

"Study and Analysis of Excavation Findings from Site No. 19 in the Cham-e Shir Dam Area, Gachsaran County (Kohgiluyeh and Boyer-Ahmad Province, Iran)"

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Abstract

According to written historical sources, the Gachsaran region, which was one of the outposts of the Arjan state and part of the mountainous territory inhabited by the nomads of the Kohgiluyeh, was significant due to its role in the Arjan-Shiraz route. Archaeological studies conducted in the catchment area of the Cham-e-Shir Dam allowed for the excavation of several sites, including Building No. 1 at Site No. 19. This building was the largest on the site and likely served as its most important structure in terms of size. The primary objectives of the excavation, carried out in the fall of 2021, were to assess the role of this site and building in the administration and security of the region's road, as well as their social, administrative, and economic roles in stabilising the power of local nomads. This site was inhabited in two distinct phases during the third to sixth centuries AH. Examining settlement deposits indicates these two phases of occupation, though historical texts do not provide clear connections to them. Ethno-archaeological studies conducted by the researchers in the spring of 2024 for one month in the areas of Behbahan, Kohgiluyeh, Gachsaran, and Boyer-Ahmad revealed that the excavated building at Site No. 19, with its short walls, material types, and plan, resembled other nomadic structures in the region. The two-part structure of the plan of each room indicated that these rooms probably had a public section and a private section. The absence of objects on the floor of the building, except for two potsherds, indicated that the area was deliberately abandoned. Considering the contents of historical texts from the Islamic era, as well as the correspondence of the data obtained from the excavation with these texts, it seems that the residents of Site No. 19 of Cham-e Shir Dam could have played a role as part of a military force ready to serve the ruler of the region if necessary.

Keywords: Site 19 of Cham-e-Shir Dam, Ethno Archaeology, Islamic Period, Architecture, Pottery.

Introduction

The region known today as the county of Dogonbadan and Gachsaran is mentioned in historical written sources from the early to mid-Islamic centuries as a settlement with the administrative centre of the town of "Gonbad-e-Malgan" (Al Moqaddasi 1982: 635; Ibnu' l-Balkhi 1921: 345; Mustawfi Qazvini 1957: 153). This area is located in the eastern part of Arjan State, within the mountainous region of Fars called "Ram-e-Giloyeh". The geopolitical position of this region during the historical and Islamic periods stemmed primarily from its location along the route connecting major Iranian imperial capitals, such as Susa and Ctesiphon, to the Persian government capitals, such as Persepolis, Firuzabad in the pre-Islamic era, and Shiraz in the Islamic era. consequently, it is not far-fetched to expect that many historical monuments in this region are linked to the aforementioned historical road, which is evident throughout this region. Historical texts provide valuable insight in this regard. The books Al-Masalek and Al-Mamalek, along with other written historical sources, have mentioned this important road many times. (Ibn Raste 1996: 222; Istakhri 1969: 117; Ibn Hawqal 1966: 54; Qudāma ibn Ja'far 1991: 28). Unfortunately,

historical texts do not explicitly refer to Site No.19, and while there are mentions of relatively small stations along the Arjan to Fars route, many potential sites cannot definitively be identified as Site 19. Numerous historical settlements were located along the Arjan-Fars road in the Gachsaran region throughout the early, middle, and even late Islamic centuries. Site No. 19 was just one among them. However, these texts indicated that between the 4th (Istakhri 1969: 117) and 7th (Ibnu' l-Balkhi 1921: 143, 148-155, 160) centuries AH, areas known as nomadic settlements in Kohgiluyeh played a crucial role in connecting different areas of Kureh-e-Arjan. These nomads have been described as making the route unsafe, while at other times, they were credited with providing security for trade routes. For example, Istakhri confirms and emphasises that "Giluayeh," who was considered one of the nomadic rulers of the region and a vast region was named after her, "always had a permanent and ready army of one thousand to three thousand at her court" (Ibid 144). Ibn al-Athir also mentioned "Sunqur bin Mawdud," (a regional ruler at Kohgiluyeh), stating, "He had gathered a lot of Turkmen and revolted, seeking Khuzestan with nomadic men." (Ibn al-Athir Vol. 11: 201).

Archaeological surveys in this region have identified several bridges, caravanserais, paved roads, castles, and fortifications that guard and protect this historical road. Surface findings indicate a continuous sequence of habitation during both historical and Islamic periods (Yaghmaei 2008: 124-129; Yaghmaei et al. 2012: 438; Sepidnameh 2021: 219-273).

This district was significant not only due to its special geographical location and communications, but also because of its pastures, which were important for nomadic life. Before the archaeological excavations conducted for the Cham-e Cheru Dam, no targeted excavations had been conducted in this area. To preserve the Cham-e Shir Dam Catchment Sites, two phases of archaeological surveys were conducted under the leadership of Saraghi (2011) and Ata'i (2016). These surveys identified 150 historical sites, with some selected for excavation based on superficial archaeological evidence. The rescue excavations in the Cham-e Shir Dam catchment area enabled the publication of survey results and sounding excavations in short articles over the past two years (Ata'i and Zare 2018:260-264; Ata'i and Zare 2020: 597-601).

One of these areas, Building No. 1 and Site No. 19, measured 20 metres long and 18 metres wide (Azizi, nd: 217). This building consisted of two adjoining rooms, measuring 14 metres long and 7 metres wide, as well as a square courtyard, measuring 14 metres on each side, on the western front, with the entrance located in the southwest corner of the courtyard. This article aims to answer the question of what function Site No. 19 of the Cham-e-Shir Dam in Gachsaran served and what its connection was to the surrounding fortresses, as well as whether there is a meaningful connection between the livelihoods and settlement patterns of the residents at this site and the nomadic settlements in the region today. This article describes the excavations and analysis of the findings from this historical building and the site to understand the role of this site in the administration and security of the region's road, as well as their social, administrative, and economic roles in stabilising nomadic power in the area. Based on the architectural findings and pottery from Site No. 19, it is possible to analyse the livelihoods and phases of settlement at this site. To further examine the similarities between this settlement style and the livelihoods of modern nomadic communities nearby, ethnoarchaeological studies are necessary, as conducted by the authors. Ethnoarchaeology primarily aims to understand the past by observing contemporary traditional societies, as highlighted by Alizadeh (2014). Achieving this requires mid-range theoretical frameworks that bridge the gap between interpreting archaeological data from Site No. 19—often seen as a static or stagnant version of the present—and the dynamic nature of the actual past. Establishing such connections relies heavily on grounding observations in the present, where clear, measurable links between activities and associated archaeological landscapes can be studied, as emphasised by Johnson (2020). The significance and precision of this method prompted Binford (2002) to compare it to the discovery of the Rosetta Stone, which offered transformative insights into historical contexts. In this study, ethnoarchaeology facilitates a comparative approach, linking the

archaeological findings from Cham-e Shir Dam excavations at Site 19 in Gachsaran with the practices of modern nomadic communities. The history of ethnoarchaeological studies in the Zagros and southern regions of Iran holds considerable theoretical and practical importance. Ethnoarchaeological studies in the Zagros have a relatively long history. Abdi (2015) has reviewed numerous studies related to nomads. Hamidreza Ghorbani (2021) has generally addressed the needs for ethnoarchaeological studies in Iran, particularly in the Zagros. Additionally, Arbuckle and Hammer (2019) discussed the process of pastoralism in the ancient Near East in general and, to some extent, examined the theoretical foundations of this method.

