

QAL'E ASRAR: A NEWLY DISCOVERED SITE FROM THE LATE IRON AND ACHAEMENID PERIOD IN EASTERN IRAN

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Abstract: Eastern Iran, which today almost corresponds to the province of South Khorasan, is unknown in terms of archaeological studies. The sequence and cultural characteristics of the region during various prehistoric and historical periods are still unknown. Archaeological excavations have recently begun in the area, which promises a bright future for the region's archeology. Due to the lack of excavations and, as a result, the lack of data with a clear and reliable stratigraphic and chronological context, it is sometimes possible to suggest evidence for recognizing and introducing the cultural characteristics of a period through a superficial study of an area. This is an issue that has been addressed in this article. Qal'e Asrar, 63 km northeast of Birjand, is a site discovered in the survey and identification program of Darmian City in 2016. This area is a small monolithic castle that surface evidence, such as pottery pieces and, most importantly, a sealed piece of pottery, showing that it belongs to the late Iron Age and the Achaemenid period. Thus, the cultural material of Qal'e Asrar has been introduced as a feature of the pottery traditions of the late Iron Age and the Achaemenid period in this region of eastern Iran.

Keywords: Eastern Iran, Qal'e Asrar, Late Iron Age, Achaemenid period.

چکیده: شرق ایران که امروزه تقریباً با استان خراسان جنوبی مطابق است از نظر مطالعات باستان‌شناسی ناشناخته است. توالی و شاخصه‌های فرهنگی منطقه طی ادوار مختلف پیش از تاریخ و تاریخی همچنان ناشناخته است. به تازگی کاوش‌های باستان‌شناسی در این منطقه آغاز شده که نویدبخش آینده‌ای روشن برای باستان‌شناسی منطقه خواهد بود. با توجه به کمبود کاوش‌ها و در نتیجه فقدان داده‌هایی با بستر لایه‌نگاشتی و گاهنگاشتی مشخص و مطمئن، بعضاً می‌توان از طریق بررسی سطحی یک محوطه شواهدی برای شناخت و معرفی شاخصه‌های فرهنگی یک دوره پیشنهاد نمود، موضوعی که برای تحقق بخشیدن به آن در مقاله حاضر تلاش شده است. قلعه اسرار در ۶۳ کیلومتری شمال شرق بیرجند محوطه‌ای است که در برنامه بررسی و شناسایی شهرستان درمیان در سال ۱۳۹۵ کشف شد. این محوطه یک قلعه کوچک تک‌دوره‌ای است که شواهد سطحی همچون قطعات سفالی و از همه مهمتر یک قطعه سفال مهر شده، نشان می‌دهد که متعلق به اواخر عصر آهن و دوره هخامنشی است. به این ترتیب مواد فرهنگی قلعه اسرار به عنوان شاخصه‌ای از سنت‌های سفالی اواخر عصر آهن و دوره هخامنشی در این منطقه از شرق ایران معرفی شده است.

کلیدواژه: شرق ایران، قلعه اسرار، اواخر عصر آهن، دوره هخامنشی

I. Introduction

Iron Age studies in Iran began relatively later than in other historical periods. The beginning of the focus on Iron Age research was the explorations of the Hasanlu project in the 1950s (Dyson, 1965). The result of this project, which focused on a small part of the Lake Urmia basin in northwestern Iran, was the presentation of the Iron Age chronology of northwestern Iran, followed by the generalization of its chronology to all of Iran (Young, 1965, 1967; Dyson, 1965). It is obvious that the generalization of the chronology of a small part of the vast land of Iran to the whole was not correct and posed many challenges¹ (Muscarella 1974: 79, 1994: 143, Medvedeskaya 1983, Kroll 1994: 163, Haerincq 1988: 64).

