HISTORIA I ŚWIAT, nr 12 (2023)
ISSN 2299-2464
e-ISSN 2956-6436

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A systematic survey of Ardashir Palace's Stronghold at Tol-e Khezr, Firuzabad Plain in Fars Province, Iran

https://doi.org/10.34739/his.2023.12.07

Abstract: *This research investigated the archaeological site of Tol-e Khezr in Firuzabad with the purpose of establishing a relative chronology. This site is among those whose pottery has been less extensively studied, and it also boasts a strategic location. Therefore, the site of Tol-e Khezr was selected for systematic sampling and investigation of its structures to ascertain its relative chronology and usage as accurately as possible. A methodical approach was chosen for the investigation of Tol-e Khezr, consisting of three steps: mapping, sampling, and documentation of the findings (including washing the pottery, registering the pottery fragments, entering the information of the findings into SPSS software, selecting the diagnostic samples, drawing the diagnostic samples, and photographing the samples). In this methodical way, 50% of all grids were sampled, with the form of every other grid. This included 30 grids of 10 x 10 meters. The number of all gathered pottery comprised 644 pieces. To interpret the pottery, we considered 12 variables for them, and the information on each piece was entered into the Statistical Package for the Social Sciences (SPSS) according to these variables. One of the most essential classifications relates to the typology of Tol-e Khezr pottery forms, which parallels various surveyed and excavated areas' findings in Iran and beyond. Furthermore, the survey revealed that, in addition to typical pottery, three distinct types of ceramic were identified: coarse with raised bands, glazed (alkaline), and ceramics with a dark slip coating. At this firm, architecture and its details in visible and exposed areas were documented, described, analyzed, and compared*.

Key words: Archaeology, History, Iran, Sasanian, Fars, Firuzabad, Tol-e Khezr, Systematic Survey, Pottery

Introduction

Firuzabad Plain is situated 111 kilometers south of Shiraz, in the southern region of Fars Province in Iran [Fig. 1]. The expanse measures approximately 3,575 square kilometers, with a width ranging from 10 to 20 kilometers. The region has

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askari_chaverdi@yahoo.com; The authors carried out this archaeological field survey with a permission letter from the Iranian Center for Archaeological Research (the number 983/133/11465), and the financial support of ICAR, in January 18, 2020 to February 16, 2020.

an average elevation of 1,351 meters above sea level, and a mild climate, with summers being hot and dry and winters being cold and humid, making it ideal for animal husbandry of sheep and goats and agriculture, especially grain, fruit, and vegetables.[1] The Zagros Mountains naturally enclose the plain, forming a natural barrier. There are considerable heights to the northwest, north, and east sides of the plain, which locally take the names of Kherghe, Beriz and Meymand respectively. These heights separate the Firuzabad Plain from the Meymand and Khajei Plains. Furthermore, there are ridges to the south of the Firuzabad plain, namely Barmaze, Roshono and Asiab Badi, and to the southeast Agher heights, which continue to the Qara Aqaj river valley in the region of Qir and Karzin. All ranges leave three natural entrances to the Firuzabad Plain: one to the north (Tang Ab), one to the south-west leading to Farrashband, and another to the southeast reaching Qir and Karzin. The Firuzabad and Qara Aghaj rivers are the two most important rivers in this region, and they have been crucial in the settle-ment of individuals in the past and now. Two significant dams have been constructed on these rivers in the last few decades. Favorable conditions, facilitated by plentiful water and sturdy natural defenses, have allowed the territory to absorb a large number of inhabitants over time, leaving a variety of cultural heritage throughout the area.

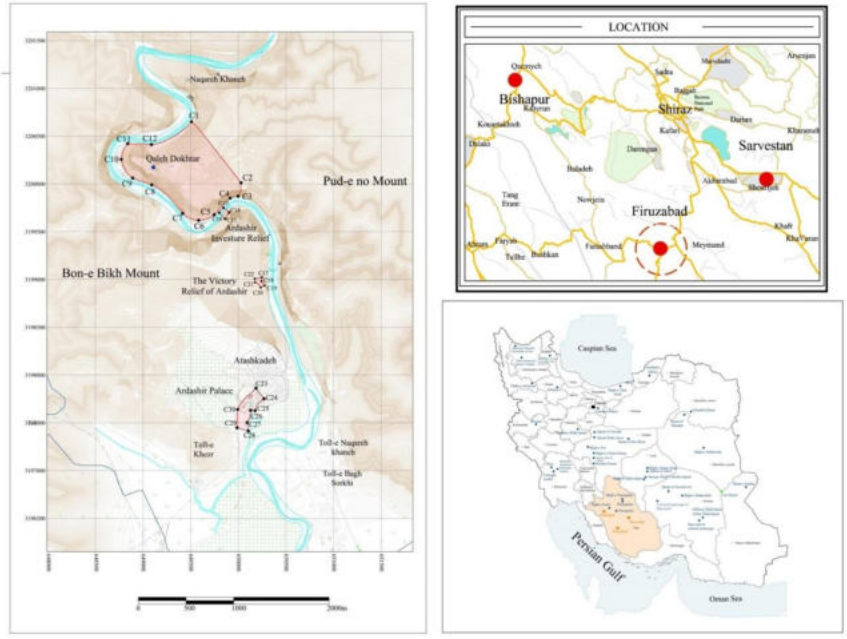


Fig. 1. Location of Tol-e Khezr in Sasanian World Heritage site, Firuzabad, Iran (Elaboration by A. Askari Chaverdi, H, Binaei), Archive of SALF

[1] Huff, 1999: 633.

Historiographers and scholars have deemed the Firuzabad Plain to be one of the most significant settlements during the Sasanian era; however, a systematic survey of the area has not yet been conducted. Several general surveys have been done, but they were not as specific as the current one. We rely on contemporary publications such as Sir Aurel Stein's gazetteer in the Fars region which provided the initial knowledge about the area, establishing a chronological order for the earliest dwellings.[2] The German scholar Dietrich Huff conducted one of the most remarkable investigations in the region, focusing on landmarks like Qal'a-ye Dokhtar and the Shahr-e Gur, along with an excavation in the latter.[3] In 2005, Reza Norouzi published his book, which encompassed the entire settlements of the area in a brief overview.[4]

The objectives of this study are to analyze the pottery assemblage sampled during the survey in order to establish a relative chronology and to examine the surviving architectural elements to uncover the site's purpose. In order to shed light on these aspects, it was necessary to conduct methodical and precise research into the pottery and structures of the site. Based on the findings of the investigation, it can be inferred that Tol-e Khezr contains pottery spanning the early periods of Parthian and Sasanian to the contemporary eras.

Methodology

A systematic approach was employed in this research to achieve the findings. The advantage of this method is that it can be used to estimate the standard deviation and the amount of error coefficient and to generalize the results to non-sampled areas. The utilization of probabilistic sampling in the current exploration has been used by archaeologists since 1970.[5] In order to prevent the clustering of sampling points that can occur in a simple random method, the area is systematically sampled. Because the selection of the first grid is arbitrary, this methodical study is a randomized sort. Each of the created grids has an equal chance of being selected and sampled. Consequently, the area is divided into equal grids. Subsequently, the grids are sampled every other one, including 50% of all grids. This enables us to cover all the areas in question and draw more precise conclusions. Tol-e Khezr was divided into 60 grids with an equal measure of 10 x 10 meters. In conclusion, 30 grids were selected and sampled in a checkered pattern. For this purpose, a stationary GPS was utilized to identify 78 precise points [Figs. 2, 4]. In total, 644 pieces of pottery were obtained. The collected samples were evaluated, analyzed, and then interpreted.

