

THE ARCHAEOLOGICAL ASSESSMENT OF PAJADAGH FORTRESS (QAL'A-E TASHVIR), TASHVIR VILLAGE, TAROM COUNTY, ZANJAN PROVINCE

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This article reports the results of an archaeological survey undertaken in 2010 at Pajadagh Fortress (Qal'a-e Pajadagh; Qal'a-e Tashvir), in Tarom County, Zanzan Province, Iran [Fig. 1]. The site merits excavation, but since none has yet been undertaken, we will limit ourselves to a general description of the geographical and historical context and preliminary observations about the fortress's architecture and ceramic sherds obtained from surface scatters.

Given its strategic location on a major east-west route and some important natural resources, what is today Zanzan Province played an important role starting well back in the pre-Islamic period. Zanzan was a provincial administrative capital under the Achaemenids, and undoubtedly retained its importance under the subsequent rule of the Parthians (Arsacids) and the Sasanians (Sābuti 1991). Among the best-known discoveries of historic remains in Iran in recent times is the mummified bodies found west of Zanzan in the

salt mines at Chehrabad. Three of the bodies date apparently to the late period of the Persian Achaemenid Empire (405–380 BCE) and the other two to the Sasanian period (224–651 CE) [Fig. 2] (Pollard et al 2008;



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Fig. 2. The body of "Saltman No. 4" on display in the Archaeological Museum of Zanzan.

Chehrabad n.d.). Recent study of the bodies suggests that the individuals might have traveled to those mines from another region. The rock salt obtained in those mines has continued to be an important commodity down to the present.

The region has historically supported significant agriculture in some areas, and the surrounding mountains have been important for hunting and animal husbandry. In the small Davah Dashy ("camel stone") valley southeast of the Pajadagh fortress, our archaeological survey discovered petroglyphs of indeterminate date that probably were left by early inhabitants, depicting antelopes, camels, and a circle divided into four parts [Figs. 3, 4, next page]. The importance of the mountain pastures can be appreciated from the fact that much later, under the Mongol Ilkhanid Dynasty, Sultaniyya, east of Zanzan, was for a time used as a summer capital. Its great, domed mausoleum, built in the early 14th century for Khan Öljeytu, is perhaps the best known historical monument in the region and is considered one of the masterpieces of Islamic architecture [Fig. 5].

Tarom township is in the north of Zanzan Province, bordering Ardabil Province in the north and Qazvin and Gilan in the east and northeast. The sizeable

Fig. 1. Map showing location of Qal'a-e Pajadagh.

With the exceptions noted, all illustrations are by the author.



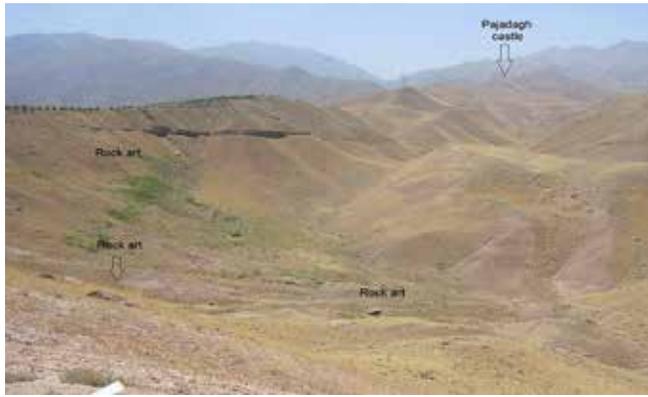


Fig. 3 (above). Location of rock art as seen looking toward the Pajadagh fortress.



Fig. 4 (right). Examples of the rock art found southeast of the Pajadagh fortress.

Ghezel-Ozan River along its northern border lies in a deep valley whose eastern end is less than 400 meters above sea level, but some of the surrounding mountains rise as much as 2800 m above sea level. Tashvir village is at 590 m above sea level on the Gilvan to Sorkhe Dizaj road. While the village is located in the Youhari Chay valley, its river is dry much of the year; it is impossible to tap the water of the Ghezel-Ozan. Thus, although the population is mainly engaged in agriculture, its possibilities are limited: there are olive trees; some grain, mainly wheat and barley, is grown; and garden crops include garlic and potatoes. In fact most of the farm families live in the surrounding highlands where they can take advantage of the pastures for animal husbandry. The local population speaks primarily Azerbaijani Turkic. The challenging natural conditions include cold winters and hot, dry summers. The area is prone to earthquakes. In 1991 one devastated the village, whose houses were mainly built of mud brick and clay.

