number in and around the town of Farāshband) is an example that also exhibits very similar changes in design – the addition of an *iwān* and courtyard – to those seen in the late Sasanian period alterations to the northern part of the central temple in the Takht-e Soleiman complex (A). The Runi *chahārtāgh* may also therefore be added to the small number of fire temples that we can surmise were created in this interval (*plan 22a,b*).

It is probable that the building at Sarvestān (*plan 23*) is a fire temple dating to the Al Buyid period (c. 934-1055 CE). It appears to reveal there was continuity into the early Islamic period from the late Sasanian period in the general structural format of fire temple design. The debate about the *chahārtāgh* of Qasr-e Shirin (*plan 24*) is a little more

¹⁷ In this method of masonry, a level of stones is laid perpendicular along the length of the wall, followed by a course of stones laid horizontally.

¹⁸ Numismatic finds confirm that construction works were on the point of being carried out at the end of the period of the rule of Qubād I. Thus, it can be considered probable that the construction date for the hypostyle halls PA and PB is around the time of the restoration of the official religion in the reign of Khosrau I Anushirwan, following the Mazdakite disturbances (Naumann and Huff, 1972: 51)



complex (see Huff, 1366/1987: 408). As well known, one of the wives favored by Khosrau II Parviz, may have been a daughter or relative of the Byzantine Emperor Maurice. As she was a Christian, she was the cause of a great deal of resentment from many of the religious zealots at court. In order to shelter her from possible repercussions of this bigotry, Khosrau established a new city for her which was not completed in her lifetime, though for other reasons became more securely established in the early Islamic centuries. It is therefore possible that the Sarvestān *chahārtāgh* was actually laid down with the intention of serving as a church for the Christian queen (Hozhberi, 1391).

Having discussed the various architectural characteristics of Sasanian *chahārtāgh* and fire temples, we find we may be able to categorize and ascribed them to three broad phases based on elements in their building designs:

1. Early – from the reign of Shāpur I to Yazdegerd I or Bahrām V: ca. 240-420 CE;
2. Middle – from the reign of Bahrām V to Khosrau I: ca. 420-530 CE;
3. Late – from the reign of Khosrau I to the early Islamic period: ca. 531-1000 CE

Analysis

The above discussion notwithstanding, a great many questions remain, the answers to which will only be obtained through greater analysis of the contemporary context in which these buildings were created. This requires further comprehensive independent research, although several points can be mentioned. Before the age of Zoroaster, Mithra was one of the major deities venerated by a number of early Aryan peoples. Archaeological evidence appears to indicate that the religion of the Medes and the Achaemenids up to the time of Darius was characterized by the worship of Mithra (Bivar, 2005: 341-385). Evidently, Zoroaster first rose to prominence as a religious reformer within the Mithraic religious tradition. Zoroaster's reforms repudiated all gods except the one known as Ahurā Mazdā – “creator of wisdom” (Raza, 1385/2006: 31).

Information from royal clay tablets allows us to conclude that the practice of sacrificing to Ahurā Mazdā was elevated to the level of official and government doctrine, which meant accepting the rites of Zoroaster (with some variations) as the country's official religion (Koch, 1377/1998: 327). These differences (negligible between the religion of Darius and that of Zoroaster), were the result of Darius' efforts to adapt and reconcile the religion to the needs of administering his populous empire (Rezāei, 1381/2002: 269).

The Magi – the Mithraic clergy – were perhaps forced to show apparent or relative acceptance of the new religion¹⁹ (in grand public ceremonies²⁰), or else choose to immigrate to regions beyond the reach of the long arm of Iranian imperial officialdom (Bazl, 1968: 222-238).²¹ It is reasonable to assume that if the Magi were interested in

¹⁹ It is from this time that secrecy and maintaining the mysteries of the Mithraic religion became more urgent. “The doctrines of Mithra, were secret doctrines. The secrets of this credo were protected rigorously, and revealed to only a small number of initiates who had advanced to the upper levels” (Razā, 1359/1980: 61).

²⁰ Even if this does not imply killing Magi it does convey a negative connotation about this clerical class.

²¹ The group that did not submit was martyred. The group that engaged in *taqiye* [dissimulation to protect the faith] was able to remain close to the circle of power, with the results that we see in the reign of Artaxerxes II. The result of the activities of the group that migrated and went east was a generation raised



retaining any influence at all, they would have had no option but to accommodate themselves to the new state of affairs (Mary Koch, 1377/1998: 327). What is certain is that at the end of Iron Age III (800-550 BCE), political changes were brought about after the instillation of the first Achaemenid king Cyrus. Mithraic fire temples such as those at Nush-i Jān Tepe and Zār Bolāgh were condemned to destruction by the guardian of the new faith (similar to that which Darius the Great and his successors made the state religion). A connection can possibly be established between Xerxes' inscription against 'daevas' (see *Inscription X Ph*) and the deconsecrating of Mithraic sanctuaries.²² We should not forget either, that Mithra was one of the most important *daevas*.²³ Deconsecrations of fire temples of the old god were probably undertaken by the adherents of Mithraism themselves. In fact, the only people capable of carrying out such a major program may have been pious Mithraists themselves. It appears that when the government changed, individuals holding such beliefs voluntarily deconsecrated their temples in order to prevent their enforced destruction by the new rulers. However, these people would not necessarily have adopted the new religion wholeheartedly, and although they were no longer able to carry out their own religious rituals in the open, may have continued to worship Mithra clandestinely. It was perhaps for this reason that Mithraic sanctuaries were established in caves around this time, with the religion thus able to survive until Artaxerxes II came to the throne, at which time influential Mithraists from within the new religion's establishment were able to secure recognition for the god Mithra among the officially approved Zoroastrian pantheon (see inscriptions A²Ha, A²Sd, A³Pa in Naumann, 1384/2003).

From a political perspective, Darius' struggle with the Magi was really a battle between Persians and Medians, a struggle between the religious doctrines of the Achaemenid court and the state religion on the one hand, and the ancient Median rites of the Magi on the other (Nyberg, 1359: 395).

The change from the Mithraic faith to the Zoroastrian religion in the course of the Achaemenid period also altered the form of temples and sanctuaries. Although fire and a hypostyle hall remained present in temple structures, evidence of the doctrinal change can be recognized in the architecture of later temples (compare the central temple at Nush-i Jan Tepe with the Tripylon Palace/Council Hall at Persepolis). However, there continues to be debates about the function of the two alters (محرابة) in the holy precinct at Pasargadae. An interesting idea was presented by Olmstead, who proposed that one of them may be a hearth for a fire sacred to Ahurā Mazdā, with the other devoted to the veneration of Ānāhitā (Olmstead, 2537/1978: 84). Ghirshman goes further, stating that a

that would eventually produce Arsaces of Parthia, founder of the Parthian dynasty. The group that migrated west may have been the future transmitters of Mithraic culture to the Roman world.

²² Herzfeld also believes that if this was indeed the case, perhaps they were destroyed in the Achaemenid era, from the reign of Darius the Great forth, when the royal house had accepted the Zoroastrian faith and Xerxes was moved to act according to his inscription against the Daevas, which was commissioned to purify Zoroastrian belief, the doctrines of Mithra, Verethragna (Bahrām), Ānāhitā and other gods that were deemed unfit by the prophet and proscribed by the royal court (Nyberg, 1359/1980: 365).

²³ The Latin word *Deus* is *Devā* in Vedic Sanskrit, and *Daeva* in Avestan, all originally mean 'God' (Bahār, 1386/2007: 26). As adjectives, the Sanskrit *devā* and Avestan *daeva* also mean 'radiant' (Boyce, 1385/2006: 35).



third niche should exist, that was used to venerate Mithra (Stronach, 1379: 193). Godard, in agreement with Stronach, also considers the two identified niches to have been given over to the veneration of fire and water (Godard, 1375/1996: 70). If such was the case, it was due to the evolution of doctrine during the reigns of Artaxerxes II (404-358 BCE) and Artaxerxes III (358-338 BCE) that Ānāhitā along with Mithra was elevated to a position within the approved Zoroastrian pantheon. Therefore, the sacred precinct at Pasargadae must date to sometime no earlier than between 404 and 338 BCE, because it is from this time forth that Ānāhitā begins to appear in lists of the gods. Some scholars continue to assert that the precinct dates to the early Achaemenid period. Kāmbakhshfard writes, “We have cuneiform epigraphic evidence recording the existence of temples of Ānāhitā in Iran from the reign of Artaxerxes II” (Kāmbakhshfard, 1355/1976; 53). If reasons why their construction should be dated persuasively to the reign of Cyrus can be presented, we may need to look for a divinity other than Ānāhitā, as the object of veneration.

In the sub-Achaemenid period, the form of fire temples remained relatively close to examples constructed in the Achaemenid period, although some also incorporated Greek architectural elements. It is hard to speak with any degree of certainty or clarity about architectural remains proposed to be fire temples dating to the Parthian period.²⁴ The reason for this may be the absence of an institutional state religion, and the existence of a variety of local and regional faiths (Sarkhosh Curtis, 2000: 23-24); or even perhaps, as some assert, the concerted obliteration of Parthian monuments (especially religious sites) by the Sasanians.

Evidence from the temples of Hatrā (Safar and Mostafā, 1376/1997: 371-382; also, Said Ahmad, 1992: 103-111), the temple of Nisā in present day Turkmenistan (Herrmann, 1373/1994: 35), Ghaleh Zahāk/Zahak in Hashtud, the temple of Gach Gombad in Rizhāv/Rijāb, Sarepol Zahāb and the remains of the Mithraeum in Dura Europos (Syria) (Herrmann, 1373/1994, 35) gives us an insight into the breadth Mithra worship in this period. There is of course other evidence of Mithra worship among the Parthians: the image of Parthian kings facing left were often struck on coins.²⁵ To the degree that Alexander the Macedonian was the saviour of the Mithraic priesthood²⁶ from the Achaemenid duelists, he was hailed as ‘Alexander the Great’ by the Mithraists,²⁷ and in

²⁴ It appears that the inference that Russian archaeologists have made, especially concerning buildings dating to the historical period in Central Asia may not be reliable. Some of the research conclusions in earlier works are colored by ideological Marxist-Leninist perspectives. Buildings have been categorized and dated on this basis. Therefore, some doubt exists concerning structures termed ‘fire temples’ in these works.

²⁵ In the stone inscription of Ālut Commagene, Mithra is written on the left (Dörner 1385/2006: 155); The sacred fire places in Nush-i Jān Tepe are located on the left hand side of the fire temples; The heart, which in spiritualist Sufism (عرفان) is the repository of Mithra/affection (مهر), is also located on the left hand side of the body. Consider the couplet: از آن به دیر مغنم عزیز می دارند که آتشی که نمیرد همیشه در دل ماست

The repositories of our spirit are dear For an unquenchable fire dwells in our hearts

²⁶ In the dark ages following the conquests of Alexander, expectations among Iranians that the appearance of the Saoshyant (the Zoroastrian savior) was immanent became especially strong (Boyce, 1385c/2006c: 128).

