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Characteristics and Style of Elymais Religious Architecture Based on the Excavations at Berdanshande, Sarmsajd and Kal-Chendar-Shami

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Abstract

Historical-religious research and studies of ancient Iran are deeply dependent on philological research and studies, and leave many questions still to be resolved. Accordingly, research involving sacred architecture in this region has considerable value, even if it raises new questions about the interpretation of many structures for which religious functions have been proposed. A lack of comprehensive archaeological documentation constitutes the main obstacle to knowledge of the sacred architecture of Iran, and if it is correct to say that the evolution of religious ideology and religious practices as attested by written sources surely must have influenced this architecture, only a careful and thorough analysis of the monuments will clarify many problems related to their function. The mountain chain of north-east Khuzestan is considered as the homeland of the Elymaeans, people led by a political entity that repeatedly claimed independence from the great statal formations of the Seleucids and Arsacids, and intermittently succeeded in establishing independent forms of government in the region. Although the highlands were difficult to exploit, this area became the place of settlements, urban centers and religious complexes displaying monumental architecture. Thanks to archaeological excavations so far conducted, we know that mountainous sanctuaries were located in the areas of Masjid Suleiman and the plain of Izeh, in sites such as Bardnshande, Sarmsajd and Kal Chandare (Shami). The examination of architectural features show that all these complexes belong to the same building traditions. This research focuses on the characteristics of Elymaean religious architecture with the aim to make cross-comparisons with other architectural complexes in a diachronic perspective and to enlighten trends that can be ascribed to processes of decision- and policy-making in a comparative environment. Data are collected and analyzed thanks to published excavation reports and previous literature (of historical and archaeological type). The result of this study is that it allows us to get to know the Elymaean architecture, which includes: terrace building, stairs, sacrificial platforms, pillared porches, square halls, courtyard architectures, and rectangular rooms, side rooms with separate entrances and Column and column head. These features appear to have been created thanks to the combination of formulae of local (Mesopotamian and Elamite) and global (Hellenistic) types.

Keywords: Religious Architecture, Elymais, Berdanshande, Sarmsajd, Kal Chendar Shami.



Introduction

Architecture in general, can be considered a part of the culture that reflects needs and material response to requirements such as security, storage, work and food provision, rest and sleep, communities, religion, government, etc. In addition to responding to the mentioned requirements the shape and structure of a building, the geographical location of a building, its accessibility, or its impassability, reveal the individual-ethnic and religious taste of a group.

The ritual architecture of a society is the way of telling parts of their religion, ritual, and religious beliefs. People's religious buildings can perform both behaviors related to religion and religious customs at the levels of rulers, priests, elites, merchants, and people with high social status, as well as the behaviors of individuals and commons.

The most important and first function of a building is organizing space. The created building and spaces in them actually guide people in their behavior and mutual relations with each other. Customs, tradition, and religion can restrict a place from a social point of view; Therefore, the structure of a building, its degree of accessibility, its size, etc, reveal hidden behaviors behind rules, customs, tradition, and religion.

Investigating the religious architecture of the Elymaeans and recognizing the architectural features such as symmetry or relative asymmetry, distance, dimensions, and shapes of space is helpful in the analysis of their remaining architecture and ultimately leads to a better understanding of their religion and religious beliefs.

The most important religious structures of Elymaeans have been identified in the three areas of Bershandeh, Sar Masjid, and Khol Chandar Shami, which this research tries to determine by relying on archaeological information and research to answer questions based on the archaeological findings of Elymais that what are the main features of Elymais architecture? And what architectural styles do these elements follow? The investigation and autopsy of the architecture of these three known religious sites have been done and comparing these sites with the pre-Elymais monument and the concurrent governments, to know the features of Elymaeans and their characteristics will be discussed.

Research method: This research is fundamental in Quiddity. And the method of collecting data is mainly based on the library method and documents that the authors collected information based on archaeological events and archaeological books and articles related to the subject.



Research background

The beginning of Elymais's research date back to the first half of the nineteenth century. When orientalists like layard, Debod, Hinz, Vanden Burg, schippmann identify and introduce khong azhdar and tang-e botan shimbar, tang-e sarvak, yaraliyand and kamalyand, bard-e but tina, Taraz and kol zarm relief however the research on the religious architecture of the Elymeans begins with sir marc Aurel stein excavations in the shami region, whose short report of his excavations in Ancient western Iran tracks was published in 1940 and then Girshman was published bard-e Neshande and Sarmasjed excavation reports in 1976. The systematic survey and excavation of the Kalchenar Shami site by the joint archeological delegation of Iran and Italy, under the supervision of Mehr Kian and Messina, began in 2013 and is still ongoing. One of the most important academic research is the senior thesis of David Saliris, which introduces the religious architecture of the Elymais, including monuments and basreliefs, as well as Abbas Rezaeinia, also performed Ashrah under the title of Parthian religious architecture in Khuzestan, relying on two buildings of Bard-e Neshande and the Sarmasjed.

Introduction of research Sites

Bard-e Neshande: the site is located at Masjed Soleyman, Khuzestan province, and 138 km from Ahvaz. It was excavated at three seasons between 1964 and 1967 by a French delegation headed by Girshman (Fig. 1). This complex is about 700 meters wide and 250 meters long. Girshman divides the complex into three parts: the palace, the Soffe complex, the place of worship, and an urban or administrative part, and considers the earliest part of the complex to belong to the Achaemenid period and considers it related to a Persian tribe. The prayer complex is made of two rows, which are named upper and lower rows.