[2] Stein: 1935.
[3] Huff, 1971; 1999.
[4] Nouruzi, 2005.
[5] Hester, Shafer & Feder, 2013: 64-79.

Fig. 2. The southern panorama of Tol-e Khezr shows Ardashir Palace and Atashkadeh Village in the background. Archive of SALF (Photo by A. Eghra)

Aims of the survey

The main two principal questions of this research were to determine the nature of the function of Tol-e Khezr based on findings and architectural structures, as well as the relative chronology of the site and its periods according to material cultures. The existence of two significant historical monuments, namely Ardashir Palace and Shahr-e Gur, in the vicinity of Tol-e Khezr, provides further evidence to support the notion that the site possessed a defensive and surveillance function. The majority of the research conducted in this area has primarily focused on the political and architectural aspects of the aforementioned sites. Nonetheless, the historical hills of this region such as Tol-e Khezr have not been surveyed as meticulously as Ardashir Palace, Shahr-e Gur, or Qal'a-ye Dokhtar [Fig. 1].

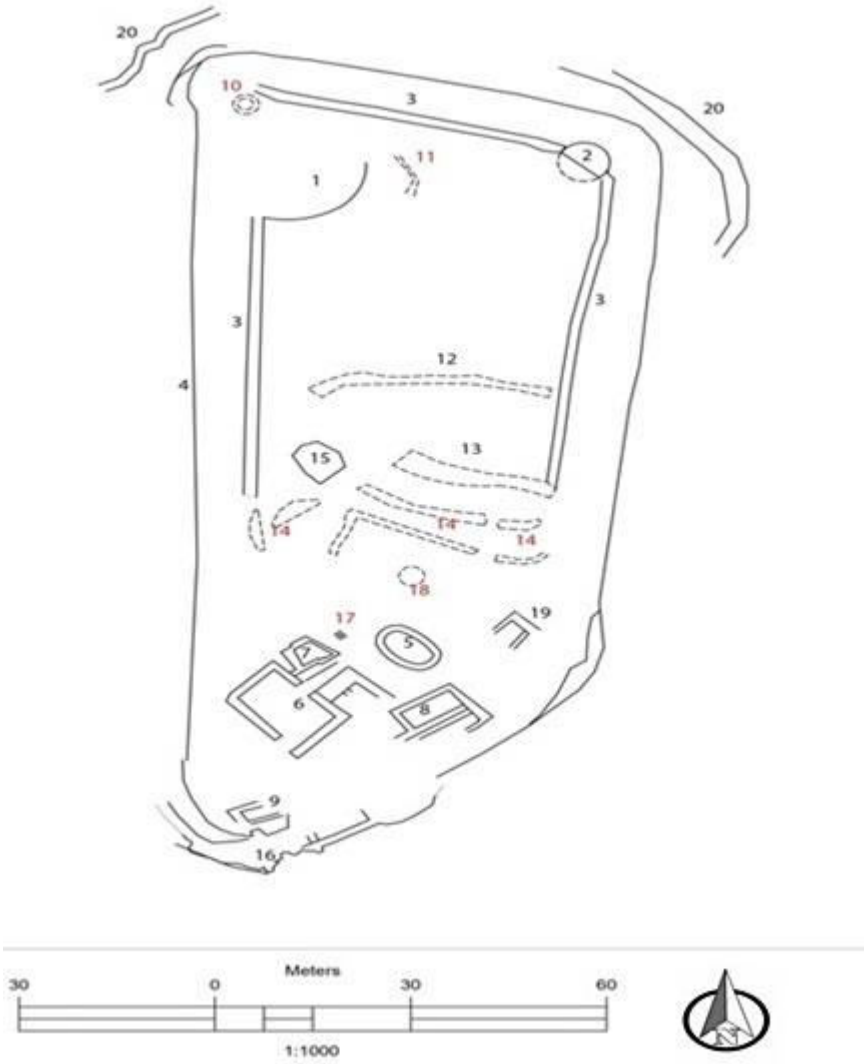


Fig. 3. Tol-e Khezr. Morphology map showing structure on the hill (Drawn by A. Eghra). The structures are numbered in the order as follows: 1. The North-western Tower Foundation; 2. North-eastern Tower Foundation; 3. Interior walls; 4. Exterior walls; 5. Oval basin; 6. Rectan-gular room;7, 8, and 9. Lateral chambers; 10. Circular sturacture; 11. A row of stones; 12 and 13. Foundation; 14. Contemporary fences; 15. Mausoleum; 16. A carved mortar; 17. Grave?; 18. Circular structure; 19. Right angle structure; 20. Massive blocks of the foundation.

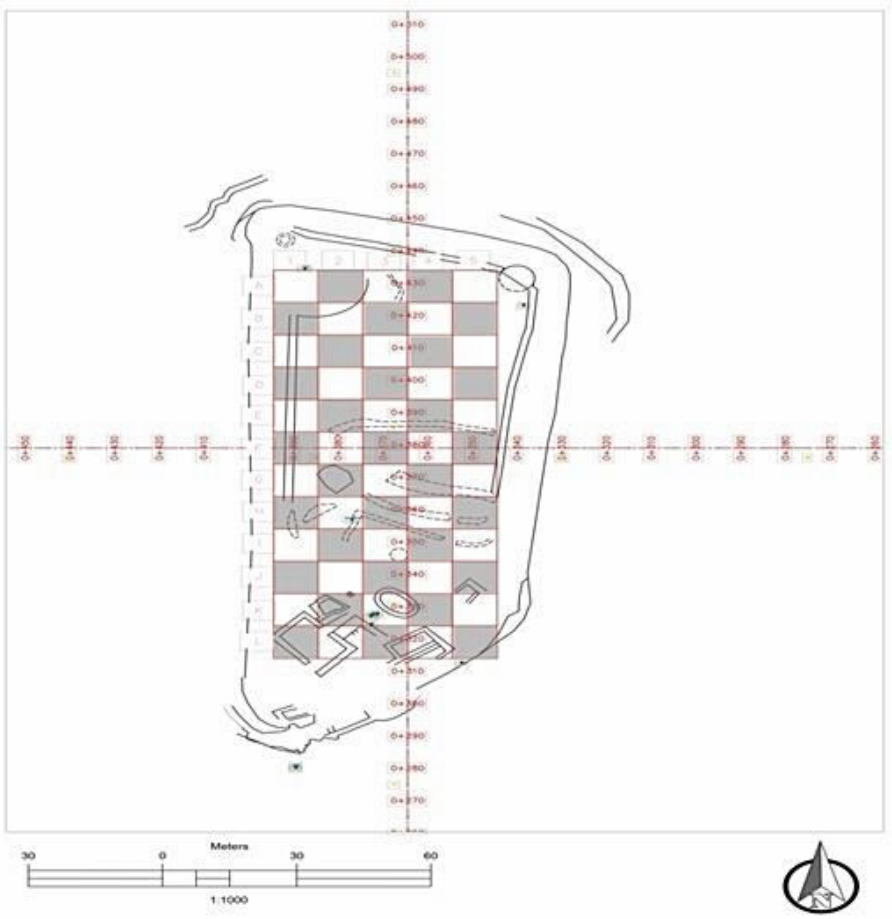


Fig. 4. A map showing the grids of Tol-e Khezr and the structures within them (Drawn by A. Eghra)