Excavation Method

Given the obvious remains of the enclosure walls on the ground surface, it was decided to select a larger area around the building to create a trench. This decision aimed to accurately and confidently excavate the building or its annexed structure. Initially, two trenches were created with a north-south orientation, labelled T.A (southern trench, measuring 10 x 10 metres) and T.B (northern trench, measuring 7 x 10 metres), along Trench A. A 50-cm-wide arm was also established between the two trenches to facilitate the excavation process, allowing for the transport of soil and other materials.

Following the excavation of Trenches T.A and T.B, a third trench (T.C) was dug on the western side to reveal the boundary of the excavation in that direction. A fourth trench was dug at the presumed entrance to the larger space believed to contain the building (T.D), and a fifth trench (T.E) was excavated to identify traces of the wall revealed on the western side of this larger space.

The fixed measurement point (BM) of the excavation area was established at a distance of 430 cm from the southern side of the trench (along the western side wall of Trench A), with its elevation being 520 m above sea level.

In the recording method, the term context was used to better understand the relationship among the artefacts. Recognising the importance of recording objects for analysing and interpreting the materials obtained during excavation, efforts were made to accurately record the context number, the height from the fixed point (BM), and the horizontal location of the artefacts unearthed. Context numbering began with 001, and any changes in texture type, soil colour, type of finds, or the discovery of new architectural features in the trench led to the assignment of a separate context number. For movable finds, the notation g.ch-sh.19 was used, indicating Gachsaran, Cham-e-Shir, Site 19, followed by the trench number, context, and find number.

Geography and Ecology of Site No. 19

Site No. 19 is located on relatively flat land with a slight east-west slope on the northern slope of the narrow Gach-e Barik mountain. It is situated 2.4 km southeast of the Cham-e Shir dam and 1,200 metres west of the Cham-e Chero fortress^[1]. This Site expands into a shallow valley (15 metres deep), with a 20-metre length to the north and 13-metre length to the west, and it leads to the Moorland towards the Gach-e Haji Mountain to the east and south. The most important water sources for Site No. 19 included a dry stream bed, located about 120 metres west, which flows from the Darveh Gorge, and the Zohreh River, located 1,000 metres to the north and east (Fig.1).

The road connecting Gachsaran to Babakalan and Genaveh passes through the Darveh Strait, located 450 metres southwest of the site. Additionally, the road connecting Gachsaran to Cham-e-Cheru and the village of Babamonir passes through the Darveh Strait 450 metres southwest. Available evidence indicates the presence of architectural remains from six nomadic settlements (in Lori: Varga and in Turkish: Yurd) at the

site, mainly consisting of surface stone layers around nomadic tents, used over recent decades (Fig.2). This has been drawn from modern observations and conversations with local nomadic natives.

Between the Kardrighon and Mount Gach-e-Haji mountains in the Cham-e-Shir Valley, and generally in the western and southern areas of Gachsaran, lies gypseous Moorland characterised by sparse tree cover. The vegetation includes mountain almond trees, Kalakhong (a fruit similar to Baneh or mountain pistachio), cedar (Kunar), and a shrub known as Ramalik, which bears sour-tasting fruit. The predominant flora of the gypsum moorland comprises mountain thyme, kangaroo grass, coniferous plants known as "Bahman", and a shrub called "yellow thorn". During the summer and autumn, these plants dry out and serve as forage for local livestock. In contrast, winter and spring bring lush greenery, making the area a habitat for pastoralists from the Lor and Qashqai tribes.

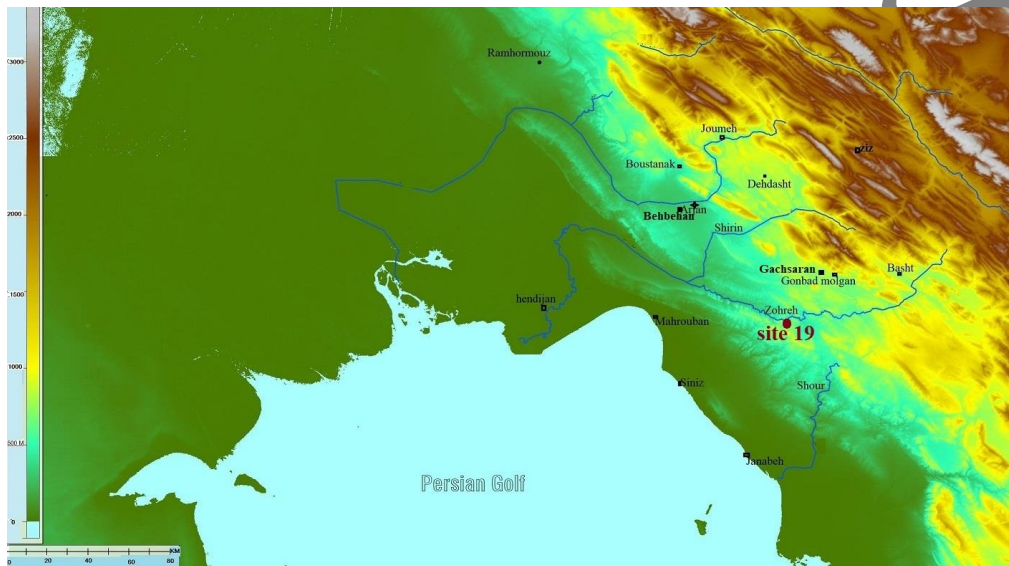


Figure 1: The course of the Zohreh River in southwestern Iran. (After: Google Earth 08/02/2025 and modified by the Authors)



Figure 2: Architectural remains of Site No. 19 before excavation; view from the northeast. (After: Authors)