Sarmasjed: this temple complex is located 100 km southeast of the ancient city of Shush and 150 km northeast of Ahvaz, which was excavated in 1948, 1967 to 1972 by a French delegation headed by Girshman (Fig. 1). The site consists of a series of stone structures that are built on the low slope of the mountain and next to the doors. In the first stage, the sides of the soffe have created a trapezoid shape, which resembles Bard-e Neshandeh, one side of which is connected to the mountain in the west and southwest. In the next three stages, Soffe expands to the North-northwest, and in the fifth stage, the western part of Soffe is added to the initial complex, on which the temples known as the Great Temple and the Temple of Herakles were built (Girshman, 1976: 62).

Kalchenar Shami: Kalchenar Shami temple site is located 34 km northwest of Izeh City in Khuzestan province (Fig. 1). This site was excavated for a week under the supervision of Marc Aurel Stein after the accidental discovery of a Shami bronze statue by the residents, which led to the identification of a rectangular building with a layer of ash, the entrance to the building was created in the south wall, and a brick platform were located in the center of the building (Stein, 1940: 149). Years later, the Iran-Italy joint delegation headed by Mehr Kian-Messina investigated and excavated this site. The discovery of the remains of 3 new soffes and huge collections of religious architecture and burial architecture is one of their achievements on this site (Mehrkian, 2014: 1).



Characteristics of religious architecture of Elymeans

Stone is considered as the main material used in architecture influenced by the mountainous biome which stables the stone soffe on infrastructure. The scrutiny of Bard-e Neshande, Sarmasjed, and Kalchenar Shami Sites reveals other features, which include the use of the Buttress construction technique, stairs construction, pillared porches, and the use of courtyard architecture, central hall, side chambers, sacrificial platforms and chambers with separate entrance from the main building.

Artificial Soffe: The most important attribute of Elymais religious architecture is the creation of buildings on high ground. Bard-e Neshande site and other buildings were constructed on two Soffe, which have changed in different periods (Girshman, 1976: 26-36). Excavation at the Sarmasjed site also led to the discovery of soffe in which the great temple (Athena Hips) and the Temple of Hercules are located. Stein refers to a soffe that

◀ Fig. 1: The location of the three sites of Bard-e Neshande, Sarmasjed, and Kalchenar Shami in Khuzestan (Ghirshman, 1976; Mehr Kian-Messina, 1391).

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consists of crushed stones in Kalchenar Shami. In the investigation of the joint delegation of Iran and Italy, the remains of 3 new Soffes were identified (Fig. 2), (Mehr Kian & Messina, 2019: 275). Making artificial height for the construction of a religious building is observed in other examples attributed to Elymais such as Bardi Andika and Babak Castle (Sardari, et al., 2014: 66).



Fig. 2: Soffe making in Elymais religious sites 1. Kalchenar Shami (photo by: Mehr Kian and Messina, 1393) 2. Sarmasjed, 3. Bard-e Neshande, 4. Bardi Castle (Authors, 2022). ►

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Buttress: Buttress is a structure that prevents the drift of the building. This feature is created sporadic along one wall in the Elymais Architecture. In Bard-e neshande the building façade has a buttress on three free sides of the soffe which besides the strength, it adds the beauty of the façade. The northwestern face has seven rectangular buttresses, the southwestern face has eight buttresses and its northeastern face has nine buttresses (Girshman, 1976: 61). The walls of Sarmasjed soffe are also composed of regular recessed and raised frames just like the soffe of Bard-e Neshande (Fig. 5) (Girshman, 1976: 61). The façade of the walls of Kalchenar Shami has been destroyed due to the destruction of the indigenous and local farmers, but due to the abundance and accumulation of stones around these walls, they probably used this technique in the construction of the southern wall of the Soffe, known as the Stein soffe, have been identified (Sardari, et al., 2014: 69).

Stairs: stairs as an inseparable part of the buildings that are built on a height, have an important role in the Elymais soffes. In the early stage, two stairs were identified at the top of the soffe of Bard-e Neshande. In later stages and during the expansion of the complex, two more stairs will be added to the soffe. One of them provides the access path from the lower Soffe to the upper Soffe. Stairs have also been identified in other Elymais

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◄ Fig. 3: Buttress construction in Elymais sites 1. Bard-e Neshande, 2. Bardi castle, 3. Sarmasjed (Authors, 2022).

sites including Sarmasjed and Kalchenar Shami. There are 11 access generally routes in Sarmsajd as well an access route was found on the northern soffe of the Kalchenar Shami site.



✓ Fig. 4: The stairs and the access path to the soffe in Elymais sites 1. Kalchenar Shami (Mehr Kian and Messina, 2018) 2. Sarmasjed,
 3. Bard-e Neshande (Authors, 2022).