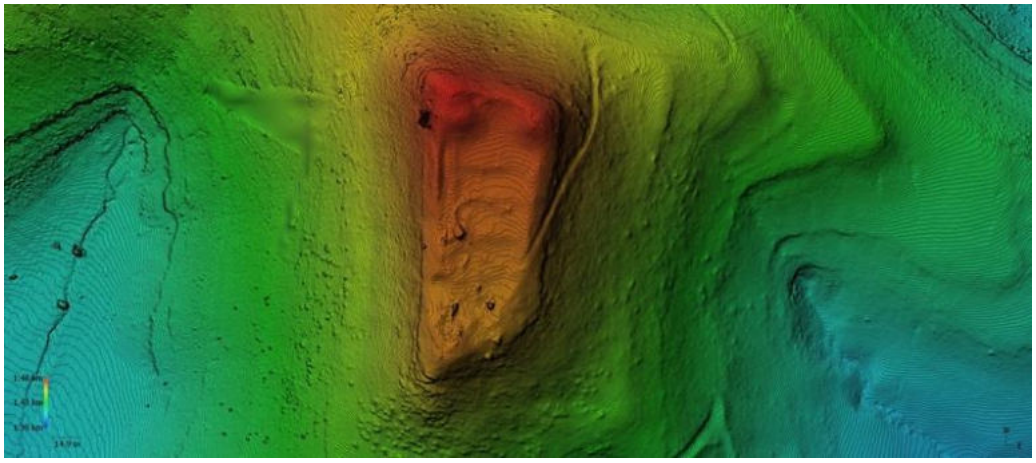


Fig. 5. Topographic map of the site (provided by A. Eghra)

Site description

Tol-e Khezr is a large, natural hill on which the remains of many collapsed rubble and plaster mortar can be seen. The hill is situated in close proximity to Ardashir Palace in its southwest [Figs. 1-2], at a longitude of 52° 32' 90" east and latitude of 25° 53' 28" north, at an elevation of 1,454 meters above sea level.

The structural remains are approximately 180 meters long by 95 meters wide [Figs. 2, 3, 5, 20]. As we approach the site from the eastern entrance, there is a contemporary road leading to the so-called Emamzadeh. The road is constructed from the debris of demolished structures [Figs. 3, 6]. On the northern side of the road, there are indications of a wall foundation that extends from east to west and reaches a height of 30 cm above the road surface [Figs. 3, 5, 7]. As one moves 25 meters to the north, another ruined wall foundation is observed from east to west, with a height of 30 cm higher than the previous wall [Figs. 3, 8]. The disparity in height has resulted in the formation of two terraces. The remains of two towers can be seen to the north of the last terrace. It is noteworthy to mention that the slope of the area increases from the south to the north of the hill [Fig. 5].

The area is provided with two fences: the outer fence is built of large stones in dry masonry without any mortar, whereas the inner fence is constructed of rubble and mortar and exhibits a more regular and well-shaped design. Five rows of large ashlars stand on a foundation made of huge flat slabs on the west edge of the hill, which is better preserved than the outer wall on the west edge. The wall's height at this particular location is 1.70 cm [Figs. 3, 9]. Nonetheless, in the other orientations, the exterior wall has been damaged and its ashlar blocks have fallen into plain sight. The exterior wall is situated on a multitude of massive and irregular foundation stones that are present all around the hill [Figs. 3, 10]. The inner fence is constructed of rubble and mortar. Despite the utilization of rubble for the construction of the wall, its shape is uniform and it possesses a thickness of 1.70 [Figs. 3, 11]. The gap between the interior and exterior wall measures 7.80 meters. The general layout of the peripheral foundations is irregular and aligns with the mound's inherent shape: the northern portion is broad, but it becomes thinner as we proceed southward down the hill.

Located on the southern part of the site, there is a rectangular chamber (12 x 8 meters) made of stone and mortar, with two entrance doors on the north and south sides. Only some parts of the wall and the foundations are still standing. The highest level of the remnant wall is approximately 1.50 meters, which is the southern wall of this building [Figs. 3, 12]. Several lateral chambers were added to the building, which appears to have collapsed due to a lack of solidity and the passage of time. These additions can be seen as rectangular chambers located to the north and northeast of the main chamber. Twenty meters to the north of the complex, there exists an oval-shaped basin measuring 8 x 4. On the northeastern side, the basin wall is

discernible through the presence of three rows of ashlars. On the opposite side of the basin, stones have been removed or encased by soil; however, the boundary of the basin is recognizable due to its substantial depth in comparison to the surrounding surface. The basin received rainwater through a stream to the north of it [Figs. 3, 13].

Near the basin to the west, there is a small, flat, rectangular-shaped structure (1 x 1.5 meters) made of rubble, which appears to be an Islamic grave [Figs. 3, 14]. There is a building located to the center-west of the site, called Emamzadeh Khezr, which has a simple chamber with an irregular plan [Figs. 3, 15]. The entrance of the chamber is in the east, leading to a small room with a short ceiling and a sharp arch. The inside of the room has been covered with plaster in the past few years. Due to the rocky foundations and the crumbled rocks that have surrendered the building, it can be inferred that the original building plan differs from the current one. The building's initial structure dates back to the 13th century. Subsequently, modifications were made; and additional features were incorporated, resulting in the building's original structure being unrecognizable.[6] Moreover, the presence of an ancient carved chute above the building that has been repurposed could suggest that the mausoleum was constructed from the ancient materials of a structure that has been replaced the present structure [Fig. 16]. On the northern angles of the site, in close proximity to the perimeter wall, there exist two circular foundations of varying sizes [Figs. 3, 17-19]. The northwest foundation has been preserved more effectively. The towers must have been associated with the Firuzabad Plain for security purposes and served as a means of monitoring the Ardashir Palace.

Masonry Technique

As evidenced by archaeological reports, this particular form of construction was quite advanced for its era [Figs. 10, 20]. It is remarkable in two ways: the process of plastering resulted in a robust and durable mortar, and the laying of stones bears resemblance to contemporary molding and concreting.[7] Stones were laid in an irregular pattern with soft plaster or gypsum mortar inside and more consistently with hard or pointed gypsum mortar on the faces. This wall construction technique has been employed in the construction of Qal'a-ye Dokhtar [Fig. 20], which is similar to the construction technique used to build the interior walls of Tol-e Khezr.

[6] Nouruzi, 2005: 43.
[7] Conservation Status Report of SALF to UNESCO, 2020: 28.