²⁷ “In popular Iranian writings, Alexander the Macedonian is called ‘the victorious’ (پیروز), [although in the Sasanian period] he was known as ‘the damned’ (گجسته) (Nyberg, 1359/1980: 34)



return for this divine blessing, the Parthians set themselves up as ‘friends of Hellas’. This Arsacid philhellenism perhaps played a not insignificant role the eventual transmission of the Mithraic faith to the Roman world (for further insight see: Cumont, 1386/2007: 63-97; also, Schwertheim, 1387/2008: 41-60).

The Mithraic religion that eventually became established in the Roman Empire was not of course purely an Iranian faith, and was significantly influenced by Mesopotamians (Bahār, 1386/2007: 255). We should also bear in mind that “the earliest artifacts and sites from the cult of Mithras [in Europe], only go back to the second century CE” (Duchesne-Guillemin, 1385/2006: 149). The eclipse of the Parthians by the Sasanians once again made religious issues a focus of state affairs. At the beginning of Sasanian rule, Ardashir I Pāpakān refers in inscriptions to a *mobed* (priest) of the Temple of Nāhid in the city of Istakhr, Fars (224-226 CE). We can conclude that the dynasty’s founder was therefore a religious man, but the accession of Ardashir Pāpakān did not immediately result in the spread of his religion throughout his domain.

During the reign of his son and successor Shāhpur I, a prophet by the name of Mani was able to gain influence at court through Shāhpur’s brother Piruz, and presented a book called *the Shāhpuregān* to the king at this time (Boyce, 1384/2005: 12). The city of Bishāpur was established by Shāhpur I (Ghirshman, 1379/2000: 45). In part of the city, a temple of Ānāhitā was built, along with a cruciform hall (Ghirshman, 1979/2000: 37-57). In addition to its cruciform plan, other features of this hall include an ambulatory passage around the building, which became a model for the construction of other fire temples in the early Sasanian period (of course this passageway may not have been ‘ambulatory’ in the sense that it served this particular ritual purpose; rather, it may have served to separate the inner sanctum from the non-sacred space outside).

Religion under Shāhpur I’s immediate successors (Bahrām I, Bahrām II and Bahrām III) was dominated by a figure named Kartir, who standardized Sasanian official state religion and tore down ‘daeva houses’ – temples to gods other than those officially sanctioned. This was very similar to the order issued by Xerxes during the Achaemenid period. Mani was murdered, and his followers fled (Boyce, 1384/2005: 14). In this way was the ‘pure’ Zoroastrian faith officially re-established. To legitimize their rule, the Sasanians tried to connect themselves to the legacy of the vanished Empire of the ancient Iranians – the Achaemenids. They attempted to project themselves as the royal successors to the ancient legend of Iran and not coincidentally, adherents of the religion of Zoroaster (Wiesehöfer, 1383: 13). Some scholars have noted the similarities between Sasanian architectural styles and those of the Achaemenids, which shows this conscious return to the spiritual beliefs of their early co-religionists also had implications for material culture in the period.

While Kartir’s prestige was still ascending, Narseh, brother of Shāhpur I was nursing a grievance against those he perceived to have usurped his rightful claim to power – the Bahrāms. This sense of grievance eventually led him to depose Bahrām III, and take the throne in 293 CE. The ensuing political change was evidently not to the benefit of the newly established Sasanian religion because in commissioning scenes depicting him



receiving the ring of power, Narseh (293-302 CE) appears to have selected imagery that may be interpreted as indicating a preference for the goddess Ānāhitā, in contrast to his predecessors.

The demise of Bahrām III and Kartir and perhaps a concomitant reduction in the emphasis on Ahurā Mazda in official religious ideology may have provided an opening for the return to influence of Mithraists within the Sasanian state. This trend may only have been fully realized during the reign of Shāhpur II (309-379 CE) when the Mithraists managed to achieve sufficient influence to cement tangible gains from this opening. Thus, it is not surprising that inside the arch of Bisotun, Ardashir II (379-383 CE) is depicted beside Mithra receiving the ring of power from Ahurā Mazda. The very important role of Āzarpāt *Mehr* Espanđān, the high priest of this period, should also not be forgotten.

It is probable that the role of fire temples was changing in the first half of the fifth century CE, changes that endured for the rest of the middle Sasanian period. A small rectangular room was created in the space between the cruciform room and the outside of the building, which was one of the distinguishing features of Iron Age III temples. This architectural development may be read as indicating there was a change in belief, possibly a transformation of doctrine leading to a return to Mithraic beliefs. Bahrām V Gur (422-438 CE), son of Yazdigerd I and his Jewish wife Sosan-dokht, had the sobriquet ‘out of touch’. Bahram V earned this by, in accordance with the wishes of his father, being raised by the Lakhmid Arabs of Hira (a tributary state centered about the present-day city of Karbala in Iraq). It is therefore likely that he was influenced by both the Arabs and the teachings of his Jewish mother, which may account for some of the other doctrinal changes which were occurring at this time.

The return to Mithra-worship and its blending with the Mazdian rites of the early Sasanian period²⁸ in this mid-Sasanian phase are evident in the scenes carved into the ossuaries in the fire temple of Bandiyān Dargaz (*image 1*). Here, there are scenes of humped cattle with the round cruciform symbol of Mithra etched onto their rumps, or a scorpion device around their midriff. There is also a dog-like creature along with a snake in the process of attacking a cow or bovine-like animal. As mentioned, earlier, Mithra had been depicted present at a royal coronation during the reign of Ardashir II (379-384 CE). Here, although the ring of sovereign power was still in the hand of Ahurā Mazda, Mithra is holding another religious symbol.

Further change in the architecture of fire temples took place in the late Sasanian period under the influence of developments of this type. The changes that occurred in the reign of Khosrau I Anushirwan (531-578 CE) may not have been unrelated to the Mazdakite revolt and events and social reforms of Mazdak’s era. Such changes that were made in the reign of Khosrau II Parviz may have been influenced by the king’s wife Maryam (perhaps daughter of the Byzantine Emperor Maurice) and Shireen (probably another Christian from areas under Byzantine control). It may even be that one of the

²⁸ “Although Mithra/Mehr was great, his position in the empyrean was much humbler than that of Ahurā Mazda.” (Boyce, 1384b/2005b: 135)



justifications for Khosrau's murder at the hands of his son Shirouyih, was the King's supposed apostasy (Tabari, 1972: 249), since the punishment for this crime was death (*Vendidād*, Fragard 15: I, sentence 2, p. 813). The death of Yazdigerd I, suspected of being too well disposed to Christianity, may have been an earlier example of this within the Sasanian royal family (Shahidi Māzandarāni, 1373/1994). Khosrau's affinity with Christianity and his amicable relations with Rome (Schippmann, 1384: 159), his conquest of Egypt (Ibid: 160) and familiarity with [Christian] Egyptian thought²⁹, may be reasons for these late Sasanian changes.

However, the religious bigotry of the Sasanians was in the end, one of the causes of their decline and fall (Raza, *Vendidād*: 55). As we can see in the architecture of early Islamic period fire temples, the structural form that had developed by the end of the Sasanian period had become the approved pattern, and they all bear close resemblance to examples from the final phase of the Sasanian period. Even today, Zoroastrian places of worship are still known colloquially within the Iranian Zoroastrian community as "in Mithra" [در مهر], or "with Mithra" [بر مهر] (Boyce, 1384/2005b). Mithra's influence continues to be felt in later religions.

Ahurā Mazdā and Mithra would not yield their privileged position to each other (Bayānegi, 1385/2006: 68), and so throughout Iran's historical period (ca. 550 BCE – 650 CE) the adherents of two important religions contended over the survival of their respective faiths – Mithraism and Zoroastrianism. The Medes and the Achaemenids were Mithra-worshippers until Darius, but which his enthronement, the religion of Zoroastrianism emerged. From the reign of Artaxerxes II, under the influence of the Mithraic clergy (the Magi) Mithra and Ānāhitā were added to the list of approved deities. Alexander the Macedonian was hailed a savior by some Mithraists, who had been compelled to adopt a syncretic version of the faith under the late Achaemenids, and Alexander was given the sobriquet 'Great'. However, among some defeated Zoroastrians he was called "Alexander the damned".

As pious Mithraists, the Parthians played an important role in the transfer of the religion into the Roman world. The reassertion of a "pure" form of the Zoroastrian faith took place in the early Sasanian period, which was followed by a gradual reemergence of the influence of Mithraic beliefs, which led to another period of religious syncretism towards the end of Sasanian rule. This religious syncretism can be traced with relative ease in the *Vendidād*. "The *Vendidād* is the Zoroastrian religion as composed and played by the Magi" (Nyburg, 1359/1980: 338). The fire temples studied here are widely distributed geographically across the whole Empire (*Map 1*).

Conclusion

The following diagnostic elements can be mentioned concerning **pre-Sasanian** fire temples:

1. They were not built consistently on either a cardinal nor ordinal alignment.

²⁹ The belief that Mithra resided in the sun was given importance in the veneration of the god in Egypt, as it was in Iran.



2. Fire temples from the Iron Age III phase have two parts (a ‘front part’ and a ‘main part’). The front part serves as a space, a sort of antechamber, separating the outside from the main part of the fire temple. A way to access to the upper part of the structure is installed here. Also, the hearth is located on the left side of the main part of the fire temple. These fire temples (Mush Tepe in Hamedān³⁰ and Zārbolāgh in Qom³¹), were probably decommissioned in the early Achaemenid period.

3. Achaemenid fire temples (insofar as we accept Persepolis to have been a religious complex), have two entrances and a narrow passageway on one side of the building. The fire place was positioned between four pillars in a room with a square plan at the center of the building.

4. Fire temples dating to the sub-Achaemenid period have ambulatory passageways around the hypostyle room and sometimes have passages along each side of the pillared room, though not connected with each other. In both forms, a room separates the hypostyle hall from the pillared *iwan* preventing direct access into the building. In the fire temple building in the town of Pāreseh, this room in the space between the pillared *iwan* and the hypostyle hall takes the form of a *chāhārtāgh*.

The following diagnostic elements may be mentioned concerning fire temples of the **early Sasanian** period:

1. All were built on a square plan,
2. All are constructed on an ordinal alignment,
3. All have an ambulatory passageway around them,
4. They were probably topped with a dome that rested on four piers. These four piers in fact replaced the four pillars or columns found in Achaemenid and sub-Achaemenid temples. The space between the pillars should perhaps then be considered the sacred place in these temples, and the ambulatory passageway its ante-space.
5. In many of them, anterooms can be identified (Konār Siyāh, Farāshband, Negār, Kuh-e Khwajeh, the Takht-e Soleiman and Bishāpur). In a small number of them, these annexes or additions relate to later phases (Shiyān, and some of the rooms at Konār Siyāh). In others, there is no sign of additions to the building (Zarshir), or if they existed, the investigator could detect no trace of them.
6. All had a religious function, and with the exception of one example, which may be a church, the rest of the fire temples are from the early Sasanian period.