The platform of gifts and sacrifices: Gift and sacrifice platforms are structures that are considered for offering gifts and sacrifices to gods and goddesses. The old temple has a chamber, a large prayer or sacrifice platform, and a courtyard in the upper soffe of Bard-e Neshande (Girshman, 1976: 26). The sacrificial platform of the temple was expanded in 3 stages, and the oldest form it was square and the sides were aligned with the four main directions. In the second stage, this platform was destroyed and another platform with larger dimensions replaced it. In the third stage, the square sides of the platform were imperfect and a building with three walls was

added to the platform. According to Ghirshman's report on the southern construction of the first soffe (eastern soffe) Sarmasjed site, a platform, and a chamber around it were found (Girshman, 1976: 27) that the remains of the platform have been destroyed today and the only evidence remains are the existence of a chamber and parts of the structure on the south soffe. Furthermore, a platform attached to the great Temple (Chamber, 28) and three platforms were found in the altar chamber in the Temple of Herakles (Girshman, 1976: 91). Stein identified the remains of a brick platform in the center of the rectangular building in Kalchenar Shami (Stein 1940: 149-150). The excavations of the joint delegation of Iran and Italy also revealed a brick platform that was very similar to what Stein achieved in his rectangular building. As well, three platforms or stone altars with square shapes were found on the northern soffe. (Fig. 5) (Mehr Kian and Messina, 2018: 19)



Pillared porch: The porch as a pillared hall that opens on three sides and one side opens to the courtyard, is one of the characteristics of Elymais architecture. The building known as the four-pillared temple in Bard-e Neshande has a portico or porch with two rows of octagonal columns in the northeast. This porch with a stone floor and sixteen columns carries most of the load of the roof of the building. Two columns of the inner row of the porch are attached to the entrance wall of the building. The great temple in Sarmsajd also follows the plan of the porch. This pillared porch is on the northeast side of the temple and consists of three rows of columns that are not parallelized So that there are 8 numbers in the external row, 7 numbers in the middle row, and 6 numbers in the internal row (Girshman, 1976: 76-77).

Yard: One of the other elements of Elymais religious Architecture is the juxtaposition of open spaces (yard) with closed spaces in architecture.

Fig. 5: Altar in the Elymais religious Architecture, 1. The brick platform in Stein's building in Kalchenar Shami (Stein, 1940) 2. Triple stone platforms in Kalchenar Shami (Messina and Mehr Kian, 2018). 3. The brick platform was discovered in the third workshop of Kalchenar Shami (Mehr Kian and Messina, 2016: 43) 4. Altar of upper soffe of Bard-e Neshande (Girshman, 1979). ►

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The old temple building in Bard-e Neshande is based on a courtyard, a chamber, and a sacrificial platform which is similar to the one found in the southern part of the Sarmasjed site near B staircase. The grand temple in Sarmasjed also follows the temple style with a central courtyard and chambers around it. This temple has a square plan and consists of a portico, courtyard, all-sided corridors, and rooms around the central courtyard with four entrances.

Square Hall: This feature has been identified in Bard-e Neshande temple which is similar to synchronic examples in the Seleucid-Parthian periods. Bard-e Neshande Hall is square and four columns have been created to reduce the load on the roof (Girshman, 1976: 28) and also there are platforms for sitting on the sides of the hall.

Lateral rectangular chambers: there are 3 rectangular spaces surrounding the Altar room in Bard-e Neshande and there is no communication between them the entrance of all three spaces is open to the four-columned hall (Girshman, 1976: 28). In the great temple of Sarmasjed, the southeast and northwest parts of the courtyard open with two entrances to rectangular rooms (spaces 6 and 10). Rectangular rooms can be seen around the main room in the temple of Herakles, some of them have a separate entrance from the main space of the temple.

Additional chambers with separate entrances: there are rooms with separate entrances from the main building that have been found in the two four-columned shrines of Bard-e Neshande and Herakles in Sarmasjed. n the four-pillared temple of Bard-e Neshande, a room was added to the northern side of room 3, which Girshman identifies as the treasury room due to the thickness of the walls Meanwhile, collections of valuable objects have been identified near the stairs of room 1, the entrance of which opens to the four-columned hall. Similar structures were found near the northwest wall of the Temple of Herakles in Sarmsajd which according to the excavator is related to a period older than the main building. In addition, spaces 12, 15, 16, and 18 also have separate entrances from other parts of the building.

Pillar and Capital: The porch and hall of Bard-e Neshande temple in the lower soffe and the porch of the large prayer hall in Sarmasjed are built in columnar style. Remnants of the column were also found in the fortuitous discovery of Kalchenar Shami and also in the investigations of the joint delegation of Iran and Italy. The Bard-e Neshande portico pedestals are quadrangular and the columns are made of different types such as round, polygonal, and grooved columns the unique example is an almost octagonal



column, on one side of which four people are carved from top to bottom and details such as the hand and feet manners reveal customs of a religious ceremony, which, considering the role of the person above, was probably a sacrifice ceremony. A Capital with human motifs with a spiral frame on its four sides and another Capital with identical motifs, a six-petaled lotus flower in a spiral frame on three sides were found in Bard-e Neshande. Girshman also mentioned a broken Capital with the figure of a woman on three sides in Sarmasjed (Fig. 6) (Girshman, 1976: 107).