Architectural Remains of Site No. 19

The architectural features of the building at Site No. 19 were uncovered through excavations in five trenches labelled A, B, C, D, and E. The remains revealed two rooms with multiple delineated spaces (see Figure 19). The construction materials primarily consisted of sandstone and limestone, both naturally sourced from the nearby mountains. The highest remaining wall section measured 75 cm on the southern side of Trench A, while the lowest was 20 cm on the northern side of Trench B. The stone used in the wall construction varied in size, with average dimensions of 10×25×33 cm, 14×25×37 cm, and 7×22×65 cm. The stones within the entrances of the rooms on the western side of Trenches A and B displayed a rectangular shape, averaging 11×20×38 cm, and were arranged methodically. Smaller stone fragments were also integrated into the walls, particularly toward their upper sections. Although the site is located within the gypsum-rich Gachsaran Formation, no gypsum mortar was identified in the construction. Instead, light brown clay served as the bonding material for the walls. Following the removal of a surface soil layer (Context 001), which was approximately 15 cm thick, two key spaces were identified. The northern space in Trenches A and B measured 6 metres in length and 4 metres in width, while the southern space measured 6.8 metres long and between 4.35 to 4.50 metres wide. Both entrances faced west, and these two areas were collectively named Space No.1. The outer walls of these spaces were surrounded by rubble stones, which reached a height of 1 metre, placed in a manner akin to debris accumulation (see Figs. 3–4). A notable architectural feature associated with these spaces is an L-shaped wall found in Context 014 within the northern area of Trenches A and B. This wall does not bond with the surrounding walls of the two rooms. It spans a north-south length of 330 cm, with an east-west width ranging from 116 cm at its narrower northern end to 160 cm at its southern end. The height of the remaining section varied from 32 cm on the southern side to 20 cm on the northern side. This wall was constructed atop the context soil layer but did not conform to a uniform interior floor surface within Space No.2 in Trench B (Fig. 9/1). Five stone slabs deliberately placed on the floor were identified in this area. The entrance to this space faces north, although no cultural materials were retrieved to clarify its purpose. The absence of a consistent floor or foundation suggests that this space may have been used temporarily over an extended period. As rubble was removed and the internal clearance of Spaces Nos. 1 and 2 progressed in both rooms, a distinct clay layer was revealed. This compact, dense layer had a blue-green marl composition mixed with fine white gypsum grains and measured approximately 30 cm thick (Contexts 022 and 023). Its surface was irregular and sloped gently from south to north. The sediments were relatively solid and excavated as large lumps. While 16 pottery sherds were discovered within this layer in Trench B, no artefacts were found in Trench A until reaching the floor level. After clearing this layer—approximately 60 cm thick in total—a dividing wall between the two rooms in Trenches A and B was uncovered. This wall segmented the spaces into additional parts. To maintain clarity and avoid confusion regarding material or spatial contexts, the report will first detail the features observed within Trench A (Fig. 5), which is located south of Trench B.

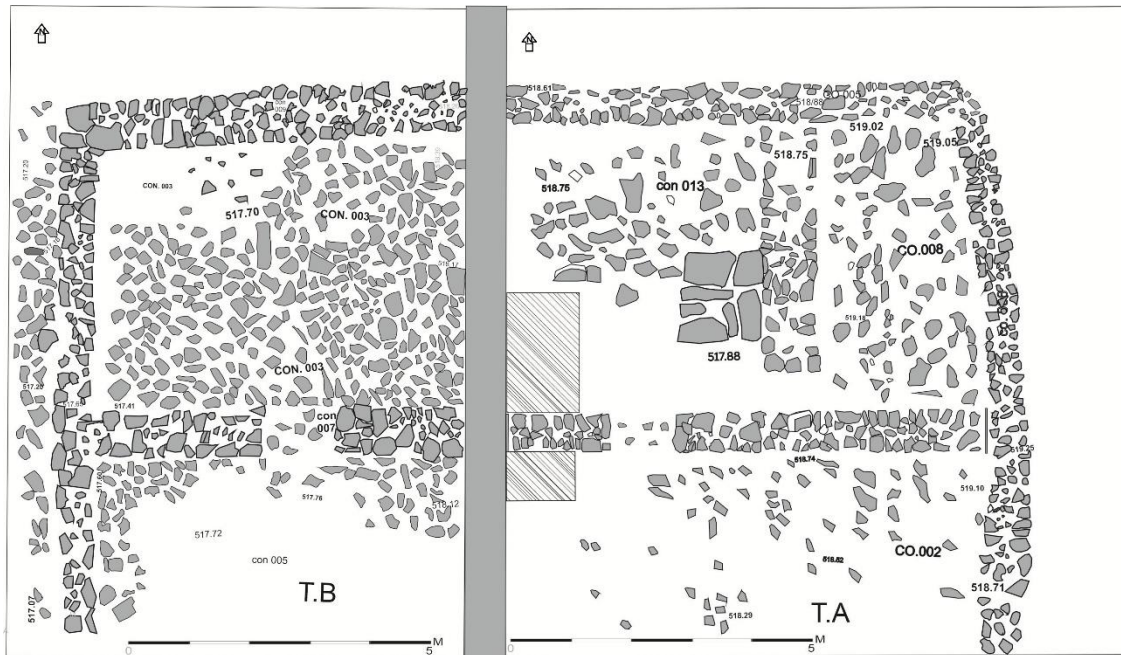


Figure 3: Rock debris on the upper surface and within Spaces Nos. 1 and 2 (After: Authors).



Figure 4: Stone debris accumulation from the second phase of settlement in the building at Site No. 19 in Context 003, Trench B, view from the north. (After: Authors)



Figure 5: Trench A; spaces and the associated final contexts (After: Authors)

During the initial phase of settlement, evidence identified in the upper layers of the five trenches highlights the construction of Building at Site No. 19, a structure located within the southern portion of trenches A and B. In this phase, a retaining wall measuring 3.5 metres in length, 50 centimetres in height, and 80 centimetres in width was built, oriented in an east-west direction. This wall bisected Space No.2 into northern and southern sections. It originated from the eastern wall of the room excavated in Trench A and terminated approximately one metre before reaching the western wall of the same room. A one-metre-wide entrance was also created to provide access to the northern section of the divided space. Space No.2 itself measures 4.35 metres in length (east-west) and 3.60 metres in width (north-south). At its centre, a stone structure was unearthed, measuring 85 centimetres in the north-south direction and 100 centimetres in the east-west direction, with an approximate height of 50 centimetres (Context 15). This structure, composed of four layers of rubble and slate stacked with mud mortar, is believed to have served as a central support pillar for the ceiling (Figure 6). On the floor east of this structure, two nearly intact pottery vessels were discovered at Context 16 (Figure 7). Additionally, a flat stone slab with an irregular rectangular shape was found positioned about 70 centimetres northeast of the room entrance and roughly one metre northwest of the stone pillar. This slab measured 74 centimetres in length, 64 centimetres in width, and varied in

thickness between 4 and 11 centimetres (Figure 8). At its centre was a small hole measuring 3 centimetres deep and 11 centimetres in diameter. Based on its features, it is hypothesised that the hole may have been intended to hold a tent pole or support a similar structural element, as its depth suggests limited alternative uses such as a mortar or door pivot. The southern section of the room, referred to as Space No.3, spans 4.5 metres east-west with a variable width ranging from 1.7 to 2.5 metres north-south. Small amounts of charcoal were found scattered on the floor of this space. Space No.4 is situated in the southern portion of the courtyard, separated from it by an irregularly built east-west-oriented wall. The floor elevation of this space measures 518.33 metres above sea level. Space No.5, located within Trench A, partially covered the courtyard and allowed for the identification of related structural elements. These include portions of the courtyard's outer wall as well as an irregular wall extending westward from the western wall of the room excavated in Trench A toward the centre of the courtyard. The courtyard itself appears to be nearly square, with dimensions approximating 15 metres on each side. Based on comparisons with modern nomadic enclosures, it is speculated that the irregular stone structure within Trench E may have been further enclosed by thorn bushes, approximately one metre high, along the southern wall of the courtyard to create a livestock containment area. Supporting this interpretation is the presence of livestock dung within Context 001 sediments from Trench C, which extended down to the base of the wall, strongly suggesting that livestock and cattle were housed within the courtyard during that period.



Figure 6: Architectural remains of Trench A, taken from the north. (After: Authors)



Figure 7: Relatively intact pottery on the floor of Trench A. (After: Authors) Figure 8. Wooden pillar carrier stone (?), view from above. (After: Authors).