Compared to other regions in northwestern Iran, Tashvir has attracted little attention from archaeologists. The first excavations there were by Ashā Khākpur in 1973, during which he mapped a construction which he later determined was a fire temple (Khākpur 1975, p. 44). More recently, excavations have been carried out by Arzollāh Nājafi (2007) and Abulfazl Aāli (2008). This archaeological work, and the survey in 2010 have been undertaken with the cooperation of the Cultural Heritage Organization of Zanjan and the Administration of Road Construction, since work on the Gilvan to Sorkhe Dizaj road posed a threat to the ancient remains.

Fig. 5. Mausoleum of Khan Öljeytu at Sultaniyya.



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This fortress is located at the geographical coordinates of UTM39s321762 and 4073960 and is 698 m above sea level. Situated where it provides a perfect view of the Tarom area, Pajadagh means literally “the lookout mountain,” because the people of this area believe that it was used for as a military observation post. The architects and the builders clearly chose the location because of the favorable topography (Nourolahi 2010, p. 73). It is on a hill northwest of Tashvir, some 85 m above the village, and south of the Gilvan road [Figs. 6, 7 (next page)]. A steep path north of the village provides access to the site [Fig. 8]. From a distance one can see the impressive remains of the towers and walls built of stone and cemented with coarse

Fig. 6. View of Qal'a-e Pajadagh from the west.

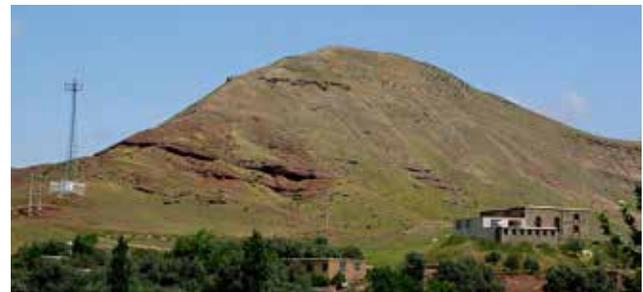




Fig. 7. View of Qal'a-e Pajadagh from the east.



Fig. 8. South façade and path leading up Qal'a-e Pajadagh.

Fig. 9. Topography, plan, and profile of Pajadagh fortress.