Fig. 6. Rubble fences belong to the contemporary period (Photo by H. Abbasnia)

Fig. 7. Remains of a foundation (Photo by H. Abbasnia)

Fig. 8. Traces of a foundation (Photo by H. Abbasnia)

Fig. 9. Exterior fortification and the foundation (Photo by H. Abbasnia)

Fig. 10. Exterior fortification and the foundation (Photo by H. Abbasnia)

Fig. 11. The interior wall of the site (Photo by H. Abbasnia)

Fig. 12. Rectangular room (Photo by H. Abbasnia)


Fig. 13. Oval basin (Photo by H. Abbasnia)

Fig. 14. A contemporary grave (Photo by H. Abbasnia)


Fig. 15. A building ascribed to Emamzadeh Khezr (Photo by H. Abbasnia)

Fig. 16. Stone chute (Photo by H. Abbasnia)

Fig. 17. A circular structure in the northwestern tower (Photo by H. Abbasnia)

Fig. 18. The remains of a tower foundation (northwest) (Photo by H. Abbasnia)

Fig. 19. The remains of a tower foundation (northeast) (Photo by H. Abbasnia)

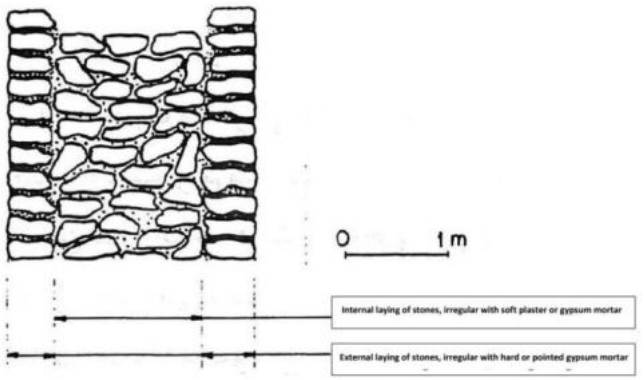


Fig. 20. The shape of interior walls (Conservation Status Report of SALF, 2020: 28)

Ceramics. Result of parallels

Intra-regional

The findings of this study were compared with those of several sites located in the southern regions of the Iranian plateau. The potteries discovered at Tol-e Khezr were compared to the areas of Tol-e Pargo, Hajiabad manor house, Qasr-e Abunasr, Karyan area, Qeshm Island (Garbeh Dan 2, Dofari, Lenj Sazi 3), Tol-e Gap Marvdasht, Qal'a-ye Golrokh, and Tape Yahya. It is evident that all of the sites are situated in the southern half of Iran. The utmost distribution was observed among the aforementioned areas for coarse pottery characterized by raised bands. According to a variety of survey reports and radiocarbon outcomes obtained from excavations, this particular type of pottery is suggested to date back at least to the first and 2nd centuries CE, extending until the conclusion of the Sasanian period. It is noteworthy to mention that the gray type [Fig. 22.10] exhibiting white particles of grit in fabric has more solid evidence to be from the 1st and 2nd centuries CE, based on close parallels. Six of the surveyed areas had this type, including Hajiabad manor house, Garbeh Dan 2, Dofari, Lenj Sazi 3, Qal'a-ye Golrokh, and Tape Yahya. A considerable number of potteries that have been identified as belonging to the early Islamic period (the 9th and 10th centuries CE) were predominantly of buff color and featured incised decoration or turquoise glaze. A piece of buff sherd was compared with a sample from Qasr-e Abunasr, which Donald Whitcomb[8] believes to be from the beginning of the Islamic or Abbasid era [Fig. 21.11]. Another example of buff-colored pottery with incised designs can be compared with samples at Tol-e Gap in the Marvdasht Plain. The potte-ry from the Islamic era discovered at Tol-e Khezr exhibits a higher level of fineness compared to that of the pre-Islamic styles and has been found in a limited number of locations.

[8] Whitcomb, 1985.

Extra-regional

Some surveyed sites on the southern shores of the Persian Gulf have yielded coarse pottery with raised bands, including Bahrain, Ed-Dur, Ra's Bilyaryar, the western islands of Abu Dhabi, and the Dibba site in Sharjah in the United Arab Emirates. The existence of this type of pottery on the southern shores of the Persian Gulf suggests economic and cultural exchanges during the Parthian and Sasanian periods. This type of pottery is widely distributed across diverse regions, which illustrates the extent of cultural domains, political influence, and, consequently, the economic prosperity of the Parthian and Sasanian periods after the end of Seleucid dominance. Furthermore, we can mention the increase in maritime communications compared to previous periods.

There are some diagnostic potteries with special features that appear to be necessary to mention, along with their photos or illustrations [Fig. 25].

Light reddish brown/ very dark brown slip ware [Figs. 25.2-3, 5]

This classification comprises dark gray, dark grayish brown, grayish brown, and light reddish brown slip colors. This group possesses an inorganic temper with fine to medium dimensions. They have a fine or medium finish and are without decoration. According to one sample, both the exterior and interior surfaces have a dark grayish-brown slip [Fig. 25.2]. There were only four sherds of this type found at Tol-e Khezr.

Turquoise glaze [Figs. 25.1, 25.6]

This ware is covered in a monochrome glaze that varies from dark green to turquoise. There are 31 sherds of this type, which constitute 4.8 % of all samples. The chronological timeline of this ware begins with the emergence of post-iron Age deposits[9] and seems to continue until at least the 14th century, witnessing subtle changes[10] in form and technique. One Sherd [Fig. 25.6] exhibiting a cracked-opaque green glaze bears resemblance to samples obtained from the Ramchah area, Bengali, Gorbedan, and Dofari in Qeshm Island.[11] In terms of technical characteristics, it is comparable to samples from Khuzestan and Mesopotamia. The similarity is also evident in the south of the Persian Gulf sites, especially in the areas of Eddur, Sohar, and Bahrain. A turquoise-speckled ware [Fig. 25.1] was found at the site. This ware has a pink core and is covered with a mottled glaze inside and out. The mottling is caused by inclusions within the glaze where the colorants have not mixed in well and

[9] Boucharlat, Perrot & Ladiray, 1987; Mouton, 1992: 148.
[10] Kennet, 1994: 188.
[11] Khosrowzadeh, 2013: 92.

by the glaze puddling slightly.[12] Close parallels have been observed at Julfar[13] and Kilwa[14] which were dated to the 16th century and 15th to 16th centuries, respectively.

One sherd [Fig. 25.4] in the sense of structure, apart from the metallic ring, is comparable to Clinky pottery that belongs to the Parthian period. The exterior surfaces are characterized by a reddish-brown color, while the core is gray, resulting in a sandwich-like appearance. The finishing is satisfactory; however, the size of inclusions is significantly larger than that of Clincy pottery, and there are also pores present on the surface.

Conclusions

Investigations conducted in the Firuzabad Plain and the results of a systematic survey of Tol-e Khezr suggest that the site has been in existence at least since the 1st and 2nd centuries CE. The construction of monuments during the Sasanian period augmented the significance of the area, resulting in the site's utmost significance during this period. Attention to the site continued in the early Islamic period for two reasons: firstly, it was an agricultural hub, and secondly, it was located on the trade route between Siraf and the Persian Gulf until the 10th century, when Siraf Harbor was destroyed by several episodes of massive earthquakes. Due to the religious importance of this area at least since the 13th century, the increased traffic on the mound by pilgrims has led to a decrease in historical findings, especially concerning pre-Islamic.