Stylistics of Elymais Religious Architecture: the making of an artificial height for the construction of religious buildings has its roots in Eastern and Mesopotamian traditions, and the earliest examples of it are known from the Ubaid period at religious buildings such as the seventh temple of Eridu, the White Temple, or the Ziggurat of Anu in Uruk t, the painting temple from Tel Agir, and the Jamdat Nasr period in the Upper Temple of Uruk (Majidzadeh, 2008: 79). A late example of it is around 1400 AD. It is located in the Aqar-quf region, a few kilometers southwest of Baghdad. A place known as Hill A, whose building remains are built on an adobe tower. According to the excavators, this tower is not a ziggurat but indicates a similar tendency to build a temple on the platform. The temple design on the high platform later appears as an excellent example in the form of large ziggurats along the river, such as Ur, Khorsabad, etc. It seems that the Elamites also built their religious buildings on natural and artificial heights and hills. An Elimite cylinder seal depicts an image of a square temple or building on top of a rectangular platform porch. As well, the remnants of a temple have been identified next to the Elimite

Kurangun relief and on top of the natural hills. In classical Greek architecture, temples are placed on a platform, a platform made of stone and with stairs on each side, but the platform on which classical

Fig. 6: columns and Capital samples from Elymais site, 1. Capital with human motifs, Bard-e Neshande (Girshman, 1979), 2. Capital with Multi-feathered flower, Bard-e Neshande, 3. A column with human motifs in the accidental discovery of Shami (www://https. carnaval.ir), 4. Capital with human motif, Bard-e Neshande (Girshman, 1979), 5. A column with a human motif, Bard-e Neshande (https://www. Citypedia. ir). ►

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Greek temples are built is different from what we named soffe. The most important difference is in the dimensions. Classical Greek temples such as the Parthenon are located on platforms whose dimensions are slightly larger than the main core of the temples. The soffe in the form of what we know in the Elymais religious Architecture may include one or more buildings for instance the soffe of the Sarmasjed site which contains several buildings. One of the classical Greek-style temples in the near east is the temple beyond the walls in Ai-Kanoum (hors-les murs - Temple) which is built on the Mastaba like the Parthenon and has stairs in all directions. However, the style of Mesopotamian Architecture and temple construction on a hill also continues in the eastern Hellenistic cultural region. Another example at Ai-Kanoum known as the Stairs Temple (Temple' à 'redans) (Fig. 8) is another example. This building is also built on a hill, just like the Mesopotamian Temples and in order to access the building it must go through a staircase with ten steps (Mairs, 2006: 9.93). Therefore, it seems that the creation of an artificial hill and the temple building on it has its roots in Eastern traditions, and this architectural feature is indicative of ethnic identity in the Hellenistic period. The use of a Buttress on the exterior façade of Elymais besides preventing drift is used to beautify the soffe since the distant past, people have used this feature and characteristic of architecture in various buildings such as houses, palaces, temples and it should be In the Neolithic era, it took root in Sang-i Chakmak, Bozmorde, and Zaghe sites. Other examples of buttress usage at Gunespan Tepe, Tepe Hasanlu, Altyn Tepe, Bastam, Babajan Tepe, Nushijan Tepe, Tepe Uzbaki, Pasargad Palace, and Mithradatkert Castle. The Elimites Buttress remains in Tepti Ahar Tomb and Choga Zanbill reveal that Elymeans knew the Buttress technique and its use in the religious structure and they inspired the method from their Elimite ancestors and Mesopotamian neighbors. The stairs usage is an inseparable part of all temples that are built on a height staircase in the White Temple of Uruk in Mesopotamia (3000-3500 BC) with a height of 12 meters perhaps the first example of this type of architecture. Three staircases, each of which had about a hundred steps, were used to access the floors in Zigurat of UR. The spiral staircase of Khorsabad Ziggurat is reminiscent of Herodotus's writings about the Tower of Babel. Choga zanbill, is placed in the middle of each side of the staircase, only the southwest staircase climbs to the higher floors. This staircase while going up, reaches the steps and hallways that change the direction of the stairs so that it seems that special can reach the temple and the upper building. But the staircase in classical Greek temples can be seen



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> in all directions of the temple platform, which can be a reflection of an open and public building. In later periods and in Greco-Roman-style temples, this staircase is limited to the front part of the temple. The Elymeans use stairs in several directions for access to religious architecture, and this is different from what was constructed in Choga Zanbil and Mesopotamian ziggurats. In general, the presence of several stairs and access paths turns the complex into an open complex in such a way that it can accommodate a large number of people and is related to the mass movement of a large number of people at a given time and to prevent crowding. It can be believed that on certain days of the year, many people would come to these ancient places to pray at once. In most Orient temples' architecture, a platform was built for performing religious ceremonies, sacrifices, and offering gifts. This culture has existed for thousands of years in Eastern tradition and Semitic religions. In the temple of Ishtar-Ashur, the platform was located in the main shrine and on several stairs. Syrian and Palestinian temples such as Abla, Dan, and Solomon in Jerusalem brought this concept to a new historical stage. The Altar or sacrificial platform in Elam traditions also has roots in Mesopotamian origin. In front of the Choga Zanbill Ziggurat, there were two rows of seven platforms, which seem to have been used for animal sacrifices. Near the entrance of the Ishni Karab (Choga Zanbill) prayer hall, there were also two offering platforms (figure 7) (Girshman, 1994: 116). The sacrificial platform of the upper soffe in Bard-e Neshande had no cover. According to Stein, the middle part of the building in Kalchenar Shami is also open and does not have any cover. He believes that the brick platform was located outdoors. The creation of a platform outdoors has similarities with the Elamite samples in the Gal Choga Zanbill temple and the temples of the eastern complex. Compliance with the square dimensions on Bard-e Neshande and the three Kalchenar Shami platforms are similar to the sacrificial platform in Elimite Gal temple, Choga Zanbill. It seems that the tradition of creating a platform outdoors in the East is scattered and related to the sacrifice and slaughter of animals. The temple of Ishtar in Mari (2600-2700 BC) reveals the spread of Mesopotamian tradition very well which appears centuries later in Hellenic temples in Syria, like the temple of Zeus at Dura-Europos, whose sacrificial platform is in the courtyard. The Al-Azza Temple in Khirbat al-Tanuur, Jordan shows well the evolution of the altar in the outdoors and additions such as the courtyard and side chambers, around the 2nd century BC to the 2nd century AD. The temple, which early stage of construction included an altar and two statues, later in the third stage of construction,