Elements characteristic of fire temples from the **mid-Sasanian** period are:

1. All are on an ordinal alignment;
2. The ambulatory passageway around the building has been eliminated;
3. The *chāhārtāgh* form has given way to a cruciform room;

³⁰ Mush Tepe, located in Shahrak Shahid Madani, a satellite town of Hamidān, was excavated by a team from Bu Ali Sina University under the supervision of Dr Mohammad Rahim, assisted by Dr Yaghoub Mohammadifar. Although I have perused their report twice, I have not yet seen a suggestion from the excavators, of what function this building may have had.

³¹ The Zārbolāgh site in the region of Aliābād, between Qom and Tehran, was identified by Aghil Ābedi, and surveyed by Mirābedin Kāboli. The scope and area of the site was determined by Hasan Rezvāni and Jafar Mehrkiyān. In recent years Mehrdād Malikzādeh has conducted limited excavations here.



4. Entrance to the building is usually enabled through a doorway on the eastern side (Bandiyān Dargaz, Torang Tepe, Shiyān), and sometimes from the west (Hājiābād at Dārābgerd) and also sometimes from the south (PD and B at the Takht-e Soleiman);
5. The door or doorways from the cruciform room usually lead into other anterooms;
6. In the larger examples, such as Bandiyān Dargaz and the Takht-e Soleiman, the division between the fire temple and external spaces is demarcated by a rectangular room to prevent direct access into the inner sanctum from outside. This room may take the form of a passageway in the case of Hājiābād;
7. The sacred hearth was probably located in the center of the cruciform room, such as at Bandiyān Dargaz and Mil-e Haram in the Republic of Turkmenistan (Kaim, 2001);
8. One of the side rooms functioned as a “temple to Ānāhitā” (such as the hypostyle hall at the Takht-e Soleiman, the hypostyle hall at Bandiyān Dargaz, and room number 114 in the Hājiābād complex).

Lastly, features characteristic of fire temples from the **late-Sasanian** period include:

1. These fire temples are also on an ordinal (intercardinal) alignment;
2. An *iwān* has been added as an architectural element of the building;
3. The ambulatory passageway feature of early Sasanian fire-temples had probably not been reinstated.
4. Late Sasanian fire temple building plans exhibit similarities with the Susa *Apadana* building and also the *chāhārtāgh* at Farāshband;
5. The building plan reverted from cruciform to closed form to *chāhārtāgh* form.



Bibliography

Akbarzādeh, D.

2006/1385, سنگ‌نیشته‌های کرتیر موبدان موبد [The Rock Inscriptions of Kartir, High Priest], Tehran, Pāzineh Publishing House, first edition.

Azarnoush, M.

1987, "Fire Temple and Anahita Temple", *Mesopotamia*, XXII: 391-401. (English)

1994, *The Sassanian Manor House at Hājiābād, Iran*, Monografie di Mesopotamia III,

Florance, Casa Editrice Le Lettere. (English)

1996/1375, «نگاهی دیگر به شاهپور دوم، اردشیر دوم، و شاهپور سوم» [“Another Look at Shāhpur II, Ardashir II and Shāhpur III”], in تاریخ و باستان‌شناسی [Archaeology and History Magazine], No. 19: 37-45.

1998/1377, «کاش کنگاور» "The Excavation of Kangāvar", translated by Fātemeh Karimi, مجله اثر [Artifact Magazine], No. 29-30: 18-55.

Bahār, M.

2007/1386, ادیان آسیایی [Asian Religions], Tehran, Cheshmeh Publishing House, sixth impression.

Bayāni, Sh.

2004/1383, شامگاه اشکانیان و بامداد ساسانیان translated as *The Evening of the Parthians and the Dawn of the Sasanians*, Tehran, University of Tehran Publishing House, second impression.

Bazl, F. M.

1968, "The Influence of the Moghan (Magian) Philosophy upon the Art and Culture", *Vth International Congress Iranian Art and Archaeology*, Publication of the Ministry of Culture and Arts, Tehran, Vol. 1: 222-238. (English)

Benveniste, É.

2004/1383, دین ایرانی بر پایه متن‌های معتبر یونانی [The Persian Religion, According to the Chief Greek Texts], translated into Persian by Bahmān Sarkārāti, Tehran, Ghatreh Publishing House, second impression.

Besenal, R.

2000/1379, فن-آوری تاق در خاور نزدیک کهن [Technologie de la voûte dans l'Orient ancien des origines à la fin de la période sasanide], translated by Seyyed Mohsen Habibi, Tehran, Iran Cultural Heritage Organization Publishing House, first impression.

Bianchi, U.

2006/1385, «مهر و مسئله یکتاپرستی ایرانی» [“Mithra and the Question of Iranian Monotheism”], in مهر در جهان باستان: مجموعه گزارش‌های دومین کنگره مهرشناسی [Mithra in the Ancient World: Proceedings of the Second Congress on Mithraism], translated by Morteza Sāghebfar, Tehran, Toos Publishing House, first impression, pp. 47-75.

Bier, L.

1982, "Sasanian Palaces in Perspective", *Archaeology*, Vol. 35, No. 1: 29-36. (English)

Bivar, A.D.H.

2005, "Mithraism: A Religion of the Ancient Medes", *Iranica Antiqua*, Vol. XL: 341-385. (English)



Borumand, S.J.

2002/1381, تخت جمشید پرستشگاه خورشیدگاه [Persepolis: Temple of the Sun], Tehran, Iran Cultural Heritage Organization [سازمان میراث فرهنگی کشور], first impression.

Boyce, M.

2005a/1384a, بررسی ادبیات مانوی [A Survey of Manichaean Literature], translated by Omid Behbahāni and Abulhasan Tahāmi, Tehran Bondahesh Publishing House, first impression.

2005b/1384b, «نقش مهر در دین زردشتی», [“On Mithra’s Part in Zoroastrianism”], translated by Ahmadrezā Ghāem Moghāmi, published in مهر در ایران و هند باستان [Mithra in Ancient Iran and India], ed. Bābak Alikhāni, Tehran, Ghoghonus Publishing House, first impression, pp. 101-142.

2005c/1384c, «میتره در ایزدکده مانوی», [“Mithra in the Manichaean Temple”], translated by Asgar Bahrāmi in مهر در ایران و هند باستان [Mithra in Ancient Iran and India], edited by Bābak Alikhāni, Tehran, Ghoghonus Publishing House, first impression, pp. 143-158.

2006/1385, زردشتیان (باورها و آداب دینی آنها), [Zoroastrians: Their Religious Beliefs and Practices], translated by Asgar Bahrāmi, Tehran, Ghoghonus Publishing House, seventh impression.

2007/1386, آیین زرتشت [The Religion of Zoroaster], translated by Abulhasan Tahāmi, Tehran, Negāh Publishing House, first impression.

Cook, J.M.

2007/1386, شاهنشاهی هخامنشی [The Persian (Achaemenid) Empire] translated by Morteżā Sāghebfar, Tehran, Ghoghonus Publishing House, second impression.

Cumont, F.

2007/1386, دین مهری [Les mystères de Mithra], translated by Ahmad Ājudāni, Tehran, Sāles Publishing House, first impression.

Duchesne-Guillemin, J.

2006/1385, واکنش غرب در برابر زرتشت [The Western Response to Zoroaster], translated by Teymour Ghāderi, Tehran, Amir Kabir Publishing House, second impression.

Dörner, F.K

2006/1385, «میتراس در کومماژن» [“Mithras in Kommagene”] in دین مهر در جهان باستان [The Religion of Mithra in the Ancient World] translated by Morteżā Sāghebfar, Tehran, Toos Publishing House, first impression, pp. 155-164.

Drijvers, H. J. W.

2006/1385, «مهر در الحضر» [“Mithra at Hatra?”], in مهر در جهان باستان [Mithra in the Ancient World], translated by Morteżā Sāghebfar, Tehran, Toos Publishing House.

Ghirshman, R.

2000/1379, بیسپور [Bishāpur], Vol. 1, translated by Asghar Karimi, Tehran, Sāzmān-e Meirās-e Farhangi-ye Keshvar Publishing House

Godard, A.

1992/1371, «آذرکده ها» [“Fire Temples”], in آثار ایران [Artifacts of Iran], translated by Abulhasan Sarvghad-Moghadam, Mashhad, Ostan-e Ghods-Razavi Publishing House, pp. 11-84.

Godard, A & et.al.

1996/1375, آثار ایران [Athar-e Iran: Collected research papers originally published by the Service Archéologique de l’Irān, between 1936-49, of which Godard was director], Vol.



1., translated by Abulhasan Sarvghad-Moghadam, Mashhad, Ostan-e Ghods-Razavi Publishing House, third impression.

Golkār,

1974/1353, ترسیم فنی نقشه چهارطاق بازه - هور [Technical Drawing of the Plan of the Bāzeh Hur Chahārtāgh], Organization for the Protection of Ancient Monuments of Iran, Khorasān Technical Office. (unpublished).

Goldman, B. & A. M. G. Little

1980, “The Beginning of Sasanian Painting and Dura Europos”, *Iranica Antiqua*, Vol. 15: 283-298. (English)

Gullini, G

1964, *Architettura Iranica dagli Achemenide ai Sasanide*, Turin, Einaudi. (Italian)

Hāmi, A.

1980/1359, مصالح ساختمانی [Construction Materials], location of publication not stated, Systemāform Publishing, third impression.

Herrmann, G.

1994/1373, تجدد حیات هنر و تمدن در ایران باستان [The Iranian Revival], translated by Mehrdād Vahidi, Tehran, Markaz-e Nashr-e Dāneshgāhi Publishing House, first impression.

Herrmann, G & Masson, V. M. & Kurbansakhatov, K.

1993, “The International Merv Project, Preliminary Report of the First Season (1992)”, *Iran*, XXXI: 39-62. (English)

1994, “The International Merv Project, Preliminary Report of the Second Season (1993)”, *Iran*, XXXII: 53-75. (English)

Homāyoun, Gh.

1975/1354, «فلسفه معماری صخره‌ای و تمرکز در روستای میمند کرمان» [“The Philosophy of Rock Architecture with a Focus on the Village of Meymand, Kermān”], in مجله فرهنگ معماری ایران [Architectural Culture of Iran Magazine], No. 3, pp. 65-78.

Hozhabri, A.

2005/1384, بررسی باستان‌شناختی شهرستان قصر شیرین [Archaeological Survey of the District of Qasr-e Shirin], archive of the Iran Cultural Heritage Organization’s Archaeological Research Institute. (unpublished)

Huff, D.