In northeastern Iran, steps have recently been taken to recognize the Iron Age. Accordingly, in northeastern Iran, there are two cultures of Archaic Dehistan² and Yaz 1 with separate and sometimes common borders (Dana and Hozhabri, 2019; Dana *et al.* 2017; Basafa, 2017; Vahdati, 2016). Archaic Dehistan culture is characterized by pottery with a majority of gray pottery and a small percentage of red pottery (Kuz'mina, 2007: 379). All areas of this culture were formed on virgin soil, and all of them were suddenly abandoned without moving to the next period (Kohl, 1984: 206). The culture of Yaz 1 is characterized by hand-painted pottery with geometric patterns and fertile areas built on a high mud-brick platform (Masson, 1959). In the southeast, no evidence of the Iron Age has been

¹ In this article, the rule of Elam in the southwest and parts of the west and south of Iran, apart from the division of the Iron Age, is considered as one of the historical periods.

² Dehistan belongs to the Dahae people in southwestern Turkmenistan, located in the Hyrcanian area. Thus, the southern part of Hyrcani, its humid and fertile part is called Gorgan plain today and its northern part, which is a desert region, is Dehistan.

identified so far, and no area has been identified between the abandoned Shahr-e Sokhta in the second millennium B.C. to the Achaemenid site of Dahane Gholaman (Moradi *et al.*, 2014).

In the Achaemenid period, there was a huge heterogeneity in the distribution of information. Most of the information available from their capitals is Pasargadae (Stronach, 1978), Persepolis (Schmidt, 1953, 1957, 1970), and Susa (Perrot, 2013). In the eastern borders of Achaemenid Iran, such as Bactria (Leriche, 2007: 128; Wu, 2017), Sogdia (Shishkina, 1994: 85), Kharazm (Helms and Yagodin, 1997: 55) and Merv (Zadneprovsky, 1995: 158; Hermann and Kurbansakhatov 1995), significant archaeological activities have been carried out, which shows a significant difference compared to archaeological activities within the current borders of Iran³. In general, the cultural materials of Achaemenid Iran in its eastern lands are different from similar cultural materials in the heart of the Achaemenid lands, Persia and Susiana. The cultural material of the northeastern Achaemenid lands, almost equivalent to Greater Khorasan, is known today as “Yaz 3”.

Within the borders of present-day Iran and in its eastern half, information is very scattered and scarce. However, in the eastern half of present-day Iran, three Achaemenid sites have been introduced so far. These are as follows: 1) Dehane Gholaman area in Sistan, which may be the urban center of Zaranaka (Scerrato, 1966; Genito, 1990), 2) Rivi area in Samalghan plain of North Khorasan, which has been introduced as an area of 100 hectares (Jafari, 2013, Jafari *et al.*, 2016), and 3) Anbazak area in Torbat-e Jam area in East Khorasan (Khodadoost *et al.*, 2015). Of course, in the study of the Kal Salar site in the south of Roshtkhar city, a large number of Yaz 3 sites have been introduced, which naturally belong to the Achaemenid period but have been introduced as Iron Age sites (Rezaei *et al.*, 2018).

As can be seen from the above, basically, the Iron Age and the Achaemenid period in the region defined as eastern Iran are relatively new propositions.

In this article, east Iran is a region between northeast and southeast Iran, which almost corresponds to the province of South Khorasan (Fig. 1). This area is very poor in terms of archeological activities. Archaeological activities in this area have been mostly studied and identified (Farjami and Mahmoudinasab, 2021, Soroush and Zarei, 2012). The excavations carried out in it do not exceed the number of fingers of one hand. Thus, the prehistoric, historic, and even Islamic cultures of this region are not very clear. This situation is especially evident in prehistoric and historical times. Excavation in Xunik Cave (Coon, 1951) and Rازه sites (Soroush

and Yousefi, 2013), Kalle Kub (Yousefi *et al.*, 2013, Azizi Khoranaghi *et al.*, 2021) and Taxčar Ābād (Dana, 2014-2015) are the only excavations in the area in prehistoric times.

Previously, the Taxčar Ābād area of Birjand was introduced as the first site belonging to this period in eastern Iran. The Taxčar Ābād site of Birjand has been excavated by Dana for four seasons, and its results indicate a small mud-brick building probably with a ritual use that belongs to the late Iron Age and the Achaemenid period (Dana, 2014-2015). In this article, a newly discovered site called Qal'e Asrar from the late Iron / Achaemenid era in eastern Iran is introduced. In surface surveys in the form of survey and identification of Darmiān County under the direction of Sedighian in 2015 for the first time, this site was identified and surveyed.