The location of Tol-e Khezr in relation to Ardashir Palace, Tol-e Naqareh Khaneh, and Qal'a-ye Dokhtar demonstrates its importance in ensuring the security of the palace. The presence of tower foundations at the corners of the site can indicate its security and military significance. These foundations were constructed of 'sarooj' and rubble, which are characteristic of Sasanian structures in this region. It should be noted that the Tol-e Naqareh Khaneh on the opposite side of the Firuzabad River has evidence of the existence of towers as well.[15] The construction of chambers in the southern part of the site, as well as large quantities of storage jars, support the hypothesis of the presence of soldiers and guards for security matters. In remote locations, such as Tol-e Khezr, the passive defense was used by those who lived there in times of emergency. It is unlikely that it would have been a settlement except for soldiers and guards, given its strategic location, storage wares, and architectural elements such as towers.

[12] Kennet, 1994: 188.
[13] Hansman, 1985: 52, Fig. 12a.
[14] Chittick, 1974: 304, colour pi. II, Fig. 91 o, pi. 112 cf.
[15] Nouruzi, 2005: 49.

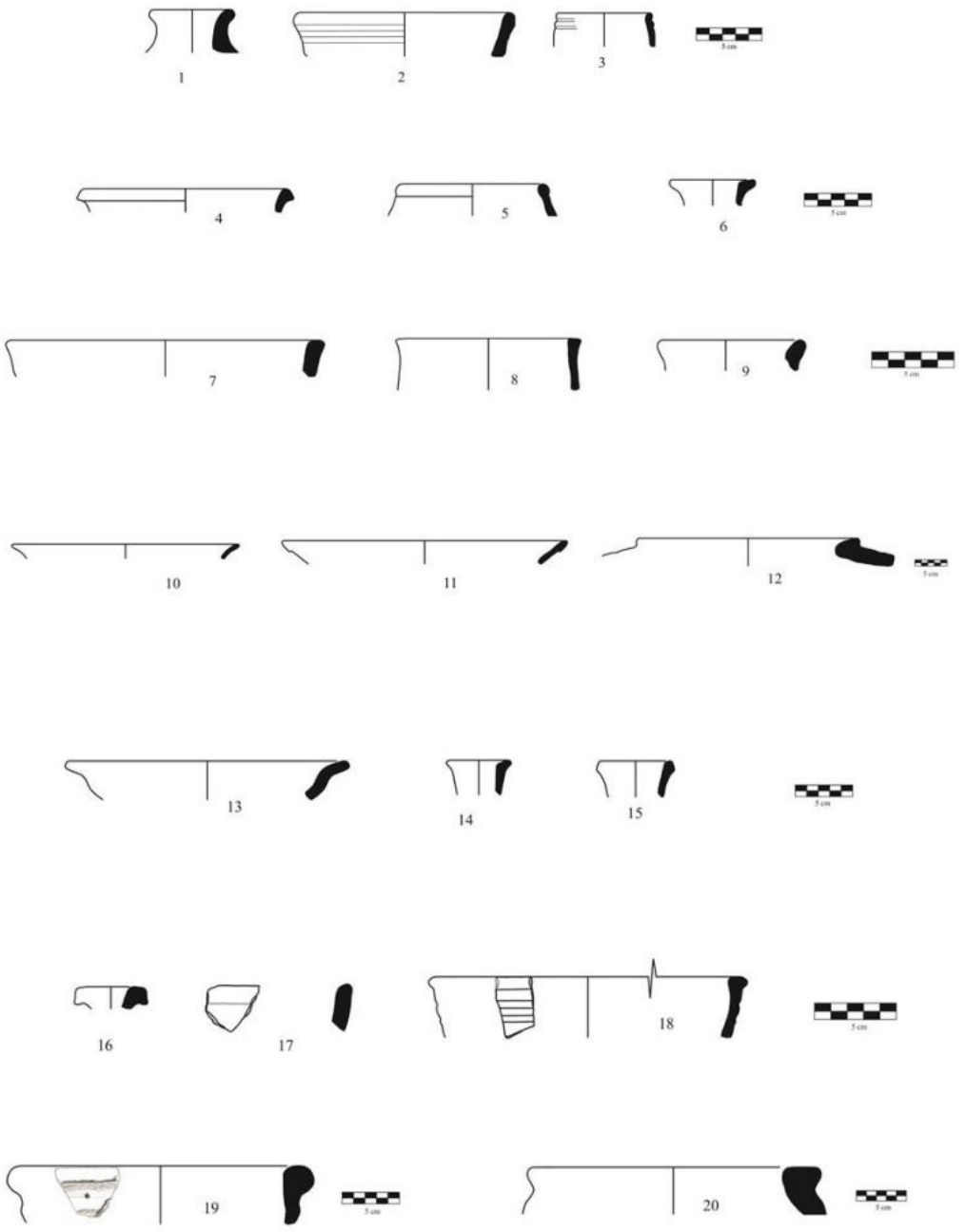


Fig. 21. The drawn rims (Drawn by F. Alizadeh)

Tab. 1. Ceramic description for Figure 21

No	**Description: 1. Form; 2. Technique; 3. Firing; 4. Color (Outer, Inner, Core); 5. Temper; 6. Finish (Outer, Inner surfaces); 7. Coating the outer surface; 8. Coating the inner surface; 9. Decoration (Outer surface, Inner surface.**
1	1. jar; 2. wheel; 3. well fired; 4. pinkish-white, pinkish-white, reddish-yellow; 5. inorganic; 6. fine, medium; 7. slip, pinkish-white; 8. no; 9. no.
2	1. bowl; 2. wheel; 3. well fired; 4. very pale brown, white, pink; 5. inorganic; 6. fine, fine; 7. wash, white; 8. wash, white; 9. two parallel bands with low objection on the outer surface and below the rim.
3	1. pipkin; 2. wheel; 3. well fired; 4. buff, buff, buff; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. two parallel incised lines on the outer surface and below the rim.
4	1. bowl; 2. wheel; 3. well fired; 4. light gray, light gray, light gray; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. no.
5	1. pipkin; 2. wheel; 3. well fired; 4. turquoise, turquoise, gray; 5. inorganic; 6. fine, fine; 7. glaze coating, turquoise; 8. glaze coating, turquoise; 9. no.
6	1. jar; 2. wheel; 3. well fired; 4. turquoise, turquoise, pink; 5. inorganic; 6. fine, fine; 7. glaze coating, turquoise; 8. glaze coating, turquoise; 9. no.
7	1. bowl; 2. wheel; 3. well fired; 4. turquoise, turquoise, pink; 5. inorganic; 6. fine, fine; 7. glaze coating, turquoise; 8. glaze coating, turquoise; 9. no.
8	1. bowl; 2. wheel; 3. well fired; 4. very dark brown, very dark brown, buff; 5. inorganic; 6. fine, fine; 7. slip, dark brown; 8. slip, dark brown; 9. no.
9	1. bowl; 2. wheel; 3. well fired; 4. pink, light red, light red; 5. inorganic; 6. medium, medium; 7. coating (wet smoothed), pink; 8. no; 9. no.
10	1. bowl; 2. wheel; 3. under fired; 4. reddish, yellow, reddish yellow, gray; 5. inorganic; 6. coarse, coarse; 7. no; 8. no; 9. no.
11	1. large bowl; 2. wheel; 3. well fired; 4. inorganic; 5. very pale brown, very pale brown, buff; 6. combined; 7. fine, fine; 8. no; 8. no; 9. no.[16]
12	1. storage jar; 2. handmade; 3. well fired; 4. light brown, light brown, light brown; 5. combined; 6. coarse, coarse; 7. no; 8. no; 9. no.
13	1. plate; 2. wheel; 3. well fired; 4. turquoise, turquoise, buff; 5. inorganic; 6. fine, fine; 7. glaze coating, turquoise; 8. glaze coating, turquoise; 9. n.
14	1. jar; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. coating (wet smoothed), coating (wet smoothed); 8. no; 9. no.
15	1. jar; 2. wheel; 3. well fired; 4. green, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. glaze coating with light green color; 7. no; 8. no.
16	1. thermos; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. no.
17	1. bowl; 2. wheel; 3. well fired; 4. turquoise, turquoise, buff; 5. inorganic; 6. fine, fine; 7. glaze coating, turquoise; 8. glaze coating, turquoise; 9. no.
18	1. large bowl; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. medium, medium; 7. no 8- no; 9. two parallel rows of incision under the rim.
19	1. bowl; 2. wheel; 3. well fired; 4. reddish yellow, light red, reddish-yellow; 5. inorganic; 6. fine, fine; 7. wet smoothed; 8. slip; 9. no.[17]
20	1. pot; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, reddish yellow; 5. inorganic; 6. medium, medium; 7. coating (wet smoothed); 8. no; 9. no.