During the initial phase of settlement in Building No. 1 at Site No. 19, a northern room was constructed on the northeastern side of the central structure, identified as Context No. 1 (Fig. 9/1). During excavation, two spaces were uncovered within both trenches, revealing stone walls. Each of these areas was designated as Space No. 1 for its respective trenches. However, because pottery artefacts found within the spaces might have been disturbed from their original context, it was not feasible to determine a precise occupation date for these spaces. The northern room measured 6 metres in length (north-south) and 4 metres in width (east-west). It featured two entrances, one on the west and another on the south side. After the addition of the southern room, the entrance leading to the northern room was sealed off, and a door was incorporated into the western wall of the new southern room to allow access to the northern space. Within Context 021, the northern room was subdivided by a wall into two separate areas, referred to as Spaces Nos. 3 and 4. The southern segment (Space No. 3) measured 4 by 3.90 metres and included its main entrance door centred along the western wall. Meanwhile, Space No. 4 was rectangular in shape, measuring 4.10 by 1.60 metres. The floors of both spaces were approximately at the same elevation: the floor of the northern space stood at 517.319 metres above sea level, while the southern space's floor was slightly lower at 517.16 metres above sea level. Additionally, three stone slabs were found on the floors of Spaces Nos. 3 and 4 (Contexts 013 and 022), although their intended function remains unclear (Figs 9–11). Beyond these primary spaces in Trenches A and B, Trench C was opened to outline the boundary of the building's courtyard wall in its northwestern corner. This trench measured 4 by 4 metres along the western section of the northern wall of Trench B (Fig. 12). Trench D, measuring 2 by 6 metres with a north-south alignment, was created to more accurately locate the building's entrance. Trench E was excavated in the central portion of the courtyard to better understand Context 010, which was linked to Trench A. This trench measured 7.50 metres in the east-west direction and 2 metres north-south. A key finding in this trench was a stone wall extending from Context 010 in Trench A towards the central area of the courtyard (Fig. 13). This wall consisted of irregular stones placed over the natural ground surface. If this feature represents what remained of a dividing wall within the courtyard, it is plausible that its upper stone courses were repurposed by nomadic groups for constructing settlements around the building after its abandonment. Evidence at the site supports such practices, as seen in images of stone arrangements encircling the main structure. If this building originally served nomadic herders, it is unlikely that the courtyard wall would have been particularly high; instead, its height may have been supplemented with tree branches to create a rudimentary enclosure for livestock, functioning similarly to a fence. Modern examples of such structures can still be observed among nomadic communities in other parts of Gachsaran County and around Site No. 19.



Figure 8: Trench B; spaces and their final contexts (After: Authors)

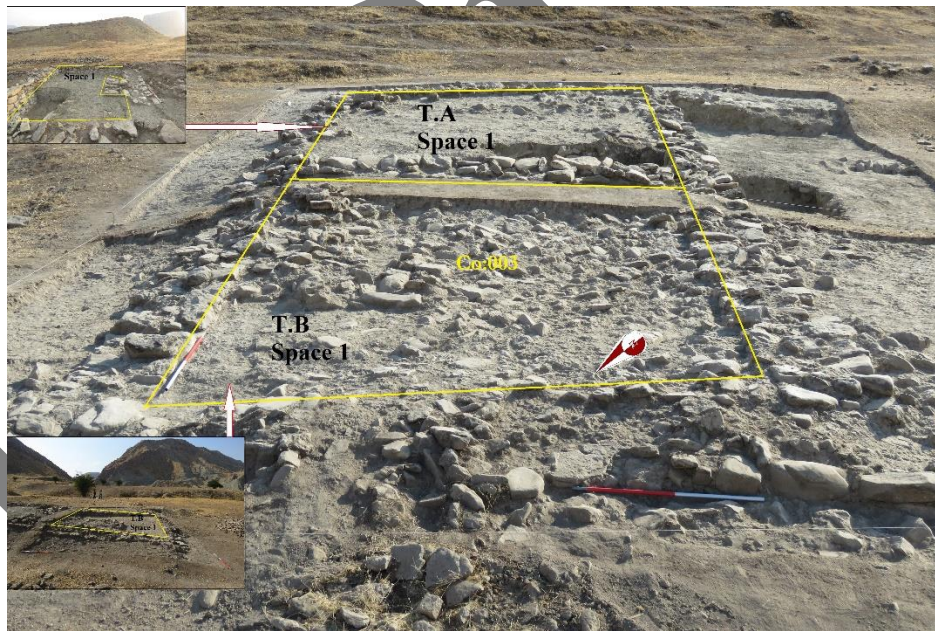


Figure 9: Space No.1 at excavation and the site view (After: Authors).

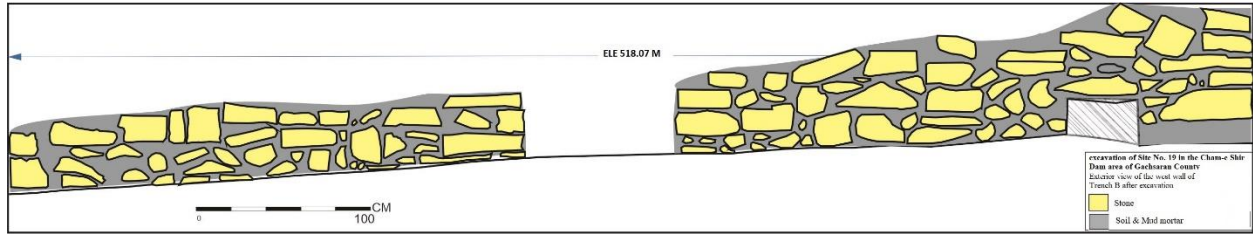


Figure 10: West view of the west wall of Trench B after excavation. (After: Authors)

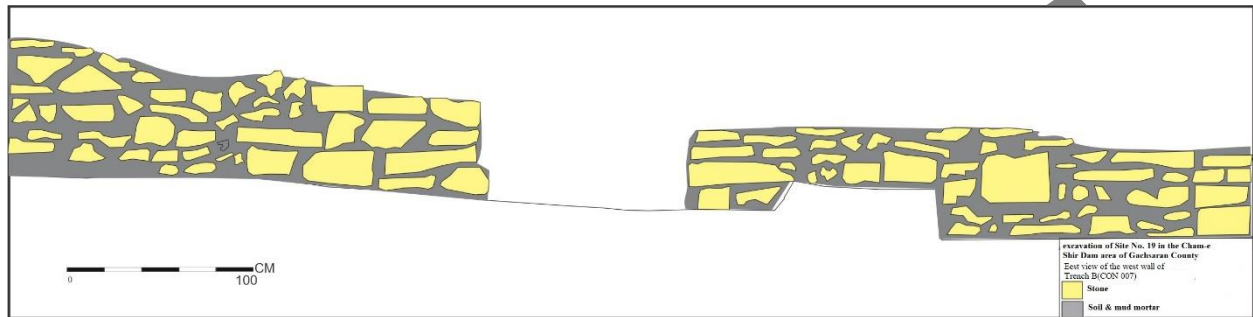


Figure 11: West view of the west wall of Trench B after excavation. (After: Authors)