1975, “Sasanian Čahar Tāqs in Fars”, *Proceedings of the Third Annual Symposium on Archaeological Research in Iran, 2nd-7th Nov. 1974*, ed. F. Bagherzadeh, Tehran: 243-255. (English)

1987/1366, «گنبدها در معماری اسلامی» [“Domes in Islamic Architecture”], translated by Karāmatullah Afsar and Mohammad-Yusef Kiyāni, in معماری ایران دوره اسلامی [The Architecture of Iran in the Islamic Period], ed. Mohammad-Yusef Kiyāni, Tehran, Semat Publishing House, first impression, pp. 397-414.

1993, “Architecture Sassanide”, *Splendeur des Sassanides*, Bruxelles, Musées Royaux d’Art et d’Histoire : 45-61. (French)

Invernizzi, A.

2005, “The Citadel of Parthian Nisa”, *Miras*, Journal of the State Institute of Cultural Heritage of the Peoples of Turkmenistan, Vol. 2, No. 18: 136-140. (English)

Kaim, B.

2001, “Zarathushtrian Temple of Fire: Excavations in Turkmenistan”, Warsaw, Agade. (English)



Kāmbakhshfard, S.

1976/1355, «عملیات مرمت در معبد ناهید کنگاور» [“Restoration Activities in the Temple of Ānāhitā at Kangāvar”], in مجله فرهنگ معماری ایران [Architectural Culture of Iran Magazine], No. 4, pp. 51-76.

Kawami, T.S. & Becker, L. & Koestler, R.

1987, “Kuh-e Khwaja, Iran, and its Wall Paintings: The Records of Ernst Herzfeld”, *Metropolitan Museum Journal*, Vol. 22: 13–52. (English)

Khlopin, I.N.

1968, “On the Genesis of Fire Temples in Ancient Iran”, *Vth International Congress Iranian Art and Archaeology*, Publication of the Ministry of Culture and Arts, Tehran, Vol. 1: 276-281. (English)

Koch, H.

1998/1377, از زبان داریوش [Es kündet Dareios der König], translated by Parviz Rajabi, Tehran, Nashr-e Kārang Publishing House, third impression.

Norman Sharp, R.

2005/1384, فرمان‌های شاهنشاهان هخامنشی [The Inscriptions in Old Persian Cuneiform of the Achaemenian Emperors], Pāzineh Publishing House, second impression.

Naumann, R.

2003/1382, ویرانه‌های تخت سلیمان [Die Ruinen von Tacht-e Suleiman], translated by Farāmarz Najd Sami’ei, Tehran, Sāzmān-e Meirās-e Farhangi Publishing House, second impression.

Naumann, R. & Dietrich, H.

1972, «حفریهای تخت سلیمان» [“Excavations at Takht-e Suleiman”], translated by Farāmarz Najd Sami’ei, in مجله باستان‌شناسی و هنر ایران [Archaeology and Art of Iran Magazine], No. 10, pp. 24-62

Neyestāni, J. & Hātemiyān, M. J. & Musavi Kuhpar, S.R. & Hātam, Gh

2012/1391, «تحلیل چگونگی استمرار معماری چهارطاقی از دوره ساسانی به اسلامی در ایران با تکیه بر [Historical Sociology], fourth period of publication, No. 2, (Autumn 1391), Tarbiyat Modares University, pp. 173-191.

Nyberg, H.S.

1980/1359, دین‌های ایران باستان [Die Religionen des alten Iran], translated by Seifoldin Najmābādi, Tehran, Iranian Center for the Study of Cultures, first impression.

Olmstead, A. T.

1978/2537, تاریخ شاهنشاهی هخامنشی [The History of the Achaemenid Empire], translated by Mohammad Moghadam, Tehran Amir Kabir Publishing House, second impression.

Von der, O & Henning, H. & Naumann, R.

2003/1382, تخت سلیمان [Tascht-e Sulaiman], translated by Farāmarz Najd Sami’ei, Tehran, Sāzmān-e Meirās-e Farhangi Publishing House, second impression.

Pilipko, V. N.

2005, “The Painting of Nisa. A New Fragment with the Image of Riders”, *Miras*, State Institute of Cultural Heritage of the Peoples of Turkmenistan, Vol. 1, No. 17: 133-138. (English)



Pirniyā, M.K.

2003/1382, سبک‌شناسی معماری ایرانی، تدوین غلامحسین معاریان [Iranian Architectural Styles: Compiled by Gholamhossein Memāriyān], Tehran, Pazhuhandeh-Memāri Publishing House

Pope, A.U.

1994/1373, معماری ایران [Persian Architecture], translated by Gholamhossein Sadri Afshār, Tehran, Farhangiyān Publishing House, third impression.

Rahbar, M.

1997/1376, گزارش فصل ششم بندگان درگز [Report of the Sixth Season at Bandiyān Dargaz], archive of the Iran Cultural Heritage Organization Archaeological Research Institute. (unpublished)

Razā, H.

2006a/1385b, وندیداد [The Vendidād] two volumes, Tehran, Bahjat Publishing House, first impression.

2006b/1385b, جشن‌های آتش [Fire Festivals], Bahjat Publishing House, fourth impression.

Reuter, O.

1938, “Sasanian Architecture”, *A Survey of Persian Art*, Vol. 6, ed. A. Pope, Sasanian Art Series, Vol.1: 493-578. (English)

Rezāei, A.

2002/1381, اصل و نسب و دین‌های ایرانیان باستان [The Ancestry and Religions of Ancient Iranians], Tehran, Dar Publishing House, sixth impression.

Rezvāni, H.

2005/1384, گزارش فصل اول حفاری آتشکده شیان [Report of the First Season of Excavations of the Fire Temple at Shiyān], archive of the Iran Cultural Heritage Organization Archaeological Research Institute. (unpublished)

Roaf, M.

1998, “Persopolitian Echoes in Sasanian Architecture,” *The Art and Archaeology of Ancient Persia: New Light on the Parthian and Sasanian Empires*, eds. Vesta Sarkhosh Curtis, Robert Hillenbrand and J. M. Rogers, London, British Institute of Persian Studies. (English)

2002/1381, نقش‌برجسته و حجاران تخت جمشید [Sculptures and Sculptors at Persepolis], translated by Houshang Gheyāsinezhād, Tehran, Ganjineh-ye Honar Publishing House, first impression.

Russell, J.

1998/1377, «رازوری و دانش‌نهانی در آیین زرتشت» [“On Mysticism and Esotericism Among the Zoroastrians”], in رازوری در آیین زرتشت (عرفان زرتشتی) [Mysticism in the Religion of Zoroaster: Zoroastrian Spiritualism], translated by Shivā Kāviyāni, Tehran, Ghoghonus Publishing House, first impression, pp. 51-104.

Safar, F. & Mostafā, A.

1997/1376, هترا (حضرا) شهر خورشید [Hatra (Hadrā): City of the Sun God], translated by Nāder Karimiyān Sardashti, Tehran, Iran Cultural Heritage Organization, first impression.

Said Ahmed, S.

1992, “Hatra”, *Archaeology*, Vol. 25, No. 2: 103-111. (English)



Sarkhosh Curtis, V.

2000, "Parthian Culture and Costume", *Mesopotamia and Iran in the Parthian and Sasanian Periods*, ed. J. Curtis, British Museum Press: 23-34. (English)

Shahidi-Māzandarāni, H.

1994/1373, «یزگرد یکم و داستان کشته شدن او» ["Yazdegerd I and the Tale of His Murder"], *مجله بررسیهای تاریخی [Historical Studies Magazine]*, No. 1: 15-31.

Shaked, Sh.

1998/1377, «گرایش‌های نهانی [رازورانه] در آیین زرتشت» ["Esoteric Trends in Zoroastrianism"], in *رازوری در آیین زرتشت (عرفان زرتشتی) [Mysticism in the Religion of Zoroaster: Zoroastrian Gnosticism]*, translated by Shivā Kāveyāni, Tehran, Ghoghonus Publishing House, first impression, pp. 105-148.

Schippmann, K.

1968, "The Development of the Iranian Fire Temple", *Vth International Congress Iranian Art and Archaeology*, Special Publication of the Ministry of Culture and Arts, Tehran, Vol. 1: 353-362. (English)

2004/1384, *مبانی تاریخ ساسانیان [Sources for the History of the Sasanians]*, translated by Kikāvus Jahāndāri, Farzān Publishing House, first impression.

Schwertheim, E.

1387/2008, *گسترش یک آیین ایرانی در اروپا [The Spread of an Iranian Religion in Europe]*, translated by Nāderghali Derakhshāni, Tehran, Sāles Publishing House, first impression.

Stronach, D.

2000/1379, گزارشی از کاوش‌های انجام‌شده توسط مؤسسه مطالعات ایرانی بریتانیا (از سال ۱۹۶۱ تا ۱۹۶۳), *[Pasargadae: A Report on the Excavations Conducted by the British Institute of Persian Studies from 1961-63]*, translated by Hamid Khatib Shahidi, Tehran, Iran Cultural Heritage Organization Publishing House.

Stronach, D. & Michael, R.

2007, *Nush-i Jan I: The Major Buildings of the Median Settlement*, London, British Institute of Persian Studies; and Belgium, Peeters. (English)

al Tabari, Abu Ja`far Muhammad b. Jarir b. Yazid

1972/1951, *تاریخ الرسل و الملوك [Tārikh alRusul wal Muluk (Tabari's History)]*, translated from Arabic to Persian by Sādegh Neshāt, Tehran, Bongāh-e Tarjomeh o Nashr-e Kitāb Publishing House, first impression.

Tourovets, A.

2005, "Some Reflexions about the Relation between the Architecture of Northwestern Iran and Urartu: The Layout of the Central Temple of Nush-I Djan", *Iranica Antiqua*, Vol. 40: 359-370. (English)

Vanden Bergh, L.

2000/1379, *باستان-شناسی ایران باستان [L'Archéologie de l'Iran ancien]*, translated by Isā Behnām, Tehran, University of Tehran Publishing House, second impression.

Wagner, M.

2006, "Podia with Stucco Decoration of Square Metopes from the Temple of Fire at Mele Heiran", *Miras*, Vol.1 No. 21, State Institute of Cultural Heritage of the Peoples of Turkmenistan: 133-137. (English)

Wiesehöfer, J.

2004/1383, *ایران باستان [Ancient Persia]*, translated by Morteza Sāghebfar, Tehran, Ghoghonus Publishing House, sixth impression.



Wilkinson, Ch. K.

1973, *Nishapur: Pottery of the Early Islamic Period*, Metropolitan Museum of Art, New York. (English)

Wright, G. R. H.