the courtyard and side chambers will be added to it (Fig. 8). The platforms of chamber 3 in the four-columned temple of Bard-e Neshande the altar chamber in the temple of Herakles, and the platform of chamber 28 in the Great Temple be similar to the offering platforms in the Temple of Ishtar, Assyria, and the Temples of Ishnikarab, Elam, and Kiririsha in Choga Zanbill are located inside the lobby of the altar chamber.



The background of the pillared porch in Iran's non-religious architecture goes back to Hasanlu's pillared porch (11th-9th century BC). The use of quadruple pillared porches align with the sides of the building is one of the most important features of Achaemenid non-religious architecture. The pillared porch in a religious building appears widely after the decline of the Achaemenid Empire and has its roots in Greek religious architecture. A Classical Greek temple is built on a platform, which is surrounded by a peristyle, which helps reduce the burden of its roof. Thereafter at the entrance to the building was a pronaos which usually had several columns in front or opposite it, behind the porch was the main chamber of the temple, and then the Opisthodomos or room that served as the balance of the porch. In most of the temples after the Achaemenid period in the East, although changes can be seen in other parts of the temples compared to the classical Greek temples, but the entrance, like a Greek temple, generally has a porch that is covered with several rows of columns. In general, the Orientals were familiar with the columned porch style at the entrance of the building, but the Seleucids used this style as a characteristic in religious architecture and spread it throughout the geography under their rule. The pillared porch has many similarities to the Hellenic religious architecture of the Orient. examples of which can be observed in Surkh Kotal, PanjaKand, Artemis in Dura Europos, Takt-i Sangin shrines, and a temple of Shush (Fig. 8). Courtyards in religious architecture have roots in Mesopotamian religious



◄ Fig. 7: Pre-Elymais sites 1. Map of building on the hill A, Aqar Quf (Moortgat, 1998: 69)
2. Ishtar temple, Nineveh (Reade, 2007: 7-11)
3. Ishtar Temple, Assur (Moortgat, 1998: 221)
4. Ishtar temple, Babylon (Koldeway, 1914)
5. Nin March temple, Babylon (Baur, 1932)
6. Ishtar temple, Mari (Parrot, 1956) 7. Eastern triple Temple, Choga Zanbill (Girshman, 1994)
8. Gal temple, Choga Zanbill (Girshman, 1994).

architecture. Temple C in the Sumerian complex of the Temple of Anna (3000- 3300 BC) has a courtyard around which the temple chambers are built. The Temple of Ishtar in Nineveh (1791-1813 BC) follows the same style. The temple of Ishtar in Babylon (605-625 BC) and the temple of Nin-March (550-605 BC) are other examples of this style. The Elamite temples of Gal Ishni Karab and Kirirsha in Choga Zanbil are also built in the courtyard style (Fig. 7). The Sumerian style of courtyard temples in the temple of Ishtar, Mari in Syria (2600-2700 BC) shows the spread of this style in the Near East (Malamat, 1997: 66), which later continued in temples such as Zeus (3rd century BC) and Atergais (1st century BC) in Dura Europos (Fig. 10) and the temple of Khirbat al-Tannur in Jordan (2nd century BC - 2nd century AD).



The square chamber form in the architecture of the four-columned hall of Bard-e Neshande temple reveals the Oriental style. Greeks used a rectangular plan for the hall and Antechamber. It seems that the square columned hall with four columns from the Achaemenid architecture, such as the Shura Hall and the Ardeshir Palace Hall, etc., continued the post-Achaemenid and Elymean architecture. Square halls with four columns in the plan of religious buildings including Surkh Kotal a shrine, Bal shamin, shush, and Khajeh Mountain (Fig. 11) Shrines show the continuation of the tradition of the four-column square Chamber in the post-Achaemenid era (Fig. 8). rectangular chambers in the religious architecture of Elymais is also one of the architectural features of Mesopotamian temples the later samples of which can be seen in the Ishtar Temple and the Nin-mah Temple in Babylon. The temple with rectangular chambers around it at the Great Temple (Athena Habis) and Bard-e Neshande have similarities with the concurrent temples such as Takt-i Sangin, Surkh Kutal, Bal Shamin,

Fig. 8: the plan of Elymais and Contemporary Temples 1. Four columned Temple, Bard-e Neshande, 2. Herakles Shrine, Sarmasjed 3. Great temple, Sarmasjed 4. Surkh Kotal Shrine 5. Atargatis Temple,Dura Europos 6. Zeos Temple, Dura Europos 7. Horus shrine, Bal shamin, Syria 8. Dilberjin Shrine 9. Takt-I Sangin 10. Al-Azza Temple, Khirbat al-Tannur, Jordan 11. A temple with a recess, Ai Kanoum 12. Artemis Temple, Dura Europos 13. Panjakent Shrine 14. Khajeh Mountain Shrine 15. Temple of shush. ►