Figure 12: The architectural remnants of the courtyard wall on the western side of Trench C. (After: Authors)



Figure 13: Architectural remains of Trench E. (After: Authors)

Pottery from Site No. 19

The most important cultural finding from the excavation of this site is pottery, which has allowed for the establishment of a relative chronology of the site (Figs. 14 and 15). A total of 115 pottery sherds were recovered from different contexts of three trenches, A, B, and C, including 100 body sherds, 11 rim sherds, 3 base sherds, and one relatively intact vessel. Of these, 109 pieces, or 95%, of the pottery, were plain, while 6 pieces, or 5%, were decorated with brown-coloured stripes, carved patterns, other added decorations, and carved patterns on added stripes. In the classification of pottery, five types were identified:

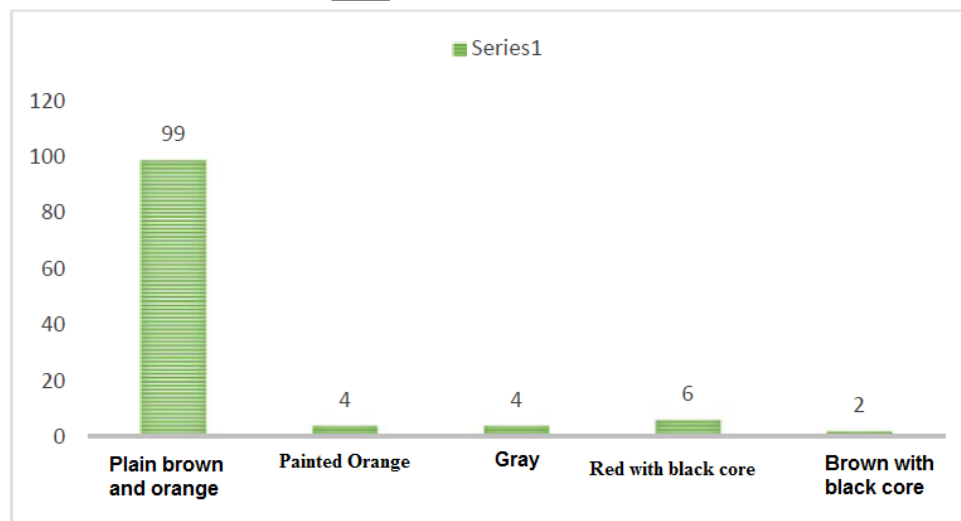





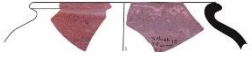


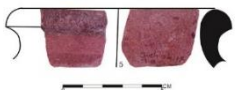



Figure 14: Frequency of pottery types found from the excavation of Site No. 19 (After: Authors).

Row	Context	Trench	Type of piece, colour of the paste, mixture, surface coating, type of construction, decoration	Illustration	Chronology - source of comparison	Comparable image example
1	٠٢٠	A	Relatively complete container, orange, fine sand, uncoated, wheel-shaped, parallel brown stripes		Islamic period; Amiri et al., 2012: 21, Figure 9	
2	٠٠٨	A	Edge, orange, fine grit, wet hands, wheel-shaped, sufficient firing, brown stripes on the exterior		Fourth to sixth centuries AH; Whitcomb, 1979: 209	
3	٠٠١	A	reddish brown, fine sand, wet hand finish, wheel-shaped, added stripe on the outside and brown stripes inside the container		4th to 6th centuries AH; Sepidnameh et al., 2022: 91, Figure 7, No. 9	
4	٠٠٨	B	orange, fine sand, thin pea-pink mud, handmade, parallel stripes painted in brown		Sepidnameh, 2021: 237, Figure 33-3, No. 6	
5	٠٠٨	A	Edge, orange-brown, fine sand, wet hands, wheel-shaped.		Sassanid - Early Islamic Centuries; Sepidnameh, 2022: 37, Figure 5, No. 2	
6	٠٠٣	B	Edge, grey, fine sand, brown outer layer, wheel-shaped.		Priestman and Simpson, 2003: 24	
7	٠٠٣	B	Edge, reddish brown, soft sand, wet hand coating, wheel-shaped, undecorated.		Sassanid; Baghsheikhi et al., 2023: 188, Figure 10	
8	٠٠١	A	Edge, reddish brown, fine sand, outer covering pea-pink, wheel-shaped.		Islamic era; Niyakan and Nouriyani, 2023: 662	
9	٠٠٣	B	Edge, reddish brown, fine sand, outer covering pea-pink, wheel-shaped.		Achaemenid-Farahamenid; Shirvani, 2016: Pl. 3, No. 8	
10	٠٠١	B	grey, fine grit, wet hand finish, wheel-shaped, shallow		Parthian-Sassanian;	



			parallel cut strips (less than one millimetre)		Sepidnameh, 2021: 226	
11	..٩	A	brown with black core, wet hand, fine sand with white grains, handmade, insufficient firing, nail-biting pattern added on the strip		Sasanian Period - Early Centuries of Islam	?
12	..٩	A	Body, pea, turquoise glaze, mineral, handmade.		Sasanian Period - Early Centuries of Islam	?

Table 1. Pottery types discovered from the excavation of the Site. No. 19. (After: Authors).

Type 1: The most prominent pottery found in the excavation of this building is orange-painted pottery featuring brown-painted stripes on a very thin slip. In one case, the interior of the vessel was decorated with the aforementioned painting style, while the exterior was adorned with an applied stripe. Painted pottery appears in two phases of residential architecture within the building, indicating settlement during the second to sixth centuries AH. Another piece of this pottery is handmade; its paste is orange with a mixture of fine sand and a thin pea-pink slip, and it is decorated with parallel brown stripes on its outer surface. Unglazed painted pottery includes a range of pottery known as "Pseudo Prehistoric Pottery". Whitcomb suggested that the spread of these painted pottery was a constant component of the Giluyeh tribe in the fourth century AH, which continued to exist in most sites until the eighth century AH (Whitcomb 2003: 10).

These pottery types were also introduced in Fars Province under the name of *Madabad* pottery (Sumner and Whitcomb 1999: 320). Sumner's chronology of the pottery also aligns with the pottery introduced by Whitcomb from the Kohgiluyeh region.

The most important archaeological find related to the settlement of the oldest phase of Site No. 19 was a relatively intact pottery of this type discovered directly on the floor of the building in Trench A. The vertical handle form of this vessel is comparable to unglazed painted pottery found during the excavations at the Atiq square, Isfahan (Sedighian and Gholami 2012: 136-138) and also in the excavations in Bishapur (Amiri et al. 2012: 9-10). Its shape and decoration also bear similarities to the painted vessels found in the excavations, with the exception that a vegetable temper was used in the manufacture of Lamma pottery (Rezvani et al. 2007: 87, Fig. 52/3).