1968, "Square Temples, East and West", *Vth International Congress Iranian Art and Archaeology*, Publication of the Ministry of Culture and Arts, Tehran Vol. 1: 380-388. (English)

Vandae, M & Tajbakhsh, R & Maghsoudi, GH,R.

2013 Sassanid fire temple Discovered in Ardašīr Khore, Pars, *Journal of American Science*, pp.105-114.

Zarrinkoob, A. & Zarrinkoob, R.

2006/1385, تاریخ سیاسی ساسانیان (۴): [The History of Ancient Iran (4): *Political History of the Sasanians*], Tehran, Semat Publishing House, third impression.

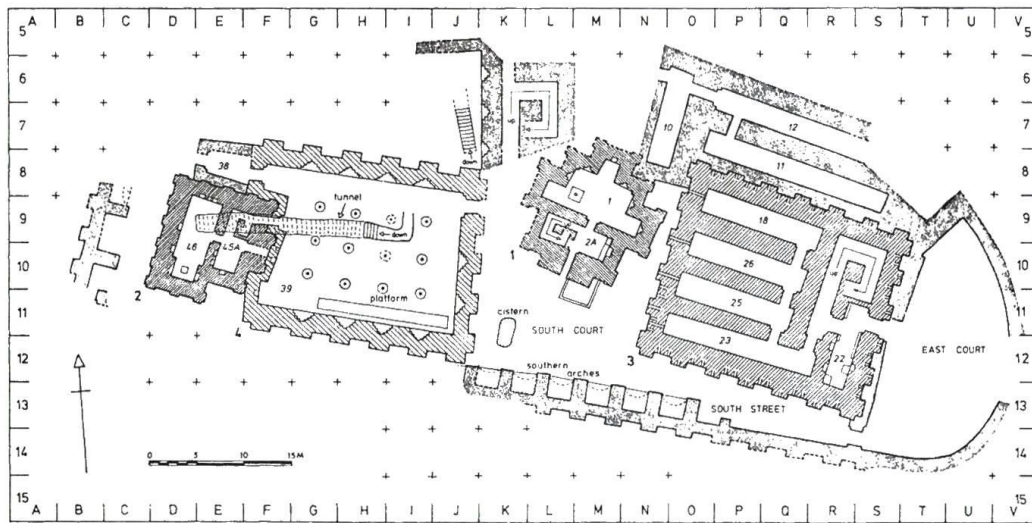
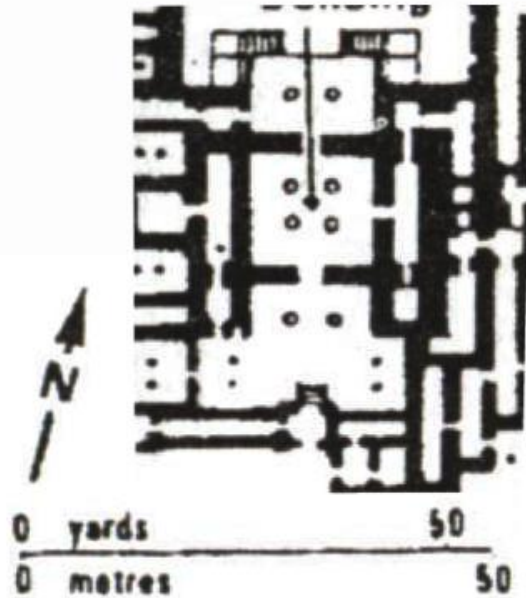


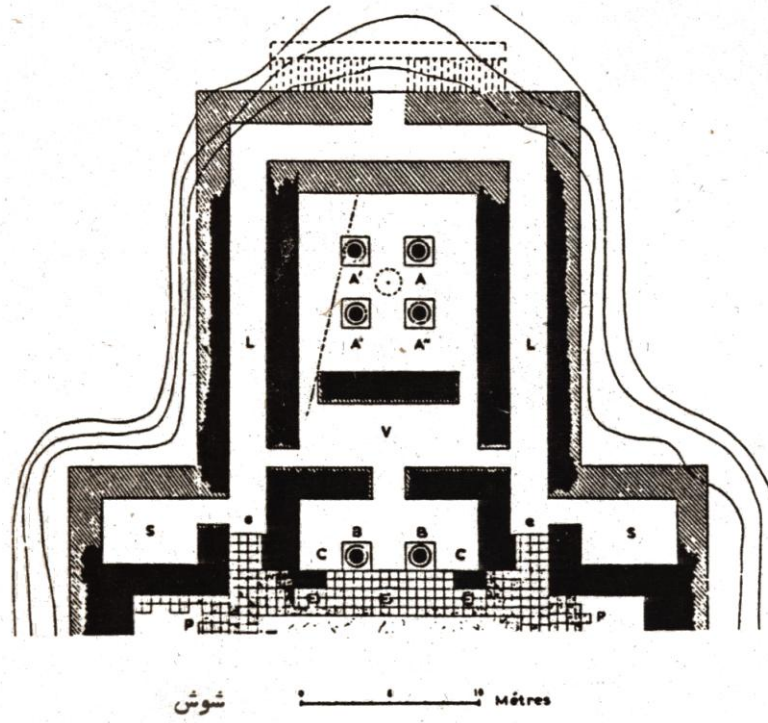
Fig. 1. Tepe Nush-i Jan, Plan of the site before the blocking and squatter occupation. 1. Central Temple. 2. Old Western Building (Western Temple). 3. Fort. 4. Columned Hall. Scale 1 : 500. The relative chronology of the buildings is not yet certain, but the Fort was clearly built after the Central Temple, and the Columned Hall after the Old Western Building. (N.B. Rooms below ramps and air vents are not shown).

نوش جان نقشه مجموعه (مختص الساسانیان در وقت ۱۹۷۸)

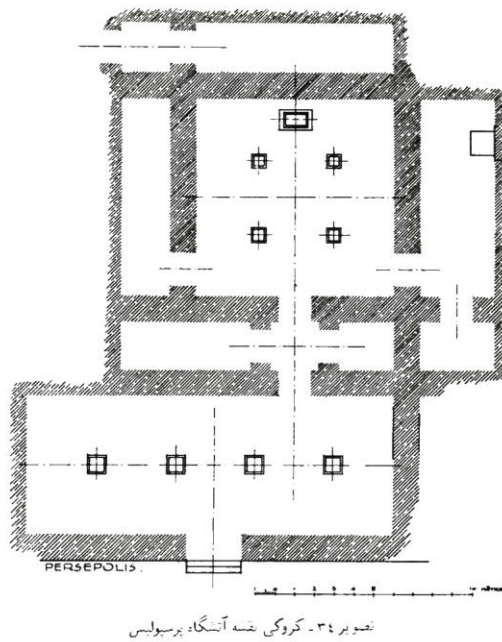
Plan 1. Nush-I Jān Tepe Complex. (Source: Roland Besenval, 2000/1379: 395)



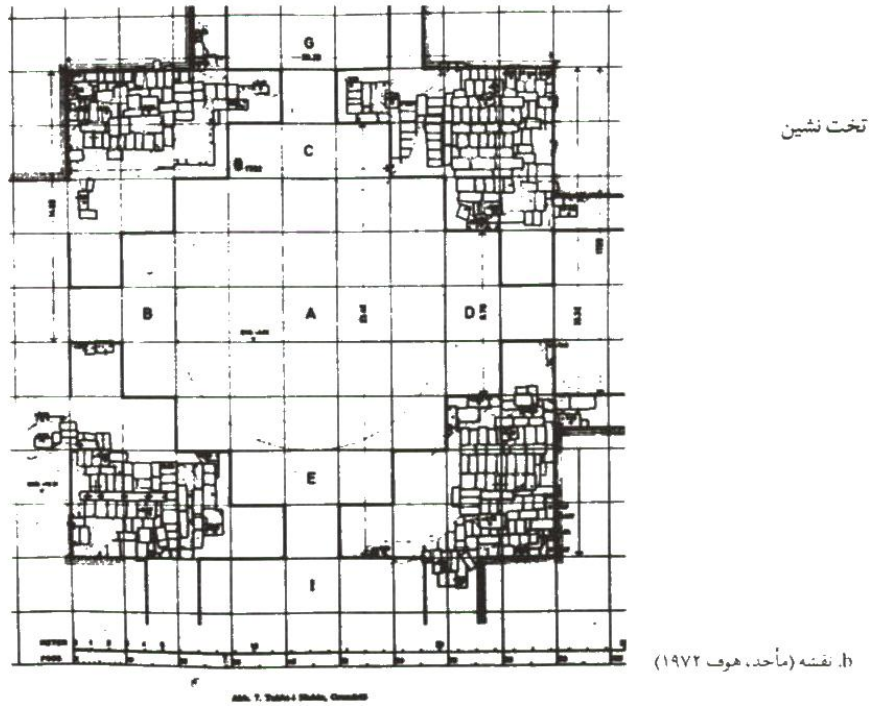
Plan 2: The Tripylon or Council Hall at Persepolis. (Source: Besenval, *ibid*: 402)



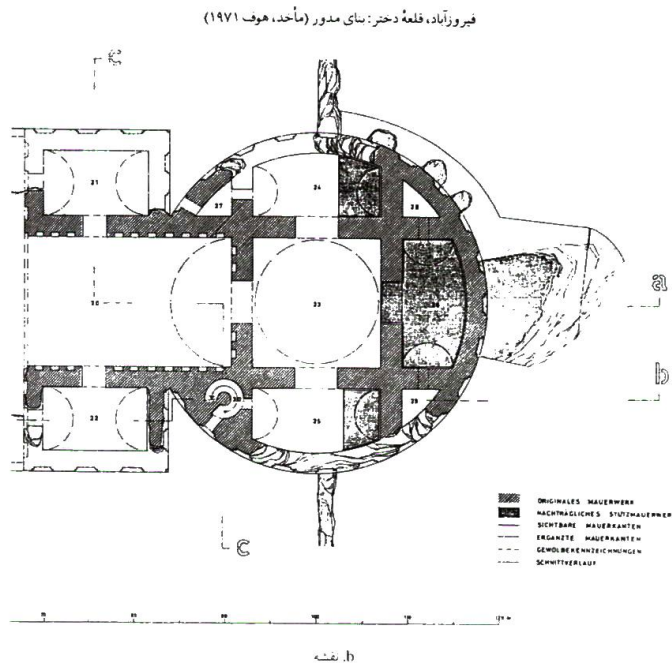
Plan 3: The Susa Apādānā (Source: Huff, 1987/1366: 406)



Plan 4: The Pārsēh Fire Temple. (Source: Godard, 1992: 66)



Plan 5: The Audience Hall at Firuzābād. (Source: Benseval, 2000/1379: 435)