[16] The sherd can be paralleled with a sample believed to be Abbasid or early Islamic from Qasr-e Abunasr excavated by Donald Withcomb (1985: Fig. 24.e)

[17] There is a drill hole below the rim which is a sign of ancient conservation, for when a ceramic or stone vessel broke in antiquity holes would be drilled on either side of the break and the two pieces were lashed together with cord or a leather thong. This kind of conservation occurred at Tell Abraq in UAE (Potts, 1998: 107).

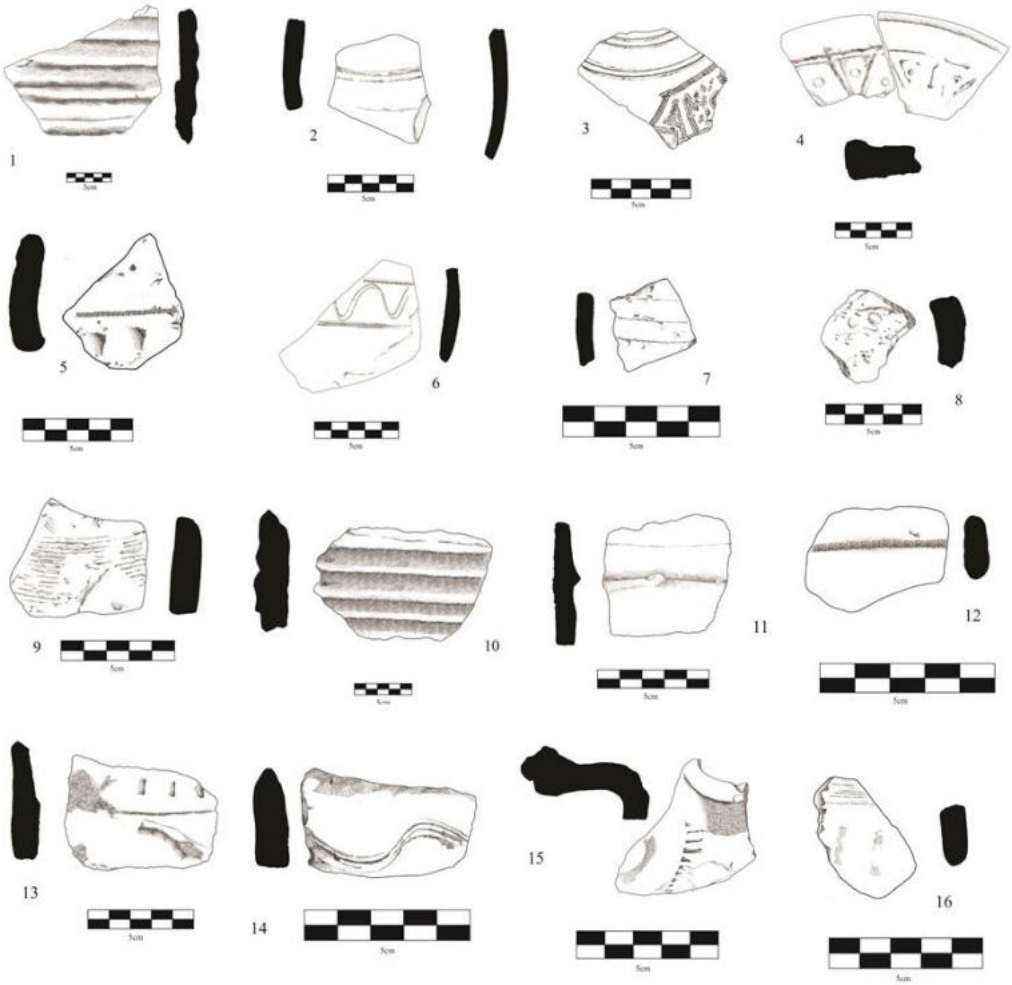


Fig. 22. Diagnostic bodies (Drawn by F. Alizadeh)

Tab. 2. Ceramic description for Figure 22

No	Description: 1. Form; 2. Technique; 3. Firing; 4. Color (Outer, Inner, Core); 5. Temper; 6. Finish (Outer, Inner surfaces); 7. Coating the outer surface; 8. Coating the inner surface; 9. Decoration (Outer surface, Inner surface.
1	1. Storage jar; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. coarse, coarse; 7. wash; 8. no; 9. incision.
2	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. coarse, coarse; 7. wash; 8. no; 9. incision.[18]
3	1. tray; 2. wheel; 3. well fired; 4. very pale brown, light red, pink; 5. inorganic; 6. coarse, coarse; 7. no; 8. no; 9; molded.
4	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. no; 8. wet smoothed; 9. incision.
5	1. undeterminable; 2. wheel; 3. well fired; 4. pink, pink, pink; 5. inorganic; 6. medium, medium; 7. no; 8. no; 9. incision and compressive.[19]
6	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. incision.[20]
7	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, buff, buff; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. incision.
8	1. undeterminable; 2. wheel; 3. well fired; 4. pinkish white, pink, pink; 5. inorganic; 6. medium, medium; 7. slip; 8. no; 9. finger impression.[21]
9	1. undeterminable; 2. wheel; 3. well fired; 4. light gray, light gray, light gray; 5. inorganic; 6. medium, medium; 7. no; 8. no; 9. combed.
10	1. storage ware 2; wheel; 3. well fired; 4. gray, gray, gray; 5. inorganic; 6. coarse, coarse; 7. no; 8. n; 9. raised band.[22]
11	1. undeterminable; 2. wheel; 3. well fired; 4. light reddish-brown, reddish-brown, gray; 5. inorganic; 6. medium, coarse; 7. no; 8. no; 9. edged band.[23]
12	1. undeterminable; 2. wheel; 3. well fired; 4. pink, turquoise, pink; 5. Inorganic; 6. fine, fine; 7. glaze; 8. glaze; 9. incision.
13	1. undeterminable; 2. wheel; 3. well fired; 4. gray, gray, gray; 5. inorganic; 6. medium, medium; 7. no; 8. no; 9. applique, incision, and compressive.
14	1. undeterminable; 2. wheel; 3. well fired; 4. buff, very pale brown, buff; 5. inorganic; 6. fine, fine; 7. no; 8. wet smoothed; 9. incision.
15	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. fine, fine; 7. no; 8. no; 9. compressive.
16	1. undeterminable; 2. wheel; 3. well fired; 4. buff, buff, buff; 5. inorganic; 6. coarse, coarse; 7. no; 8. no; 9. incision.[24]

[18] Comparable with a sample occurred at Qal'ay-e Golrokh (Gholami, Mohammadifar & Askari Chaverdi, 2022: Fig. 20)

[19] Comparable with a sample occurred at the Sasanian manor house in Hajiabad (Azarnoush, 1994: 180.z).