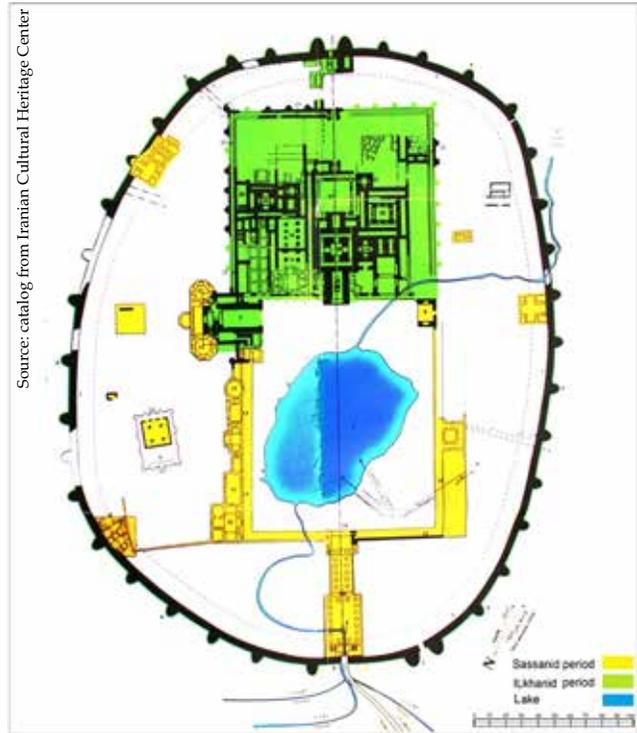
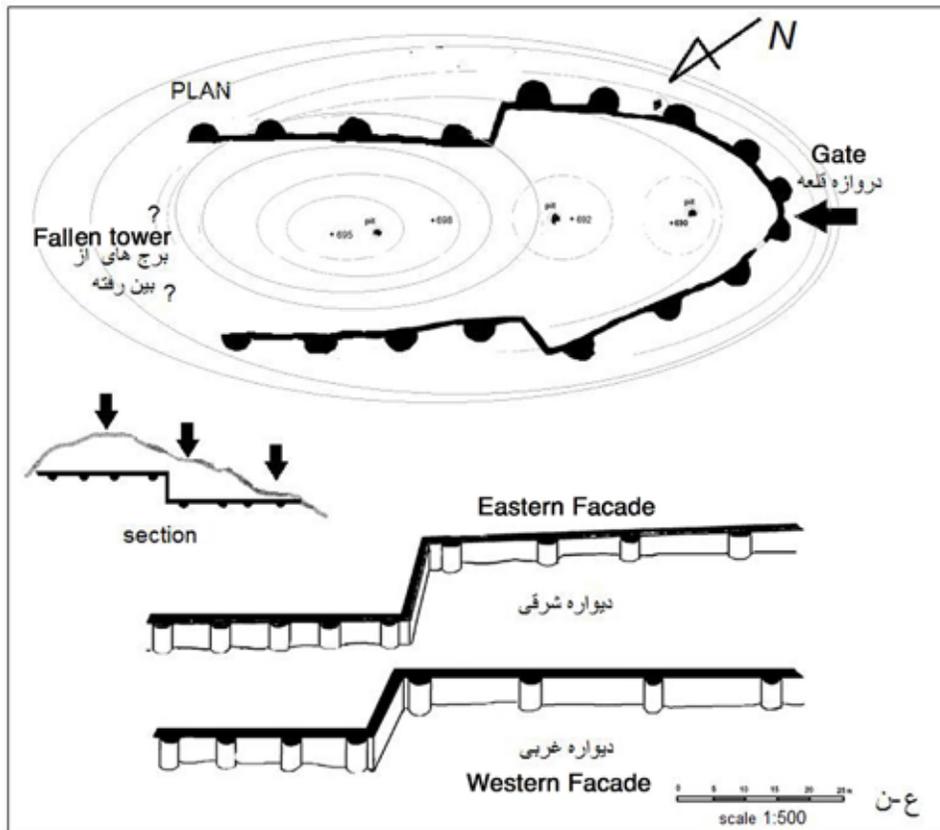


Fig. 10. Plan of Takht-i Suleiman.

gypsum. Huge blocks of stone were used in the foundations.

Architecture

Pajadagh seems to have been structured in three levels surrounded by the walls with semicircular towers [Fig. 9]. This method of fortress construction, using towers to protect the enclosed area, is also observable in Takht-i Suleiman [Figs. 10, 11 (next page)]. The first level on the south side of the fortress was probably the entrance. In this area a break can be seen in the wall which dates from the time of the destruction of the castle. Here it seems there are the remains of architectural elements which were destroyed during an earthquake in 1369 but left traces in the form of circular depressions [Fig. 12]. The second level has similar depressions indicating the locations of architectural



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Fig. 11. South wall and gate of Takht-i Suleiman, showing large Sasanian-era stone blocks and reconstructed tower.



Fig. 12. Depression in the southern part of the architectural remains.



Fig. 13. View of interior area of fortress.

Fig. 14. Masonry of the fortress walls.



elements which are no longer extant [Fig. 13]. The third and highest level likewise shows evidence of destruction. Above the stone foundations, the fortress seems to have been built using bricks and gypsum as the cement [Fig. 14], a technique that can be seen in Qal'a-e Dokhtar, in Fars Province [Fig. 15], and other castles of the late Arsacid and early Sasanian periods (Girshman 1991, p. 386).

Seventeen extant semicircular towers can be observed along the walls of Pajadagh. On the south side are the foundations of 8 solid towers built with small stones and coarse gypsum (as if the stones have been soaked in the cement). Four of the foundations are up to two meters high. The rest have been covered by the soil and project only slightly above the current surface. The architects were forced to build filled-in or solid towers to ensure that the walls were level and prevent settling of the walls. In the eastern part of the fortress are the remains of nine towers, five of which are intact up to 2.5 m. The walls and towers of this part of the fortress are better preserved than those in the other parts. Unfortunately, the foundations of some of the towers (for example, the second tower of the eastern wall) have been destroyed by unauthorized excavation [Fig. 16], possibly simply for quarrying of the building materials for modern uses.



Photo 2010 courtesy of Daniel Waugh

Fig. 15. A section of the remains of Qal'a-e Dokhtar.

Fig. 16. Pit from illegal excavation.