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and Shush. Some archaeologists consider this type of architecture to be the Persian style of architecture in the Hellenistic period, which is prevalent in Iran, Afghanistan, and Syria. It can observe a conscious asymmetry in the side chambers like Mesopotamia in Herkles temple, Sarmasjed. This feature is not observed in the rectangular chamber of the four-columned temple and the large temple. In the great temple, all-round corridors are created around the chambers and the central courtyard. Meanwhile, in Takht-i Sangin and Panjakent temples, the side chambers are connected to each other and form corridors on three sides of the main chamber. The hallway and the main chamber in Bal-shamin and Surkh Kotal shrines lead to an antechamber, and finally, in Khajeh Mountain the antechamber merges with the hallway and forms a hallway in the four directions of the main chamber in the temple. This style is later accepted as a model in Sassanid Chahartag Therefore, the four-pillared temple of Bard-Neshande, as well as the large temple in the Sarmasjed and its side chambers, are probably a link connecting the Mesopotamian architectural style to Persian architecture. The annexed chamber in the four-pillared temple and the temple of Herakles in the Sarmsajd with a separate entrance have similarities with the temple and the sacred chamber of the goddess Dinito Ishtar in Assyria. A building that was added to the main part of the Ishtar temple in Assyria (13th century BC) and was built Tukulti Ninurta for the two goddesses of the main goddess Ishtar (Ashur Itu) and the minor Ishtar (Dinito). Perhaps a chamber with a separate entrance is built for worshiping a god or goddess related to the main god. Similar examples of this type of architecture in Dilberjin and Dioscuri confirm this assumption. The thought of creating human motifs on columns of Elimite shrines is different from the Greco-Roman thought and it seems that native thoughts are reveal these motifs. Respecting the hands of the people carved on the column is very similar to Elimite motifs such as pilgrims' relief Kurangun. Better interpretation will be provided if put the Capital motifs with the human motifs found in Bard-e Neshande each other like a strip and it seems that all the motifs represent a religious ceremony with the presence of a local god and goddess where two noble people pay respect on behalf of other people. The duality of gods has long been seen in the tradition of Mesopotamia and Elam religion and it is possible that this duality will be combined with similar Greek gods in the Elymean period, actually what we see in Nemrut-dagh. It seems that the Capital with the same motifs of the six-feather lotus flower and the Capital with motifs composed of an artichoke leaf in Bard-e Neshande are



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> the only features of the Corinthian style on the Elymais columns, which shows the influence of Hellenic religious architecture on Elymais temples.

Conclusion

By examining the archeological documents and reports obtained from the excavations in the three sites of Bard-e Neshande, Sarmasjed, and Kalchenar Shami it is possible to consider a special style of architecture for the religious architecture of Elymais. The usage of traditional elements of local temples, which have been accepted by the natives for many years and adapted in their temples after the Hellenization of the orients, is an important principle that must be considered. It seems that instead of abandoning their beliefs and accepting the Greek beliefs, the natives accepted their commonalities and reveal them. The Elymais temples reflect the traditional architecture of the region. The scrutiny of the traditional architecture of Mesopotamia and use in the Hellenistic temples of the Near East reveals that the Greeks were not the inventors of this style and according to the conditions of each region, they only added or subtracted parts of the Greek style. In general, the main elements of religious architecture regard to the three sites mentioned include soffe construction, buttress, sacrificial platforms, courtyard, central hall, rectangular chambers around it, chambers with separate entrances and columns, and capital, which elements such as soffe construction, the use of buttress, sacrificial platforms in square dimensions, the use of courtyard architecture, the central hall with square dimensions, the creation of rectangular chambers around the main building, chambers with separate entrances, and also the use of columns and capital with human motifs rooted in the tradition and local beliefs of the region and indicative of ethnic identity in the Hellenistic period. The Hellenic architecture affect Riwag or Iwan and stairs in several directions and some columns were left with spiral motifs.

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Conflict of Interest

There is a conflict of interest between the authors.

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References

- Baqherian, A.; Bucci, I.; Cellerino, A. et al., (2016). "Preliminary report on the first season of xcavation of the Iranian–Italian joint expedition in Khuzestan at Kal-e Chendar, Shami (6th campaign, 2013)". *Parthica*, 18: 31–52.

- Bauinger., (1932). *The Excavations at Dura-Europos: Preliminary Report of Third Season of Work*. November 1929-March 1930. New Haven: Yale University Press.

- Black, J. A., (1992). Anthony Green, Tessa Rickards, and the British Museum. Gods, Demons, and Symbols of Ancient Mesopotamia: An Illustrated Dictionary. London: published by: British Museum Press for the Trustees of the British Museum,

- Frankfort, H., (1954). *The art and architecture of the ancient orient*. Harmondsworth.

- Ghirshman, R., (1950). "Masjid-i-Soleiman. Résidence des premiers Achéménides". *Syria*, 27: 205-220

- Ghirshman, R., (1962). Persian Art, the Parthian and. Sassanian Dynasties, 249 B.C.-A.D. 65. Translated by Stuart Gilbert and James Emmons. New York.

- Ghirshman, R., (1964). "Bard-é Nechandeh. Rapport préliminaire". *Syria*, 41: 301-321.

- Ghirshman, R., (1969). "La terrasse sacrée de Masjid-i Solaiman". In: *Comptes rendus des séances del Académie des Inscriptions et Belles-Lettres*, 113e année, 3: 482-494.