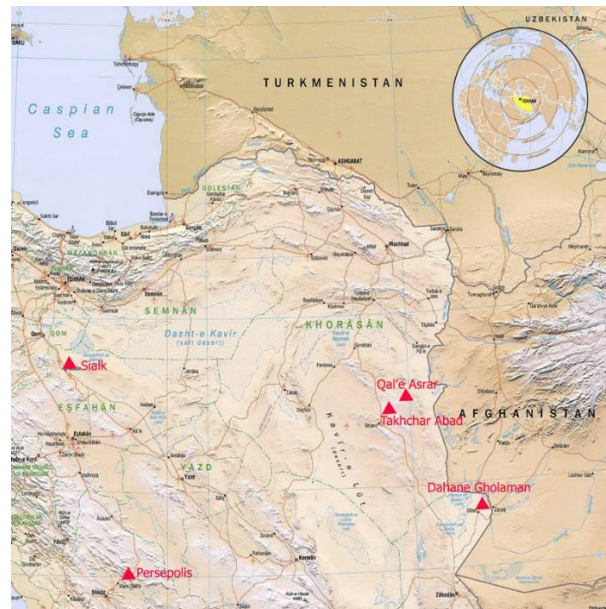


Figure 1. Map of South Khorasan province in eastern Iran.

II. Qal'e Asrar site

Qal'e Asrār is located 7 km northeast of Qohestān, 1800 m southeast of Barandud village, and 800 m northwest of Zir-e Barandud village of Qohestān district of Darmiān city (Fig. 2). Access to this site is possible via the Qohestān to Zohān asphalt road. This area is located 400 meters south of the intersection of this road, with the road leading to Barandud and just to the west of the main road. Today, this road is a relatively side road with a north-south direction. However, this path seems to have been more important in the past. Evidence of this claim is the existence of inscriptions at the T intersection site (400 meters north of Qal'e Asrar) in the Nasta'liq script of the Safavid period. The surrounding area of this work is in the east of the asphalt

³ Of course, useful collections of the distribution of Achaemenid sites have recently been collected (for Persian sources, see the special

issues of the Bāstānpazhuhi Journal, issues 10-11, 12-13, 14-15 and 18-19, and for Latin, Briant & Boucharlat, 2005; Lhuillier, 2018).

road, in the west of the agricultural lands, and in other aspects of the barren foothills. The historic site of Qal'e Asrar is now perched on top of a natural hill, the

bedrock of which is visible in some parts, at the height of about 20 meters above the surrounding land. This hill has a north-south direction.



Figure 2. Qal'e Asrar satellite image (left) and its reconstructed plan (right) (after Dana, 2019: figs 6 and 7).

III. Qal'e Asrar Architecture

At the top of the natural hill, the remains of building materials can be seen as scattered stones, which in some parts are accompanied by mud mortar in the form of a short wall. These architectural remnants do not look very cohesive at the area level. Instead, it is easily visible in the satellite imagery as a cohesive architecture. This architectural remnant is an almost square castle with a length of about 20 meters on each side, which has a

tower in each corner (Fig. 2). A pivot of the door was also identified among the architectural remains on the surface of the area, which indicates the existence of at least one entrance in this building (Fig. 3). However, there is no evidence of this entry at the area level or in the satellite image. Apart from these, no other architectural remains can be seen on the surface of the compound. These remains are located directly on the bedrock of the hill.



Figure 3. A pivot of the door (by Authors).

IV. Qal'e Asrar Pottery

A large number of potteries were scattered on the surface of the compound.

These potteries were plain and painted, and a small number were glazed. The glazed parts belong to the late Islamic centuries, and due to their small number, they

do not seem to belong to the site itself. Islamic pottery may have been transferred from the Mazār-e Čādu Islamic site about 150 meters west of Qal'e Asrar (below Qal'e Asrar) because the other potteries are homogeneous and appear to belong to the same period (Fig.4- 13).