Fig. 17. A brick on the east side of fortress.

The distance between the towers varies from 6.5 to 7.5 meters and the width of the walls of the towers is 2.70 to 3 meters. Where parts of the brick-faced walls have been preserved, they are from 1.5 to 2 m thick, filled with stone rubble. An exception is on the southern slope where the eastern and western walls of the fortress join and there are two towers only 2 m apart, which seem to mark the entrance to the fortress.

In the northern part (third level) which is the highest point of the fortress facing south, the distance between the towers on the southeast and northwest is about 20 m due to the steep incline. Here, to compensate for the steep south-facing slope and to create a logical relationship between the different parts of the structure, the architect of the fortress, has built a vertical wall. Overall, the fortress is symmetrical.

Fig. 19. The potsherds.

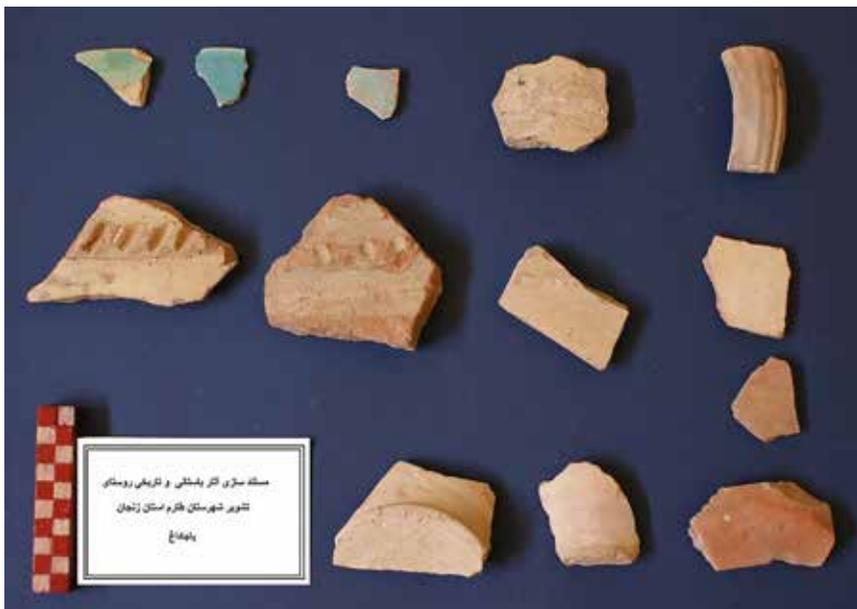


Fig. 18. A grinding stone found in the eastern sector.

In general, we observe the use of large and small stones in the foundations and large bricks (measuring 49 x 26 x 12 cm) cemented by coarse gypsum for the upper part of the walls [Fig. 17]. The same is observable in Takht-i-Suleiman (Henning von der Osten and Naumann 2003, p. 75). The technique of facing walls with brick and filling the space in between with stone rubble is an old one that can be documented, for example, from the Arsacid period (Colledge 2001, Fig. 41). Also this method was used in the palaces and the structures of the Al-Hazar Assyrian palace, in which narrow and wide stones have been used alternately (*Ibid*, pp. 121–24). Both plan and construction technique at Pajadagh seem to correlate most closely with Arsacid building and suggest that the founding of the fortress probably dates to that period, even though it was in continuous use through the Sasanian period and probably later as well.

Surface finds

On the eastern slope of this site are scattered ceramics, broken bricks, and a grinding stone [Fig. 18]. The ceramics [Table 1] include ones with buff temper, and others that are both glazed and unglazed [Figs. 19, 20 (next page)]. The wares include jugs, jugs with handles, buckets, and bowls having green, light blue and turquoise color glazes with raised and rope-form applique decorations. The buff-colored ceramics are wheel-thrown: on them can be seen ridges left by the wheels. Their exteriors have been smoothed with a knife or other metal object, although in some cases probably by a wet hand. In particular, the

Fig. 20. Schematic drawings of the potsherds.