[20] Paralleled to a sample that occurred at Tol-e Gap (Khanipour*, et al*., 2017: 140, Figs. 5-6). The sherd was discovered within the stratification unit of excavation and dated to the 9th/10th centuries CE.

[21] Paralleled to a sample that occurred at Karian (Askari Chavardi & Kaim, 2012: 406, Fig. 30).

[22] It is noteworthy to mention that this type of pottery was found at Tol-e Khezr in various colors, including reddish brown, buff, and greenish buff which were more common than the gray one. This type of pottery can be compared to samples found at Dibba (Jasim, 2006: Fig. 27.2), the Western Islands of Abu Dhabi (King & Tonghini, 1998: Fig. 5), Ra's Bilyaryar (Kennet, 1994: Fig. 1-3), and Ed-Dur (Boucharlat, *et al*., 1988: 10, Fig. 7); Dofari, Gorbedan 2, and Lenj-sazi 3 sites in Qeshm Island (Khosrowzadeh, 2013: Fig. 9:2), the Sasanian manor house at Hajiabad (Azarnoush, 1994: 180.r; 185.o), and Tol-e Pargo. Based on radiocarbon examination at Tol-e Pargo the given pottery can be dated to the late Parthian period until the beginning of the Sasanian period (Askari Chaverdi, 2019).

[23] Paralleled to a sample that was found at Hajiabad (Azarnoush, 1994: 190.f).

[24] Paralleled to a sample found at Tol-e Kahnek, southern Khorasan (Farjami & Mahmoudi Nasab, 2020: 508, Fig. 6). The sherd was dated to the 9th and 10th centuries CE.

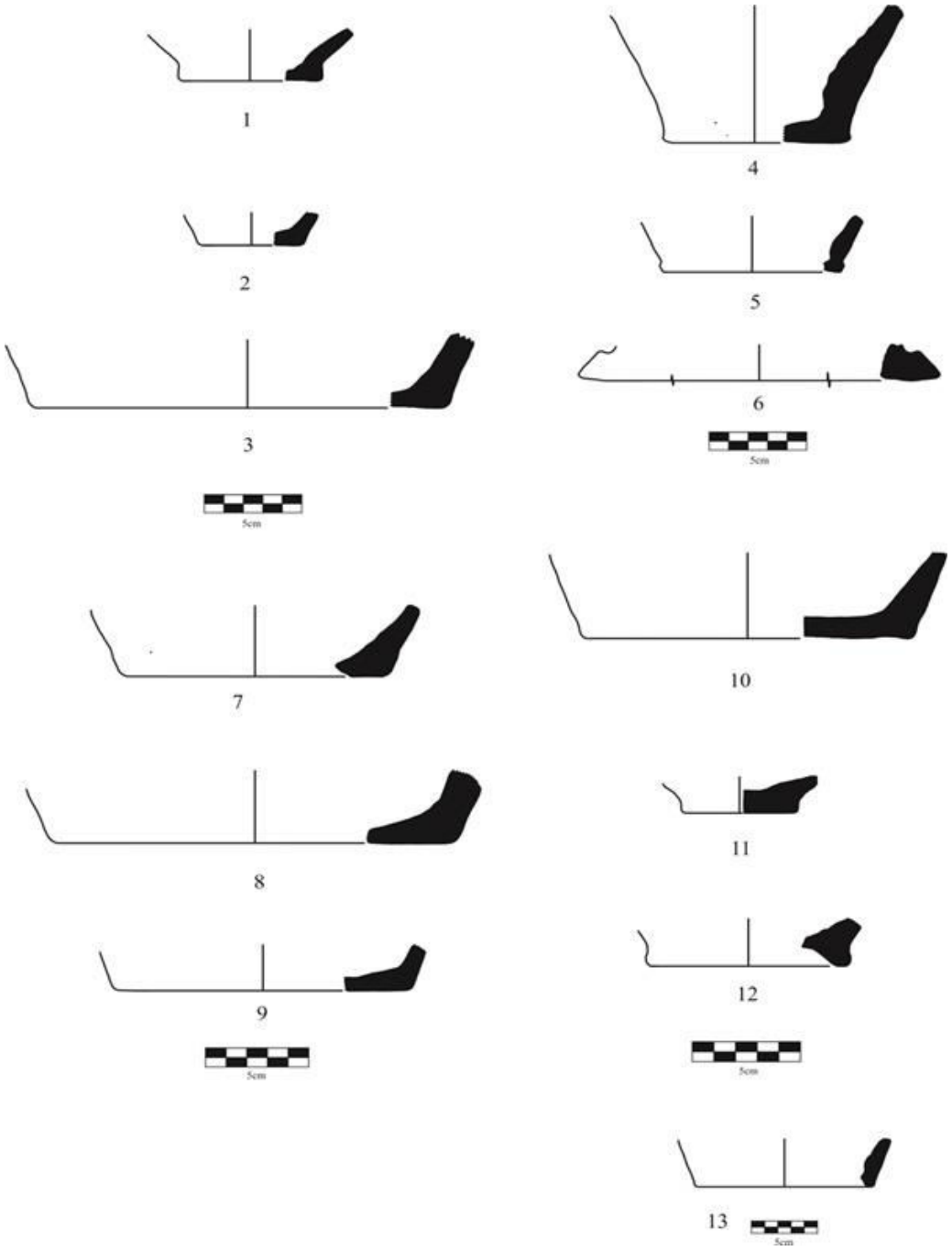


Fig. 23. The drawn bases (Drawn by F. Alizadeh)