Type 2: The largest proportion of pottery discovered consists of simple pottery with orange and brown paste, using fine sand as temper. Some of this pottery is insufficiently baked (Fig. 15), resulting in a grey core with two thick brown layers on the outside and inside. Some examples in this collection show a uniform orange paste and are seen as having two shells, which some experts attribute to incomplete baking (Emami, personal conversation, 2021 December 17). Some of these pottery types, such as the edge fragment of Context 008, Trench A, are similar in form to late Sasanian-early Islamic examples (Aali and Khosrowzadeh 2006: Fig. 61, No. 1; Khosrowzadeh 2012: 184; Fig. 9, Nos. 15-16; Ata'i 2016: 209, Plate 2, No. 3).

Type 3: In the surface layer (Context 001, Fig. 9/1) of Trench B, two pieces of grey wheel-made pottery were found (Fig. 15). These pieces have fine sand as temper and a polished surface, created by a wet hand.

Their baking was adequate, and one piece of each pottery featured a shallow incised strip (about one millimetre).

Type 4: Six kitchen pottery sherds from Context 009 (New Settlement Period) were uncovered in Trench A (Fig. 15). These sherds, made from brown paste with a black core and tempered with fine sand containing white grains, were handmade and insufficiently baked. One of these two pottery pieces was decorated with a carved pattern using a nail on an added strip. Given the relatively small size of these potteries, determining their exact form is challenging.

Type 5: This type consists of brown pottery with a black core, vegetable temper, and fine sand, with the outer surface decorated with a wet hand. Only two sherds of this pottery type were discovered from Context 003 of Trench B. Similar pottery was also found in the archaeological excavation at the historical cemetery of Deh Domen in the Boyer Ahmad district. Based on previous studies, this type of pottery has been dated to the middle of the third millennium BC (Oudbashi et al. 2019: 31-32). These pottery pieces were placed in this layer in a disturbed manner, indicating they do not belong to the construction period of Site No. 19.

Other Findings

In addition to architectural evidence and 115 pottery sherds, several other items were discovered, including a broken glass bangle fragment from Context 002, Trench A (Figure. 16 c), a broken copper bangle fragment from Context 002, Trench A (Figure. 16 b), an iron flag fragment from Context 001, Trench B (Figure. 16 a), a broken glazed pottery bead fragment, and an animal bone fragment (Figs. 17-19).

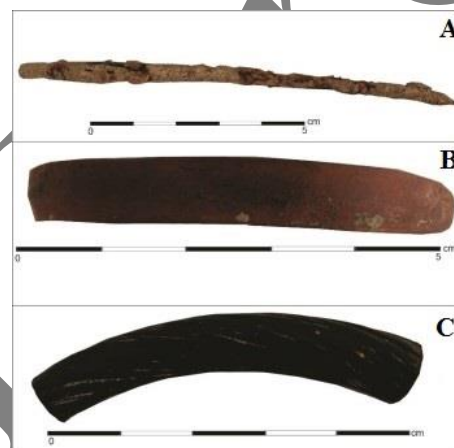


Figure 16: Iron (A), copper (B), and glass (C) objects found from the excavation at Site. No. 19. (After: Authors)

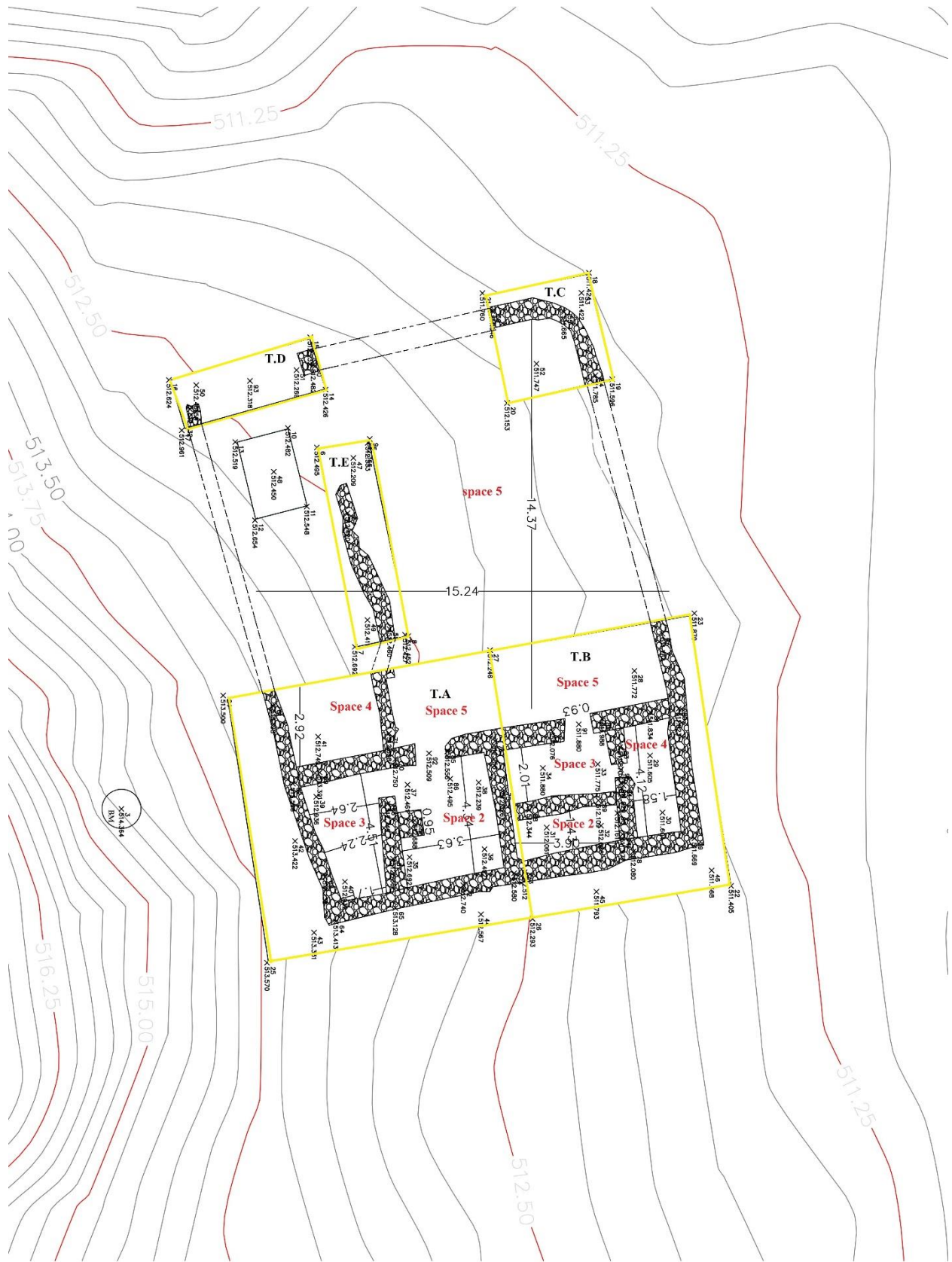


Figure 17: General plan of Site No. 19 after excavation. (After: Authors)