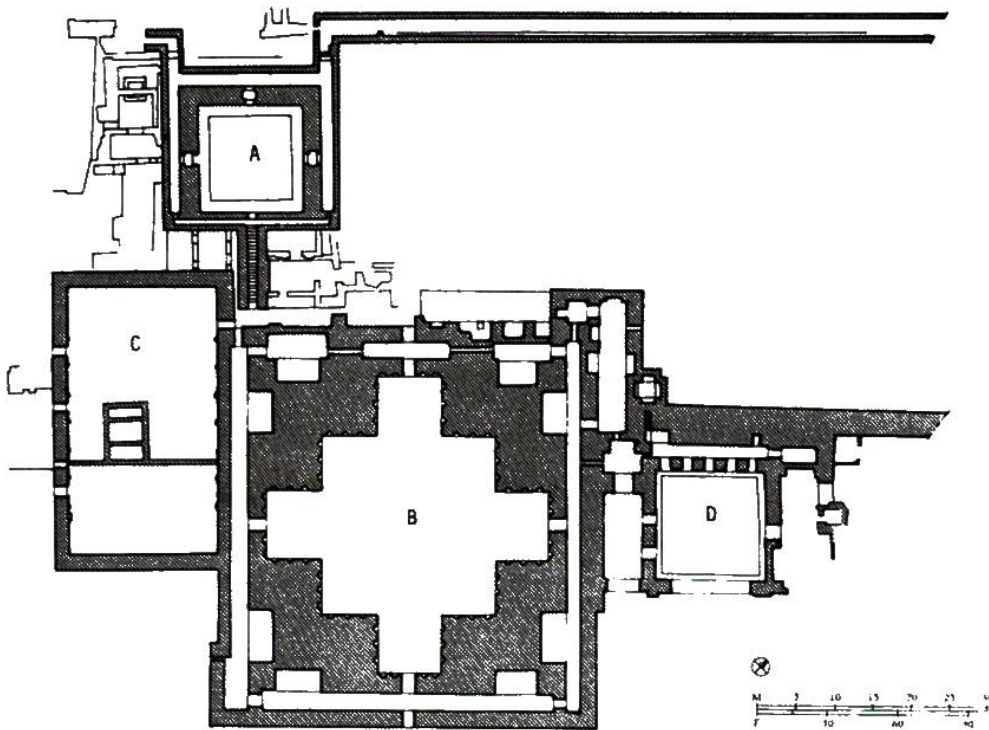


Plan 6: The Ghaleh Firuzābād. (Source: Benseval ibid: 434)



a. نقشه (مأخذ، هوف ۱۹۷۴)

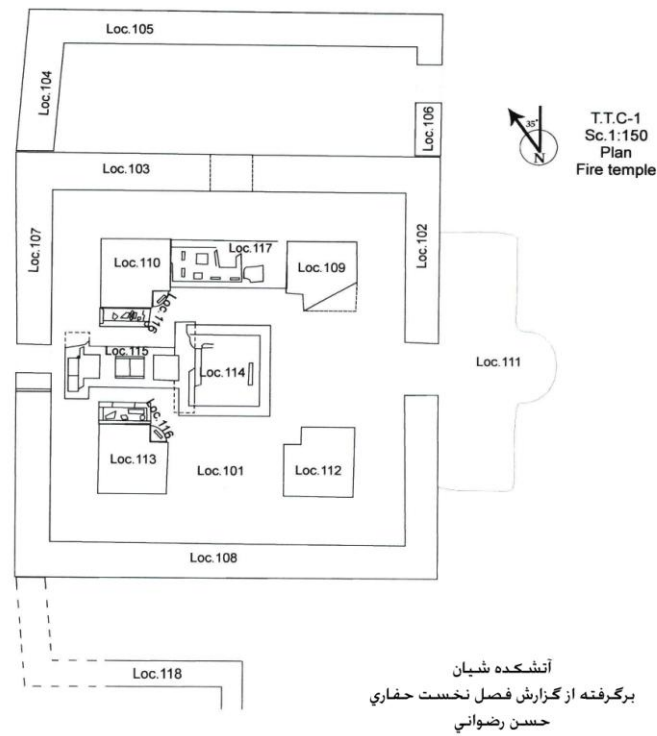
Plan 7: The Firuzābād Palace. (Source: Benseval, *ibid*: 430)



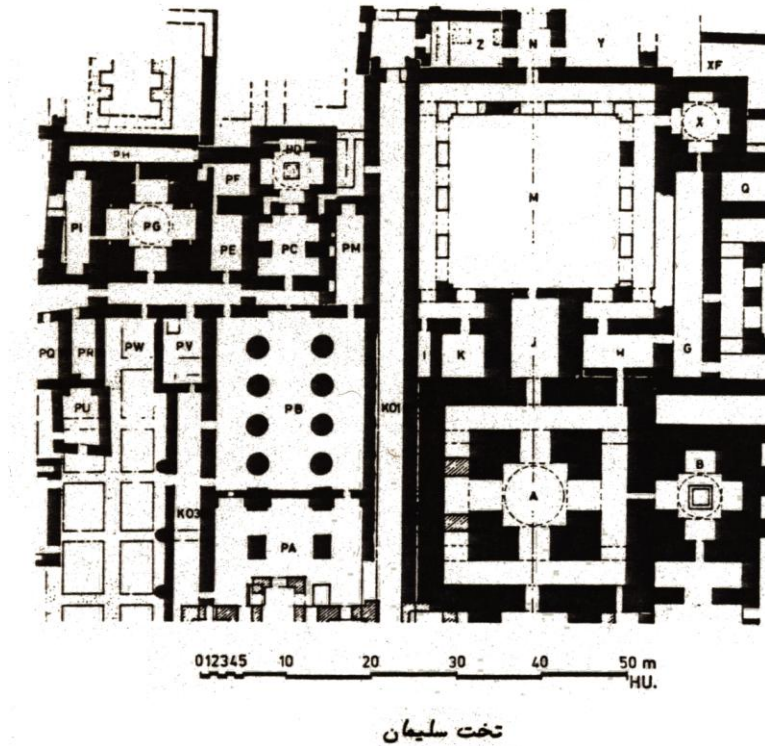
بیشاپور

a. نقشه «کاخ» (مأخذ، گولسی ۱۹۶۴)

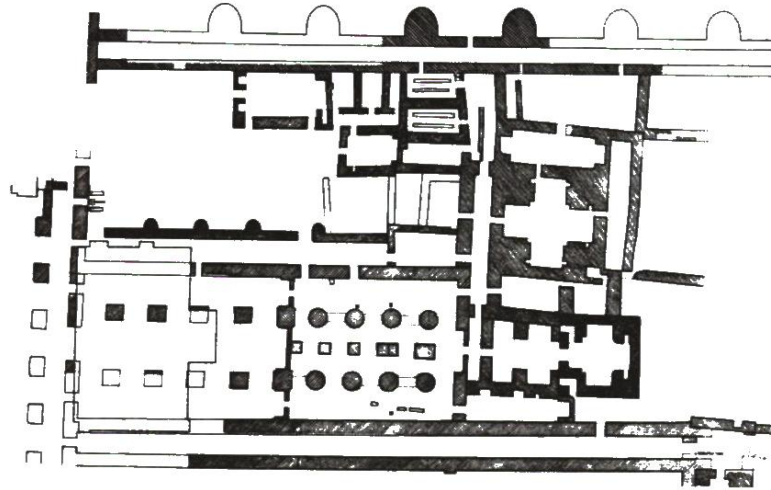
Plan 8: Hall and Temple of Ānāhitā at Bishāpur. (Source: Benseval, *ibid*: 430)



Plan 9: The Shiyān Fire Temple, Islāmābād-e Gharb. (Source: Rezvāni, 2005/1384)



Plan 10: Takht-e Soleimān. (Source: Huff, 1987/1366: 406)

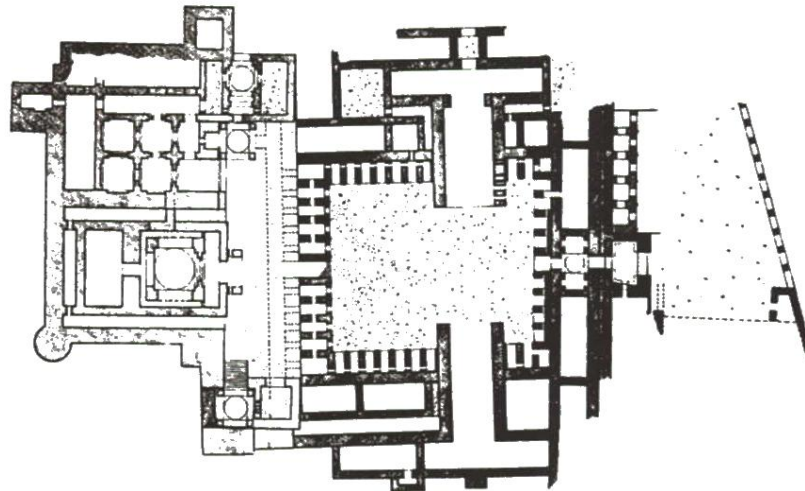


۸. آتشکده، بخش غربی: نقشه

تخت سلیمان
(مأخذ، بومان ۱۹۷۷)

Plan 11: The Hypostyle Hall at Takht-e Soleimān. (Source: Besenval, 2000/1379: 451)

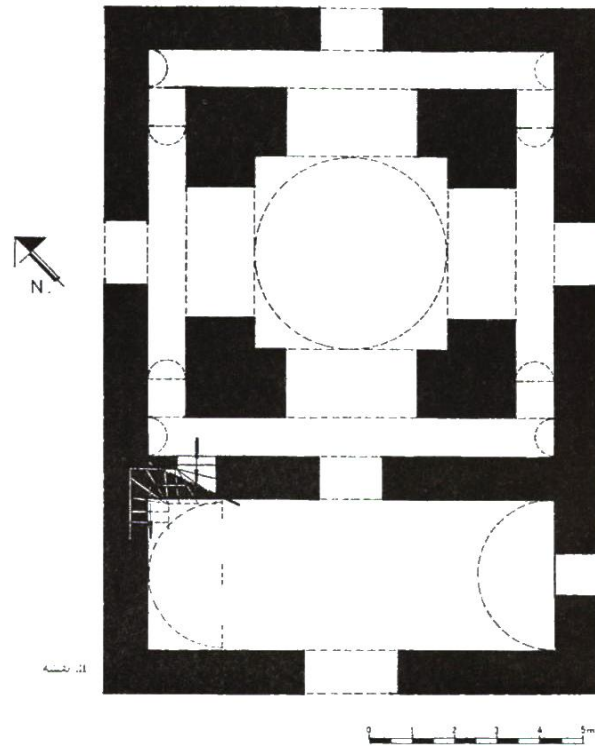
Pl.205



۸. نقشه پیشنهادی برای دوره ساسانی

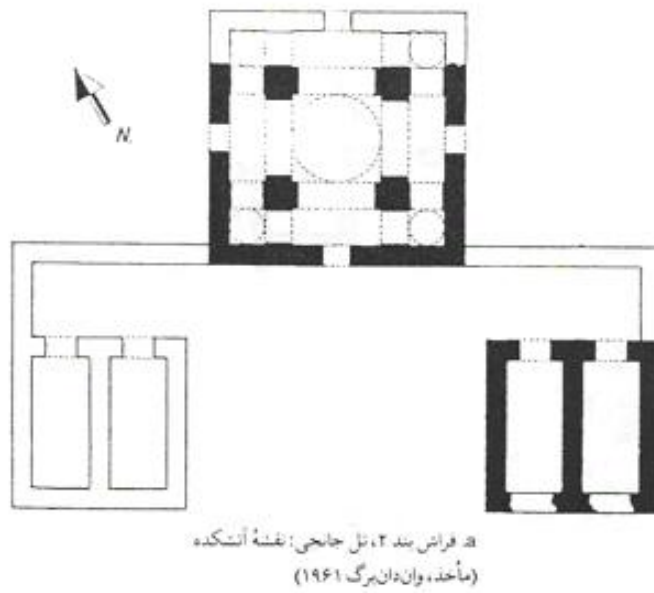
کوه خواجه: خواجه شهر
(مأخذ، گولیبی ۱۹۶۴)