- Ghirshman, R., (1976). "Terrasses sacrées de Bard-è Néchandeh et Masjid-i Solaiman: L'Iran du SudOuest du VIIIe s. av. n. ère au Ve s. de n. ére". In: *Mémoires de la Délégation.Archéologique en Iran (MDAI)*, 45, 2 volumes. Paris.

- Ghirshman, R., (1994). *Chaghazanbil*, (Dur Ontash), vol (1, 2) first edition. Translatid by: Asghar Karimi, Tehran: Iran's Cultural Heritage Publications. [In Persian].

- Hannestad, L. & Potts, D., (1990). "Temple Architecture in the Seleucid Kingdom". In: *Religion and Religious Practice in the Seleucid Kingdom*, edited by Per Bilde: 91-124. Aarhus, Denmark: Aarhus University Press.

- Hinz, W., (1950). "Elamisches". In: Archiv für Orientforschung, 18 (1-2): 282-306.

- Hinz, W., (1963). "Zwei neuentdeckte partische Felsreliefs". In: *Iranica Antiqua* (IrAnt), 3: 169-173.

- Hinz, W. & Koch, H., (1987). "Elamisches Wörterbuch" (in 2 Teilen). In: *Archäologische Mitteilungen aus Iran*, suppl. 17. Berlin.

- Kruglikova, I.T., (1986). Dil berdzin. chram Dioscuri Moskva.

- Koldewey, R. & Johns, A. S. G., (1914). *The Excavations at Babylon*. London: Macmillan and Co.

- Kowami, T., (2012). Iran's Memorial Art in the Parthian Period.

Translated by: Yaqub Mohammadi Far and Alireza Khounani, Hamedan: Bu-Ali Sina University Publications. [In Persian]

- Layard, A. H., (1846). "A Description of the Province of Khuzistan". *Journal of the Royal Geographical Society of London (JRGS)*, 16: 1-105

- Layard, A. H., (1887). Early Adventures in Persia, Susiana, and Babylonia, Including a Residenceamong the Bakhtiyari and Other Wild Tribes before the Discovery of Nineveh. 2 volumes. London.

- Layard, A. H., (1894). *Idem*. 2nd ed., 1 volume, London.

- Mairs, R. R., (2006). "Ethnic Identity in the Hellenistic Far East". Phd thesis, University of Cambridge, Faculty of Classics.

- Majid Zadeh, Y., (2008). *History of Ancient Mesopotamia Civilization*. Vol 3. Tehran: University Publishing Center. [In Persian]

- Malamat, A., (1971). "Mari". The Biblical Archaeologist, 34 (1): 1-22.

- Mehrkian, J., (1985). "Report on chemistry". Document center of the country's cultural heritage organization. [In Persian]

- Mehrkian, J.. (2014). "Kal Chandar Shami, the first season of exploration of the Iran-Italy Archaeological Group (sixth program)". *The* 13th International Conference of Iranian Archaeology, Tehran: february 2015. [in Persian]

- Mehrkian, J., (2015). "Shami, after seventy-eight years of archaeological excavations of the joint delegation of Iran and Italy". *reports of the 15th annual gathering of Iranian archeology:* 15-17. [In Persian]

- Mehrkian, J. & Messina, V., (2018). *Ancient Elimay.* Iran: Cradle of civilization, archeology and history of Iran (according to the National Museum of Iran). [In Persian]

- Mehrkian, J. & Messina, V., (2018). "Preliminary report of the joint delegation of Iran and Italy in Khuzestan: Kal Chandar, Shami (2013 to 2016)". *Journal of Archaeology, Specialized Journal of the Institute of Archeology of Iran*, 3(4): 1-29. [in Persian]

- Messina, V. & Mehr Kian, J., (2014). "Return to Shami. Preliminary Survey of the Iranian-Italian Joint Expedition in Khuzestan at Kal-e Chendar". *Iran*, 52: 65-77 (ISSN: 0578-6967).

- Messina, V. & Mehr Kian, J., (2016). "The Religious Complex at Shami". in: R. Stucky, O. Kaelin,H.-P. Mathys (eds), *Proceedings of the 9 ICAANE*, Basel (2014), Wiesbaden, Harrassowitz: 439-448 (ISBN: 9873-447-06175-9).

- Messina, V. & Mehr Kian, J., (2019). "The Sanctuary And Cemetery of Shami Research of the Iranian-Italian Joint ExpedIition In Khuzistan At Kal-E Chedar". *Proceedings of the Eighth European ConferenceOf Iranian Studies*, Volume I, St Petersburg: 271-286 (SBN 978-5-93572-866-4).

- McKenzie, J. S., (2003). "Carvings in the Desert: The Sculpture of Petra and Khirbet etTannur". In: *Petra Rediscovered: The Lost City of the Nabataeans*, edited by: Glenn Markoe: 165-191. New York: Harry N. Abrams in association with the Cincinn Art Museum.

- Moortgat, A., (1998). Ancient Mesopotamian Art: Classical Near



Eastern Art. Translated by Zahra Basti and Mohammad Rahim Saraf. Tehran: Samt Publications. [In Persian]

- Ngaheban, E., (1993). *Excavation of Haft Tepe Khuzestan Plain, first edition*. Tehran: Publications of Iran's Cultural Heritage Organization. [In Persian]

- Parrot, A., (1956). *Mission Archéologique de Mari*. Paris: Librairie Orientaliste P. Geuthner.