Discussion and Analysis

The excavations carried out in five trenches, A, B, C, D, and E, at Site No. 19 (Figs. 17-19) revealed the remains of a nomadic settlement. This settlement consisted of two rooms with a square-shaped structure on their western front measuring 14 by 14 metres. Both rooms had their entrances on the west side, aligning with the square-shaped structure of the building. Evidence from pottery studies, previously described, along with architectural evidence- such as walls made of stone and the connection between buildings- shows that the original room in this area (during the earliest period of settlement) resembled the setup found in Trench B. This original room featured one entrance on the west side and another on the south side. This period is dated to the first Islamic centuries, according to the pottery found in Context 024 in Trench A. The designation of Building No. 1 at Site 19 (the excavated building) as a nomadic residence stems from its plan and architectural structure, which align with contemporary nomadic settlements in this historical site. Additionally, the use of pasture lands nearby for contemporary nomads further supports this identification. Our ethno-archaeological studies, conducted in the spring of 2024 over the course of a month, involved a survey across areas of Gachsaran, Behbahan and Kohgiluyeh covering an area of 10,000 square kilometres. This research included participant observation in setting up tents and Kapars, interviews, and an examination of the tent locations of households that had not migrated that year. The winter settlements of the same nomads- now often transformed into small and large villages- continued to show traces of the herding practices from the medieval and late Islamic centuries, including a distance of two to five kilometres from sedentary people, as well as stone walls and the formation of colonies to protect livestock rather than humans! Additionally, this study examined the materials used to make black tents, including goat hair, the wood used to hold the black tent as a pillar and metal or wooden nails for reinforcement, as well as the covering of the nomads' Kapars. In addition, the cooperation involved in erecting these black tents, the precedence and delay in the construction of the Kapars and black tents, and the influence of the social status of the tribe on this erection were also examined. In our ethnoarchaeological study, it became clear that all of the structures examined, including the kapars and black tents, were a function of the economic and social background of the people who lived there. The temporary architecture of the region's nomads, particularly within the tropical counties of Kohgiluyeh and Gachsaran, can be categorised into two types of housing.

1-Summer housing type: In general, many nomadic families do not remain in the tropical region during the summer season; instead, they relocate to higher altitudes in Boyer-Ahmad and Semrom counties. However, some nomads spend the summer in tropical regions for various reasons, such as tribal conflicts or insufficient pastures. For example, half of the Olad-e Mirzali of the Boyer Ahmad tribe spent the summer in the western and eastern suburbs of Dehdasht city for the reasons mentioned above. Their dwellings consist of columns of tree trunks, reeds, and tree branches, referred to as "kapor".

2-2- Winter housing: Most members of the Kohgiluyeh and Boyer Ahmad tribes spend the winter in the tropical regions of Kohgiluyeh and Gachsaran, Behbahan, and the coastal areas of the Persian Gulf.

Our survey revealed that, after the Qashqai tribe, which migrated from Gachsaran to Semrom, the Olad-e Mirzali tribe likely has the longest migration pattern in the region. They occupy the Moorland area of Zeydon in Behbahan County from late autumn to early spring, and the Dilgan and Ludab areas from mid-spring to early autumn (Josh and Zangwa settlements). As the foliage of the trees provides little protection for the inhabitants from the winter rains, they generally live in black tents (Bohon) woven from goat hair. These tents are surrounded by a short stone wall (up to a height of one metre), built without mortar, and covered with a little soil to prevent rainwater from entering. Inside the black tent, a cooking stove is usually placed in the middle. The interior of the black tent is typically rectangular, and inside and at the end of the tent is a platform-like space built with large and small stones, then filled with soil, sand, and gravel, and flattened, higher than other surfaces (Fig. 22).

The only remaining characteristic of the black tent after it was abandoned includes the levelled area under the tent, the pillar pit, the stone platform filled with soil, the stone walls without mortar or with mud mortar, the ovens, and the streams around it (Rafifar and Ghorbani 2006: 92). Archaeologists identify and study these remnants through excavation.

Feilberg has drawn a horizontal section of a permanent site for the Lorestan black tent (Fig. 18), showing a water outlet, a stove, and short walls with two rows of stones (Feilberg 1944: 156), which are largely similar to the architectural structures found around Site No. 19. (Figure. 19). The design proposed by Roger Cribb bears resemblance to the structure of Site No. 19 at the Cham-e Shir Dam in Gachsaran (Fig. 20). In terms of the structure of the building, the plan obtained from Site No. 19 showcases one of the types (1 to 7) of black tents and even nomadic tents utilised in different seasons of the year (Figure. 21), as previously studied by Roger Cribb (2004:106).

It seems somewhat difficult to understand the structure of the original covering of the building at Site No. 19. However, considering the relatively circular stone found in the room in Trench A, which has a shallow depression in its centre, this stone may have been the location for the beam in the central part of the black tent. Furthermore, the relatively flat stones placed on the floor of Trench B could have served a similar purpose. One of the main challenges in comparing modern nomadic black tents with the possible sample excavated from Site 19 at the Chamshir Dam in Gachsaran has lain in the wooden or metal pegs that secure the black tents or tents. Since the number of pegs and their distribution around the mentioned black tents are directly related to the tent's capacity for both family members and guests, highlighting the social and economic importance of the tent's owner. However, comparing these features at Site 19 is often challenging and sometimes impossible due to the nature of the pegs, which were usually wooden and have decayed over time.

Historical texts from the early to mid-Islamic centuries do not provide significant insights into the structures of black tents, and merely reference their quantity as evidence of military importance (Estakhri 1989: 93, 112 & 122). This hinders our ability to analyse the structural features of the black tents and their erection method. These sources also remain silent about the size and dimensions of the black tents. The significance of the size of the black tents has only been clarified through modern ethnoarchaeological studies.

It was mentioned earlier that historical texts have focused mainly on the importance of the communication routes between Arjan and Fars, along with descriptions of significant settlements. Therefore, we should not expect much from these texts to mention all the settlements located along the route from Arjan to Fars. Additionally, the limited architectural remains found at Site 19 also suggest that the absence of such sites in the historical texts indicates relatively minor importance. Site No. 19 may have functioned as a seasonal stopover. Considering the historical context of such settlements in the Islamic-era texts, it is likely that the inhabitants of Site 19, along with other nearby sites, were part of the nomadic families previously mentioned by Istakhri (1969: 117), Al Moghaddasi (1982), and later by Ibnu' l-Balkhi (1921: 143, 148-155, 160). In fact, these nomadic settlements were part of the subsistence system of southwestern Iran during the early to mid-Islamic centuries. These nomads, whose number has been mentioned as at least 12,000, were considered part of the armies of the rulers of the time. This potential military force, referred to as the Kurds of Fars, was named so not because they were from the Kurdish tribe, but as all nomads in the third to fifth centuries AH were collectively referred to as Kurds in historical texts (Ibid). Among the prominent examples of such battles that took place in this region during the Seljuk era (around 553 AH) is the

campaign of Malek Shah ibn Mahmud against a figure called Shumlah, who was defeated with the assistance of tribal forces (Ibn al-Athir, *Al-Kamil*, 11:238). This account was also mentioned in the *Saljuqnameh* (2021) with the exact name of the region "Dogonbadan", which was the historical name for Gachsaran, noted in the mid-sixth century AH of the Seljuk dynasty, further emphasising the importance of the mentioned region during this period. As previously mentioned, Istakhri highlights and confirms that Giluayeh, regarded as one of the nomadic rulers of the region—after whom a vast area was named—maintained a standing and prepared army of one to three thousand soldiers at her court (Ibid 144). Similarly, Ibn al-Athir notes that Sunqur bin Mawdud, a local ruler in Kohgiluyeh, had amassed a large number of Turkmen and led a revolt with nomadic forces, aiming towards Khuzestan (Ibn al-Athir, *Al-Kamil* Vol. 11: 201). These contexts suggest that Site No. 19 could have been one of the settlements associated with such military forces. In addition to its nomadic livelihood, this settlement was also considered part of the military forces of the warring parties. The temporary and short-lived structures erected at this site indicate seasonal settlement, while the structures added over time suggest the continuation of such settlement for at least two centuries.