Plan 12: The Kuh-e Khājah, Sistān. (Source: Besenval, 2000/1379: 452)



نگار: چهارتاق
(مأخذ، وان دان برگ ۱۹۶۵)

Plan 13: The Negār Chāhārtāgh. (Source: Besenval, 2000/1379: 458)

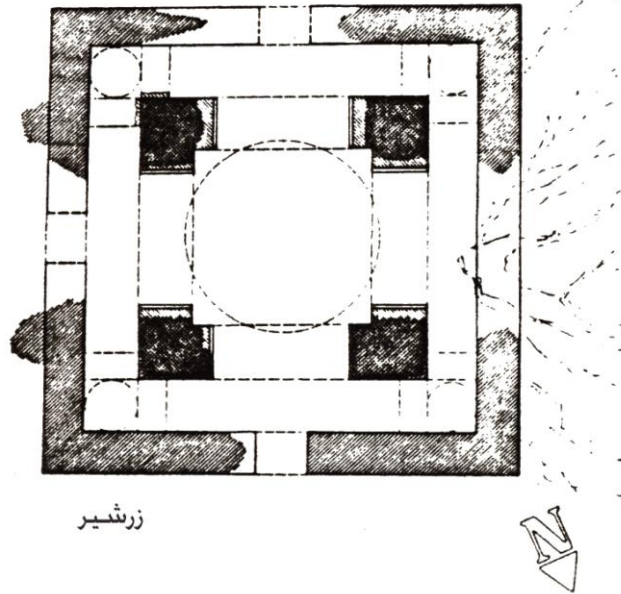


فرایش بند، ۲، نل جاجی، نقشه آنسکده
(مأخذ، وان دان برگ ۱۹۶۱)

Plan 14: Farāshband. (Source: Besenval, 2000/1379: 454)

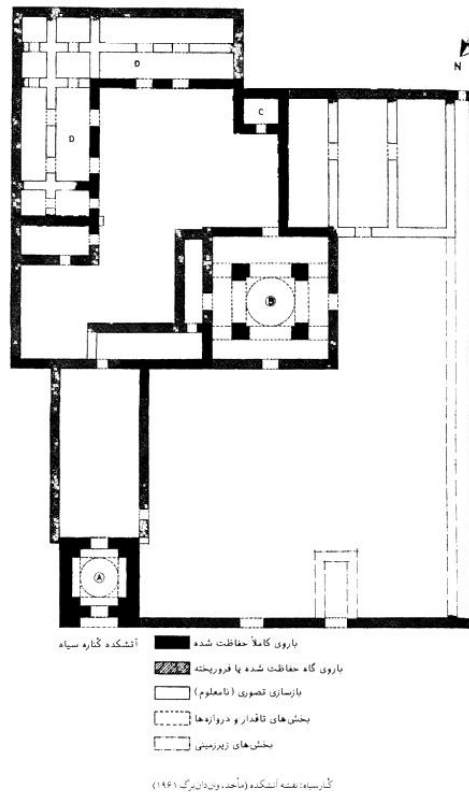


1:100

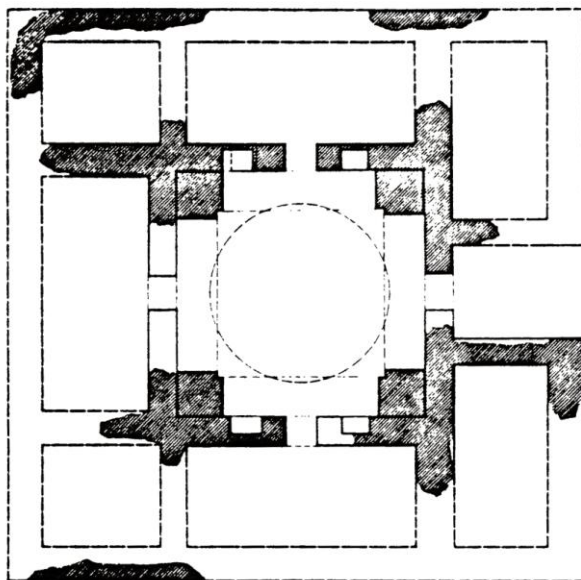


Plan 15: The Zarshir Chāhārtāgh. (Source: Huff 1987/1366: 408)

Pl.211



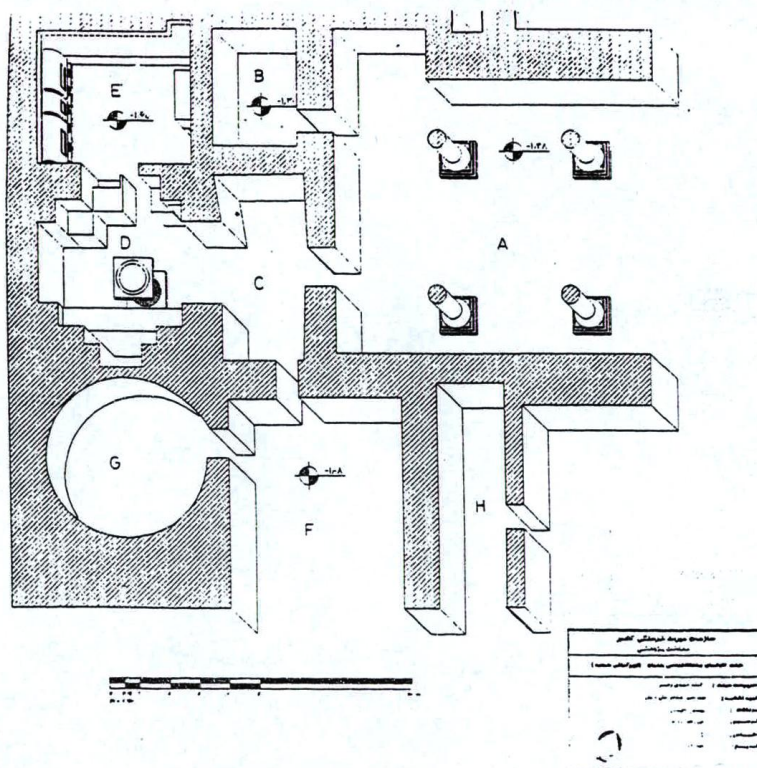
Plan 16: Konār Siyāh Chāhāhtāgh. (Source: Besenval, 2000/1379: 453)



گرگان ، تورنگ تپه



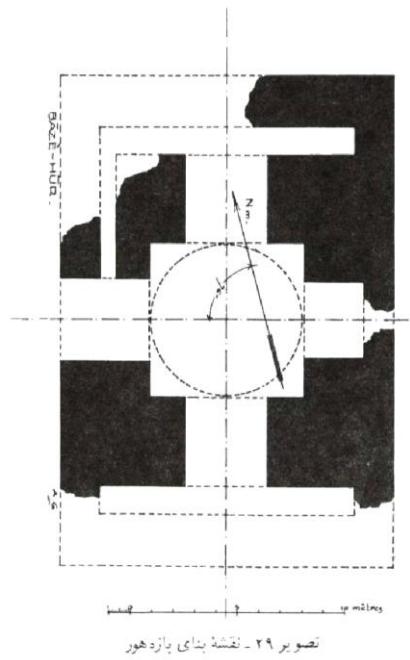
Plan 17: Turang Tepe, Gorgān. (Source: Huff 1987/1366: 407)



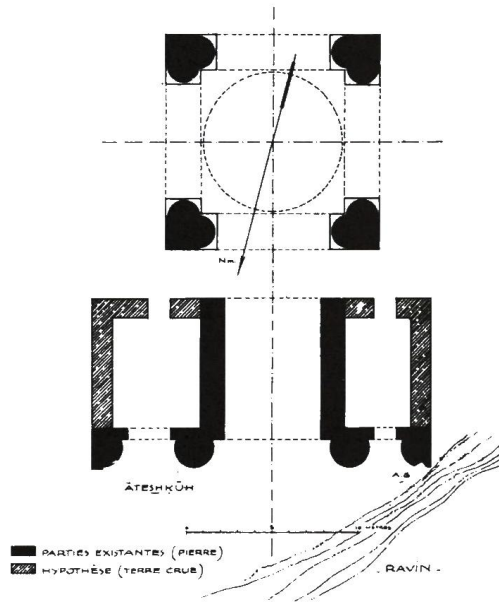
Plan 18: Bandiyān Dargaz. (Source: Rahbar, 1997/1376)



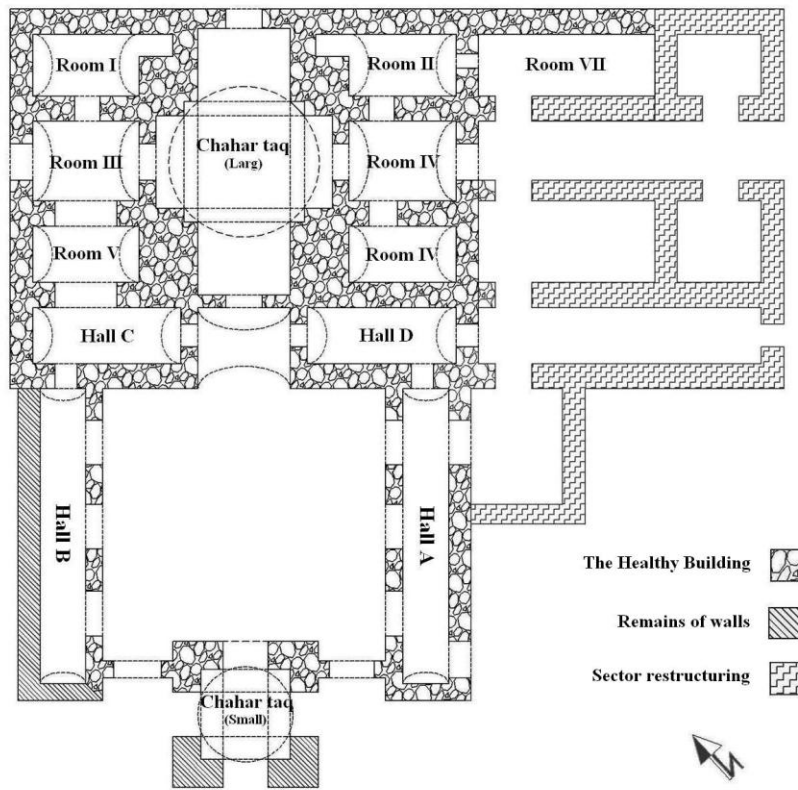
Plan 19: Hājiābād Mansion, Dārābgerd. (Source: Āzarnoush, 1994)