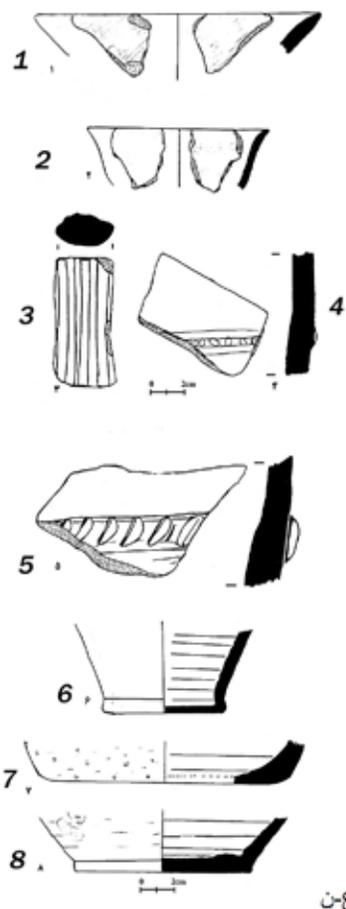


Table 1. Description of potsherds

Number	Description	Reference	Period
1	Rim of vessel. Glazed. Cream yellowish. Fine quality. Medium temperature. Decorated with green glaze inside and outside. Wheel made. Fine sand and straw temper.	Haerinck 1997, Fig. 17, design 1	late Arsacid; Sasanian
2	Rim of vessel. Glazed. Cream. Elegant quality. Medium temperature. Decorated with turquoise blue glaze inside and out. Wheel made. Sand temper.		late Arsacid; Sasanian
3	Handle of vessel. Buff. Rough quality. High temperature. Fine sand and straw temper.	Haerinck 1997, Fig. 8, design 8	Arsacid and Sasanian
4	Body of vessel. Buff. Rough quality. Low temperature. Decorated with embossed rope. Glaze: thick brown. Burnished. Wheel made. Fine sand and straw temper.		Arsacid and Sasanian
5	Body of vessel. Buff. Rough quality. Medium temperature. Rope decorated. Wheel made. Sand temper.	Kāmbakhsh'fard 2001, Fig. 16; Khosrozādeh and A'ali 2004, Fig. 12, design 8	Arsacids and Sasanian
6	Pan with a flat base. Buff. Medium quality. Medium temperature. Outside smoothed with a palette knife. Wheel made. Fine sand and straw temper.	Alizādeh 2003, Figs. 70, 71	
7	Flat pan. Buff. Medium quality. Low temperature. Wheel made. Sand temper.	Alizādeh 2003, Figs. 67, 69; Rāhbar 2003, p. 153, design 7	
8	Pan with flat base. Buff. Medium quality. Medium temperature. Wheel made. Tempered with coarse sand containing mica particles.	Rāhbar 2003, p. 152, design 33	

buff-colored wares are the large containers (buckets) and legs of some vessels.

Although the technique of glazing dates even earlier, during the Achaemenid and Arsacid periods glazed wares were very important, and there developed a wide range of colors: green, grey, white, azure and silver-white. The glazed wares collected at Pajadagh were mostly bowls with flat or outwardly curved edges and legged dishes glazed both inside and outside. In some cases only the inner surfaces of vessels were glazed. The color of the glaze of these vessels includes turquoise, pale blue and green, with some evidence of crackling. My analysis of these dishes suggests that uneven temperature during the firing produced both green and turquoise color on the same vessel: these parts which were exposed to higher temperature are turquoise and the parts exposed to lower temperature are green.

The ceramics collected from the site are comparable to those found at the Oltan fortress site in Ardabil (Alizādeh 2007, Figs. 67, 69, 70, 71), Madi fortress (Dej Madi) in Bistun (Alizādeh 2003, pp. 92-93), Qal'a-e Yazdigird (Keall and Keall 1981, Fig. 22) and the Khorhe Mahalat site (Rāhbar 2003, pp. 151-53), all of which

belong to the Arsacid and Sasanian periods.

Conclusion

Constructed on the highlands of Pajadagh, the Tashvir fortress has a perfect view of the surrounding roads and landscape. Its location on the Zanjan-Khan Cha'e route made it an important observation point for connections to Gilan Province and the Sefid Rud (river). It served to protect buildings located in Tashvir village, among them a fire temple and other recently-discovered structures along the main road. One can at least hypothesize that the fortress was a key center for the administrator of this region beginning in the late Arsacid period and continuing into Islamic times, when the route through the area was part of the historic "silk road."

Our knowledge at present is limited to its plan and what is observable on the surface. While the designers must have planned structures for fodder storage and water reservoirs to enable the fortress to survive a siege, so far we have no evidence about such installations. Their documentation must await serious scholarly study of the site, whose cultural and strategic importance merit such an examination.

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About the author

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