- Reade, J., (2003). "The Ishtar Temple at Nineveh". In: *Nineveh: Papers of the XLIXe, Rencontre Assyriologique Internationale,* London, edited by Dominique G.A.R. Collon and British School of Archaeology in Iraq: 247-290.

- Sardari, A.; Soltani, A. & Attarpour, S., (2014). "The expansion of the Elimai culture in the foothills: Suleiman Mosque and Andika". *Quarterly of Iranology (archaeology, cultural heritage and continuous science) archeology*, New volum, 8(16): 69-79. [In Persian]

- Salaris, D., (2014). "Space and Rite in Elymais Considerations on Elymaean Religious Architecture and Rock Reliefs during the Arsacid Period". Mphil thesis, University of Sydney, Faculty of Arts and Social Sciences.

- Salaris, D., (2017). "A Case of Religious Architecture in Elymais: TheTetrastyle Temple of Bard-e Neshandeh, Annali". *Sezione orientale*, 77: 134–180

-Schippmann, K., (1970). "Notizen zu eine Reise in den Bakhtiaribergen". in: *Archäologische Mitteilungen aus Iran*, 3:231-237.

- Schippmann, K., (1971) "Die iranischen Feuerheiligtümer". Berlin-New York. (1989). In: *Encyclopaedia Iranica*, 3, s.v. Bard-e Nešānda, 761-762. London-New York.Online at: iranicaonline.org/Bard-e Nešānda

- Shenkar, M., (2013). "Iran's religious architecture in the Hellenistic period". Translated by: Shirin Nowrozi and Bijan Bajurvand: *Quarterly of analytical research paper on art history and interdisciplinary studies of Madras archaeological research*, 5(9): 98-118. [In Persian]

- Stein, A., Old Routes of Western Iran, London.

- Vanden Berghe, L., (1963a). *Les reliefs élamites de Mālamīr*. In: *Iranica Antiqua* (IrAnt), 3: 22-39.

- Vanden Berghe, L., (1963b). "Le relief parthe de Hung-i Naurūzī". In: *Iranica Antiqua (IrAnt)*, 3: 155-168.

- Vanden Berghe, L., (1983). Reliefs rupestres de l'Irān ancien. Bruxelles.

- Wimber, M. K., (2007). "Four Greco-Roman Era Temples of Near Eastern Fertility Goddesses: An Analysis of ArchitecturalTradition". MPhil Thesis, Brigham Young University, Department of Visual Arts.



شاخصهها و سبک معماری مذهبی الیمائی و با تکیهبر کاوشهای بردنشانده، سرمسجد و کلچندارشمی

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چڪيده

محققین بر این باورند که در ایران اشکانی، کشور دارای ساختاری ملوکالطوایفی بوده است. در این شیوهٔ حکومت داری قدرت های محلی و خوانین حکومتگر کوچک و بزرگ ظهور یافته و هر یک به ایفای نقشی به فراخور قدرت خود در داخل امیراتوری می پرداختند. الیمایی ها یکی از این خوانین نسبتاً قدرتمند بودند کے پے از بسط قدرت سلوکیان در ایے ان، در نواحی شمالی خوزستان و ناحیے ہ کوهستانی زاگرس جنوبی، حکومتی محلی تشکیل داده، و تا ظهور ساسانیان بر این نواحی حکمرانی کردند. واژهٔ الیمایی را برگرفته از واژهٔ عیلام میدانند، اما تاکنون مدارک متقنی در این مورد ارائه نشده است. کوهستان های شمال شرقی خوزستان خاستگاه اوليهٔ اليمائيان به شمار مي روند جايي که اليمائيان کوه نشين بارها در برابر سلوکیان و پارتها ایستادگی کرده و حکومتی نیمهمستقل در منطقه را تشکیل دادند. دور از دسترس بودن این منطقه، جایگاه مناسبی برای برپایی سـکونتگاهها، شـهرها و نیایشـگاههایآنان بـود. نیایشـگاههایی کـه برپایـهٔ کاوش های باستان شناسی در مسجد سلیمان و ایذه، در محوطه هایی چون: بردنشانده، سرمسجد و کل چندارشمی قرار دارند. بررسی ویژگیهای معماری نشان می دهد که همهٔ این مجموعه ها متعلق به یک سنت ساختمانی هستند. در این پژوهـش نویسـندگان تـلاش میکننـد بـا کنـکاش در محوطههـای ذکـر شـده به شناخت شاخصه های معماری مذهبی الیمائیان دست یافته و هم سانی های آنان با معماری بومی پیش از الیمائی و معماری مذهبی حکومت های همزمان را آشکار کنند. این پژوهش با استفاده از گزارش های کاوش محوطه های الیمایی و با بهرهگیری مطالعات تاریخی–تطبیقی آثار معماری برجای از آنان صورت گرفته است. حاصل این یژوهش شناخت شاخصه های معماری مذهبی الیمائیان، شامل: صفهسازی، استفاده از یشتبند، یلکان، سکوهای قربانی، ایوانهای ستون دار، تالار مربع، استفاده از معماری حیاط دار، استفاده از اتاق های مستطیل، ایجاد اتاق های الحاقی با ورودی مجزا و ستون و سرستون است. این شاخصه ها از ترکیب و تلفیق معماری بومی منطقه (بین النهرین، هخامنشی و ایلام) با معماری مذهبی هلنی ایجاد شده است.

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