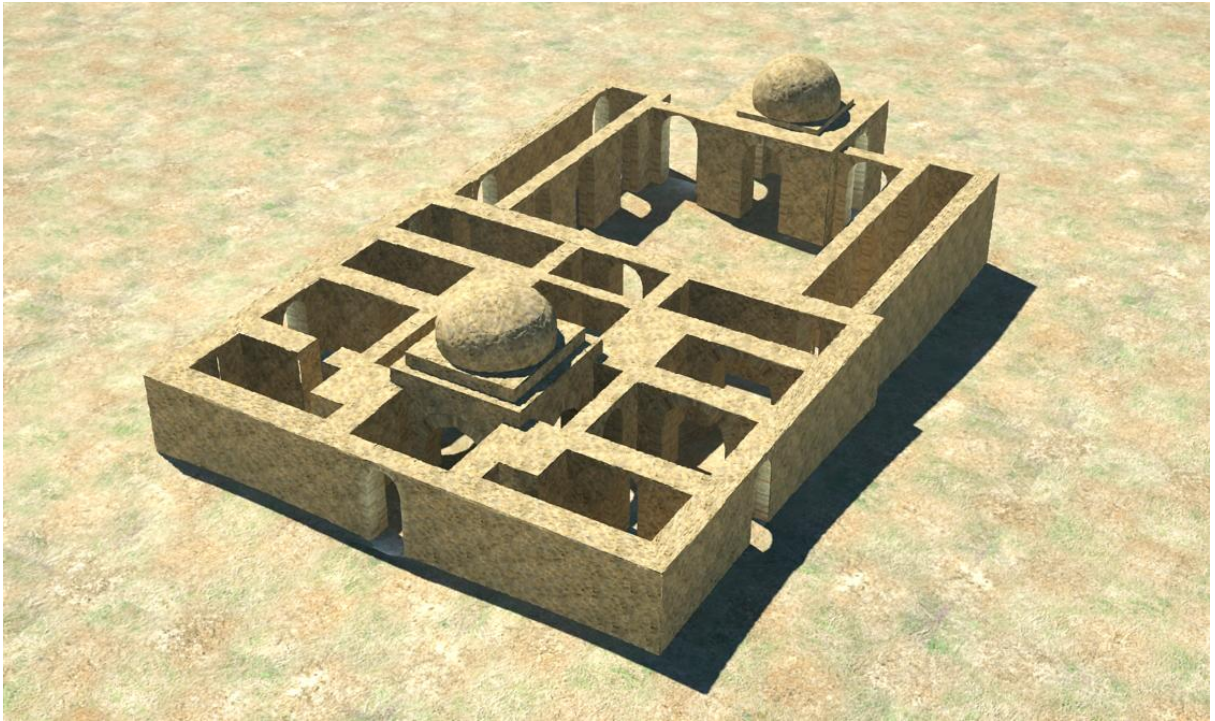
Plan 20: The Bāzeh Hur Chāhārtāgh. (Source: Godard et.al,1996/1375 :61)



Plan 21: Ātashkuh Chāhārtāgh, Mahalāt. (Source: Ibid: 66.)

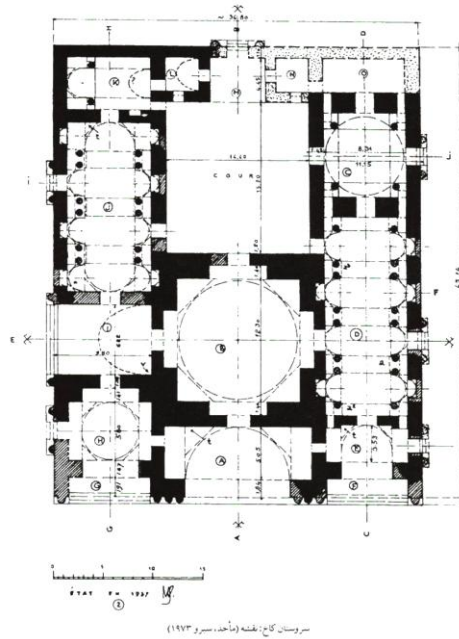


Plan 22a: The Ruhni Chāhārtāgh (Vandae, 2013: 108)

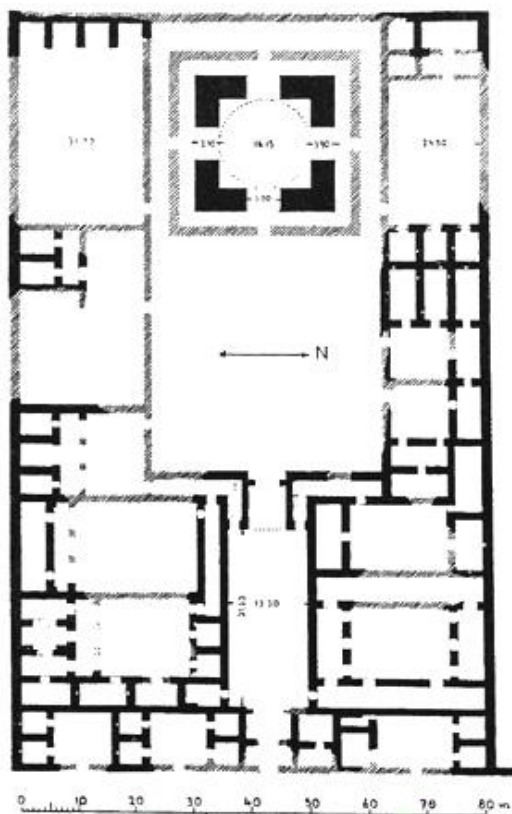


Plan 22b: Three-dimensional The Runi Chāhārtāgh, reconstruction of the northern entrance view(Ibid:111)

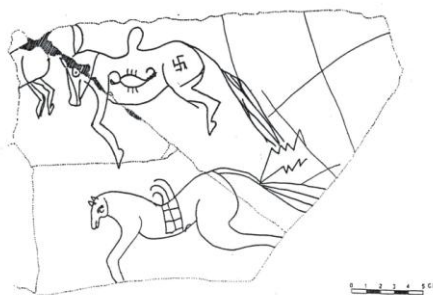
Pl.195



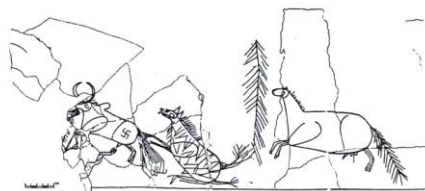
Plan 23: Sarvestān. (Source: Benseval, 2000/1379: 437)



Plan 24: Chārghāpi. (Source: Benseval, 2000/1379: 441)

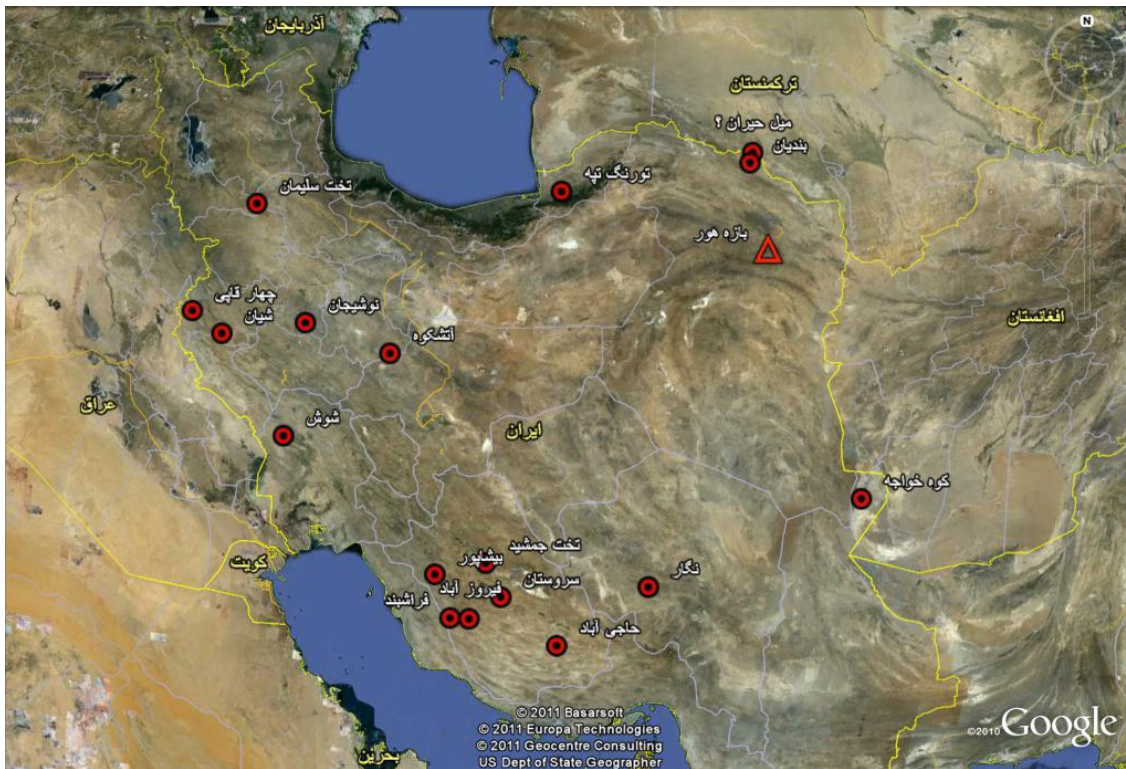


طرح شماره ۱۱۱: نقاشی سوار و اسب در سطح استخوان [۱۱۱] - مغرب، اسیزین قلعه



طرح شماره ۱۱۱: صحنه ای از تیر، چرخ و اسب در حوض استخوان [۱۱۱] - مغرب، اسیزین قلعه

Image 1. Designs etched into the plaster walls of Bandiyān Dargaz
(Source: Rahbar, 1997/1376)



Map 1: Distribution of chāhārtāghs referenced in this paper. (Source: Google Maps)