Figure4. Excerpts from the Qal'e Asrar pottery design (by Authors).

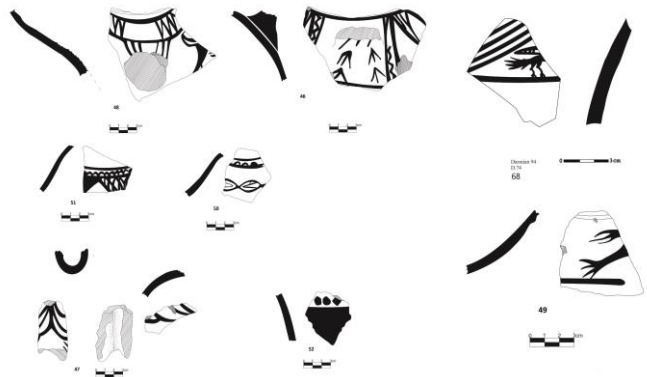


Figure 5. Excerpts from the Qal'e Asrar pottery design (by Authors).

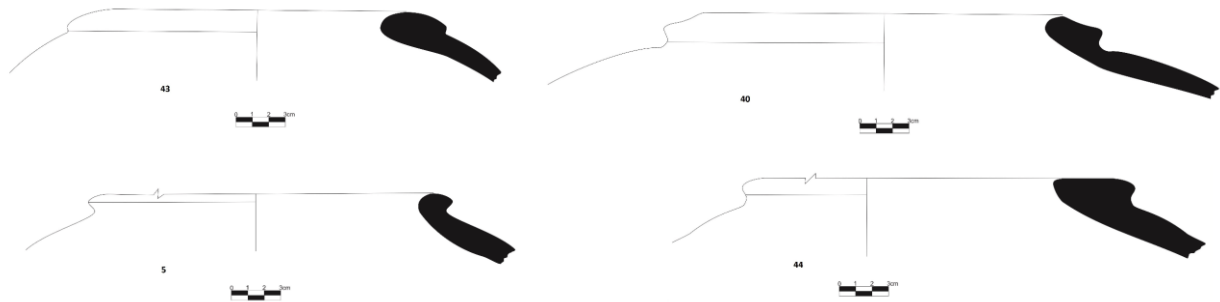


Figure 6. Excerpts from the Qal'e Asrar pottery design (by Authors).

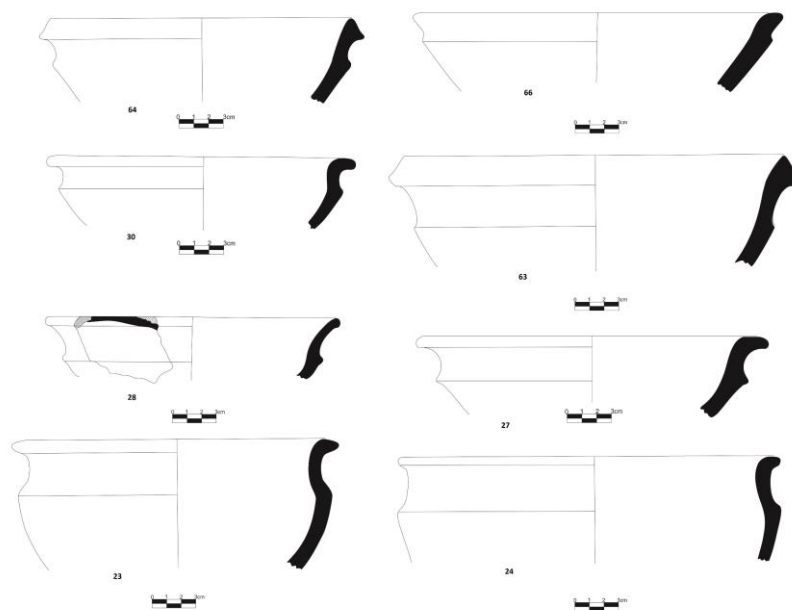


Figure 7. Excerpts from the Qal'e Asrar pottery design (by Authors).