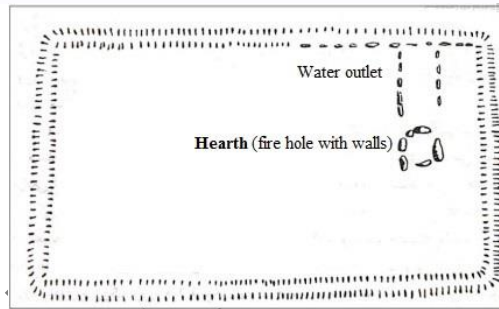


Figure 18: Black horizontal cross-section of a Lorestan black tent (After: Feilberg 1944: 156).



Figure 19: Remains of contemporary nomadic architecture adjacent to the excavated structure at Site No. 19. (After: Authors)

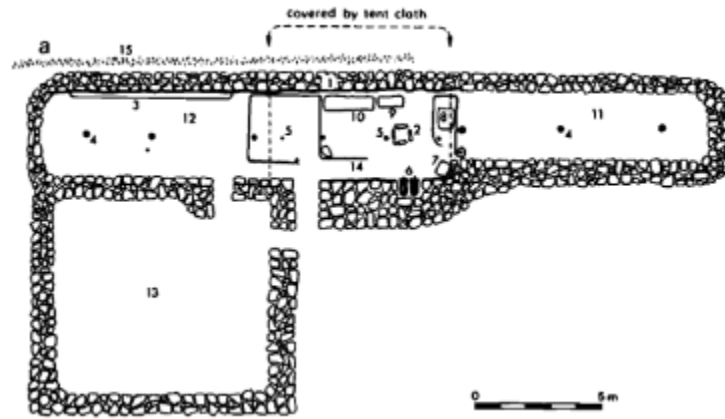


Figure 20: Plan of the black tent of nomads in western Iran (After: Edelberg 1966-67:390)

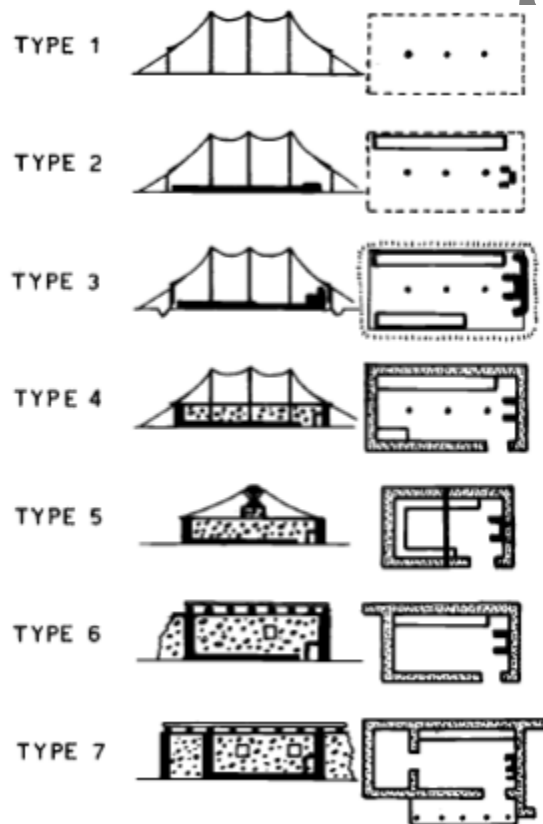


Figure 21: Different types of black nomadic tent structures (After: Cribb 2004:106).



Figure 22: The black tent of nomads in the summer areas of Boyer-Ahmad County (After: Authors).

Conclusion

The historical monument unearthed at Site No. 19 reveals a single settlement attributed to a nomadic pastoralist community that inhabited the area from late autumn to early spring, utilising it for grazing their livestock. Comparable patterns can be observed today among the Qashqai and Lur nomads in the region, who follow a seasonal migration. They spend the colder months in rural areas like this site and move to higher altitudes in the Boyer Ahmad and Semirrom regions during the warmer months. Ethnoarchaeological studies of the Boyer Ahmad tribe's settlements in areas such as Gachsaran, Behbahan, Dehdasht, and Yasuj have demonstrated notable parallels with this ancient lifestyle and settlement system. Adjacent to Site 19 are architectural remains dating back to the Qajar and Pahlavi periods, reflecting the continuity of settlement in the area. The original structure at Site No. 19 is characterised by relatively regular stone arrangements and geometric quadrilateral room layouts. However, the low walls of the two trench rooms, which were often covered with black tents, closely resemble contemporary nomadic architecture. This supports the notion that this site was a nomadic settlement near Cham-e Shir Dam in Gachsaran. The absence of wooden pegs, possibly due to reuse or deterioration over time, makes it difficult to accurately estimate the tent's size or extent. This, in turn, complicates efforts to gauge the population size or socio-economic standing of this community compared to modern equivalents affiliated with the Boyer Ahmad tribe. The site's proximity to Darveh Gorge and Cham-e Cheru Fortress further underscores its significance. Based on pottery finds across various contexts, the settlement dates from the early Islamic centuries through the Islamic Middle Ages, extending into the Seljuk period. This timeline closely aligns with the nearby Cham-e Cheru Fortress. The lack of significant archaeological deposits on the building's floor suggests voluntary abandonment. Additionally, a dense layer of blue-green marl, roughly 30 cm thick, separates two distinct phases of occupation. While there is some speculation that this soil might have been used on the building's surface during site restoration, evidence remains sparse. The limited architectural remnants, along with short-term settlement phases and their resemblance to current nomadic structures in the area, suggest that Site No. 19 was unlikely to be a centre for regional management or control. Instead, it likely served as a temporary residence for a relatively large household engaged in livestock herding under the oversight of nearby fortresses. This connection is supported by similarities in pottery styles discovered at these locations. Furthermore, historical records shed light on this settlement's role as part of a military

force tied to surrounding fortresses. Nomadic households, regardless of their transient lifestyles and impermanent settlements, played a vital role in the security infrastructure of the time. They could act as ready military forces, both defending against threats and ensuring safe passage along caravan routes. Historical sources reference routes connecting Arjan to Shiraz and Isfahan, suggesting these nomads may have been strategically positioned to safeguard these trade corridors or confront opposing forces under Arjan's sovereign authority. Their relationship with Arjan's ruling forces and local fortresses solidifies their dual role as herders and defenders within the socio-political landscape of the era.

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[1]. Site No. 19 is situated at geographical coordinates 39 R 490192 UTM 3335760 and at an altitude of 520 metres above sea level. Cham-e Cheru fortress is located two kilometres northeast of Site No. 19.