Tab. 3. Ceramic description for Figure 23

No	**Description: 1. Form; 2. Technique; 3. Firing; 4. Color (Outer, Inner, Core); 5. Temper; 6. Finish (Outer, Inner surfaces); 7. Coating the outer surface; 8. Coating the inner surface; 9. Decoration (Outer surface, Inner surface.**
1	1. bowl; 2. wheel; 3. well fired; 4. light reddish-brown, buff, buff; 5. inorganic; 6. medium, medium; 7. slip; 8. no.
2	1. bowl; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, buff; 5. inorganic; 6. coarse, medium; 7. no; 8. no.
3	1. basin; 2. wheel; 3. well fired; 4. pink, pink, pink; 5. inorganic; 6. coarse, coarse; 7. no; 8. narrow parts with light red slip.
4	1. jar; 2. wheel; 3. well fired; 4. buff, buff, buff; 5. inorganic; 6. medium, medium; 7. no; 8. no.
5	1. vase; 2. wheel; 3. well fired; 4. olive, light brown, light brown; 5. inorganic; 6. fine, fine; 7. olive slip; 8. no.
6	1. undeterminable; 2. wheel; 3. under fired; 4. pink, no, dark gray; 5. combined; 6. medium, no inner surface; 7. no; 8. no.
7	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, buff; 5. inorganic; 6. medium, medium; 7. no; 8. no.
8	1. basin; 2. wheel; 3. well fired; 4. very pale brown, buff, buff; 5. inorganic; 6. medium, medium; 7. no; 8. no.
9	1. undeterminable; 2. wheel; 3. well fired; 4. very pale brown, very pale brown, very pale brown; 5. inorganic; 6. medium, medium; 7. no; 8. no.
10	1. basin; 2. wheel; 3. well fired; 4. pink, light red, light red; 5. inorganic; 6. medium, medium; 7. no; 8. no.
11	1. bowl; 2. wheel; 3. well fired; 4. pink, turquoise, pink; 5. inorganic; 6. medium, medium; 7. no; 8. glaze coating.
12	1. bowl 2; wheel 3. well fired; 4. pink, turquoise, pink; 5. inorganic; 6. medium, medium; 7. no; 8. glaze coating.
13	1. vase; 2. wheel; 3. well fired; 4. light red, light red, light red; 5. inorganic; 6. coarse, medium; 7. no; 8. no.

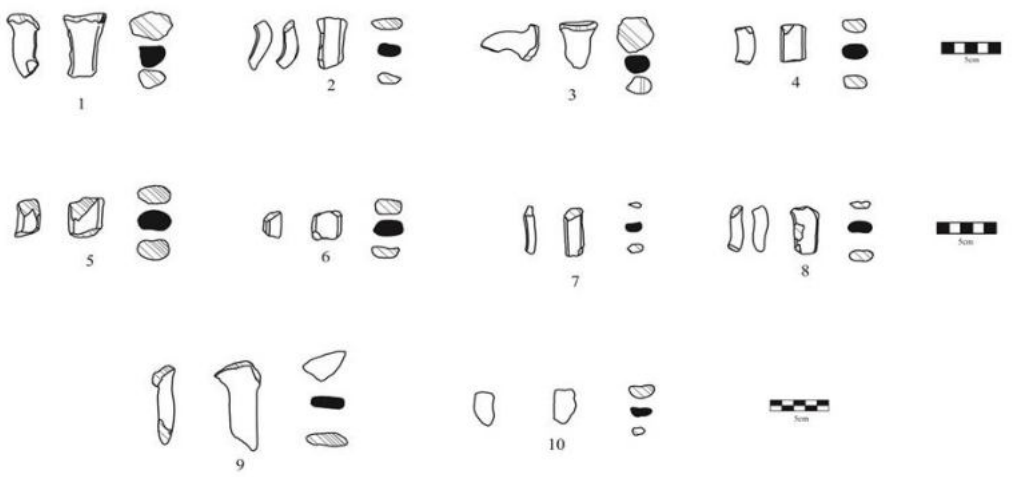
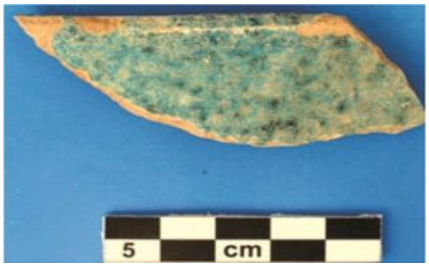


Fig. 24. The drawn handles (Drawn by F. Alizadeh)

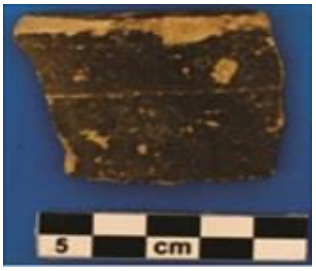
Tab. 4. Ceramic description for Figure 24

No	**Description: 1. Form; 2. Technique; 3. Firing; 4. Color (Outer, Inner, Core); 5. Temper; 6. Finish (Outer, Inner surfaces); 7. Coating the outer surface; 8. Coating the inner surface; 9. Decoration (Outer surface, Inner surface.**
1	1. undeterminable; 2. well fired; 3. very pale brown, very pale brown, very pale brown; 4. combined; 5. coarse, coarse; 6. no; 7. no.
2	1. undeterminable; 2. well fired; 3. very pale brown, very pale brown, very pale brown; 4. inorganic; 5. medium, medium; 6. no; 7. no.
3	1. undeterminable; 2. well fired; 3. buff, buff, buff; 4. inorganic; 5. fine, fine; 6. no; 7. no.
4	1. undeterminable; 2. well fired; 3. buff, buff, buff; 4. inorganic; 5. medium, medium; 6. no; 7. no.
5	1. undeterminable; 2. well fired; 3. very pale brown, very pale brown, very pale brown; 4. inorganic; 5. fine, fine; 6. no; 7. no.
6	1. undeterminable; 2. well fired; 3. very pale brown, very pale brown, very pale brown; 4. inorganic; 5. medium, medium; 6. no; 7. no.
7	1. undeterminable; 2. well fired; 3. buff, buff, buff; 4. inorganic; 5. fine, fine; 6. no; 7. no.
8	1. undeterminable; 2. well fired; 3. dark gray, dark gray, pink; 4. inorganic; 5. medium, medium; 6. wash; 7. wash.[25]
9	1. undeterminable; 2. well fired 3. very pale brown, very pale brown, buff; 4. inorganic; 5. fine, fine; 6. slip; 7. slip.
10	1. undeterminable; 2. well fired; 3. light reddish-brown, pink, pink; 4. inorganic; 5. medium, medium; 6. wash; 7. no.

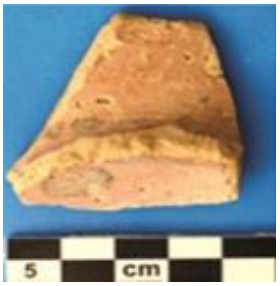
[25] Comparable with a sample occurred at Qal'ay-e Golrokh (Gholami, Mohammadifar & Askari Chaverdi, 2022: Fig. 19).



1 (Illustrated in Fig. 21.7)



2 (Illustrated in Fig. 21.8)



3 (Illustrated in Fig. 23.1)

4

5

6

Fig. 25. A few ceramics with special features (Photo by H. Abbasnia)

Acknowledgment

This paper is an adaptation of sections of the author's Master's thesis at Shiraz University (Abbasnia 2021). We express our sincere gratitude to Professor Pierfrancesco Callieri, who served as the advisor for the master's thesis from which the present paper was derived. We extend our gratitude to Shiraz University, the Research Institute of Cultural Heritage and Tourism (RICHT), and the Iranian Center for Archaeological Research (ICAR) for their assistance in granting a permit and their contribution to funding the Tol-e Khezr Survey. Thanks to Ali Eghra for providing topography maps and aerial photos. We are grateful to all the staff of Firuzabad World Heritage for their support in completing this project. The survey team was Prof. Alireza Askari Chaverdi, Homayoun Abbasnia, Alireza Abbasnia, Alireza Jafari, and Vahid Younesi.

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To cite this article: Abbasnia, H., Askari Chaverdi, A. (2023). A systematic survey of Ardashir Palace's Stronghold at Tol-e Khezr, Firuzabad Plain in Fars Province, Iran. *Historia i Świat*, 12, 111–138. https://doi.org/10.34739/his.2023.12.07