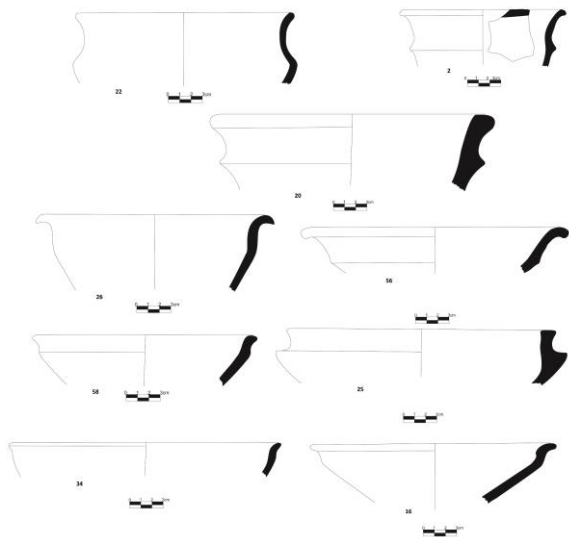


Figure 8. Excerpts from the Qal'e Asrar pottery design (by Authors).

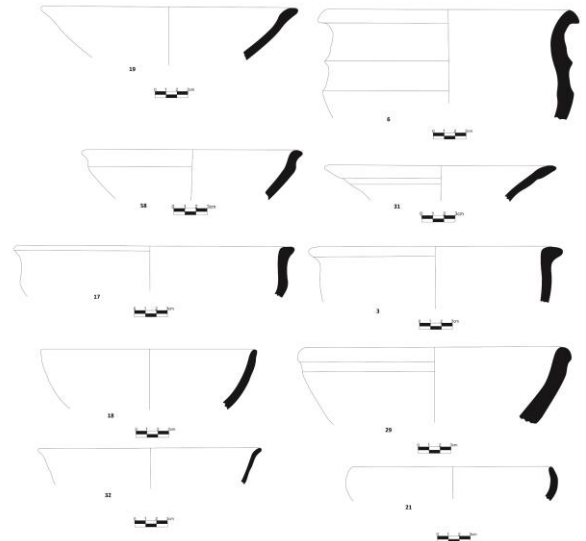


Figure 9. Excerpts from the Qal'e Asrar pottery design (by Authors).

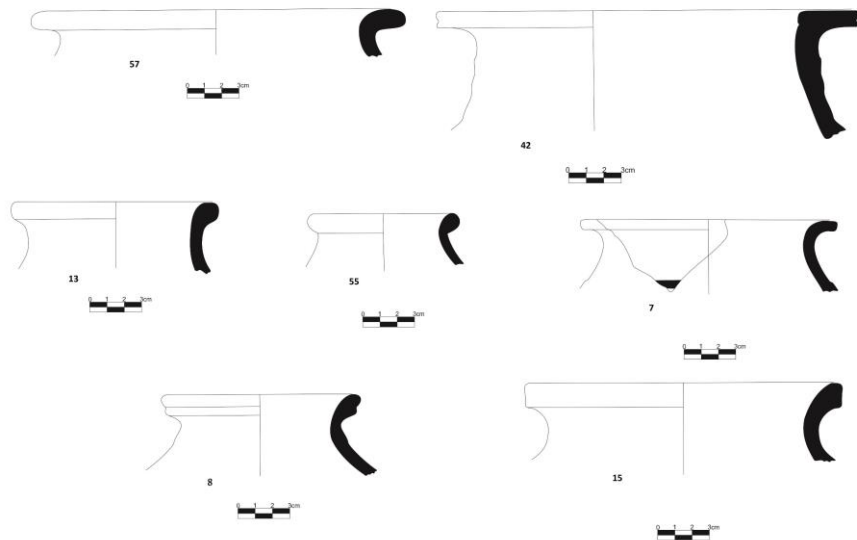


Figure 10. Excerpts from the Qal'e Asrar pottery design (by Authors).

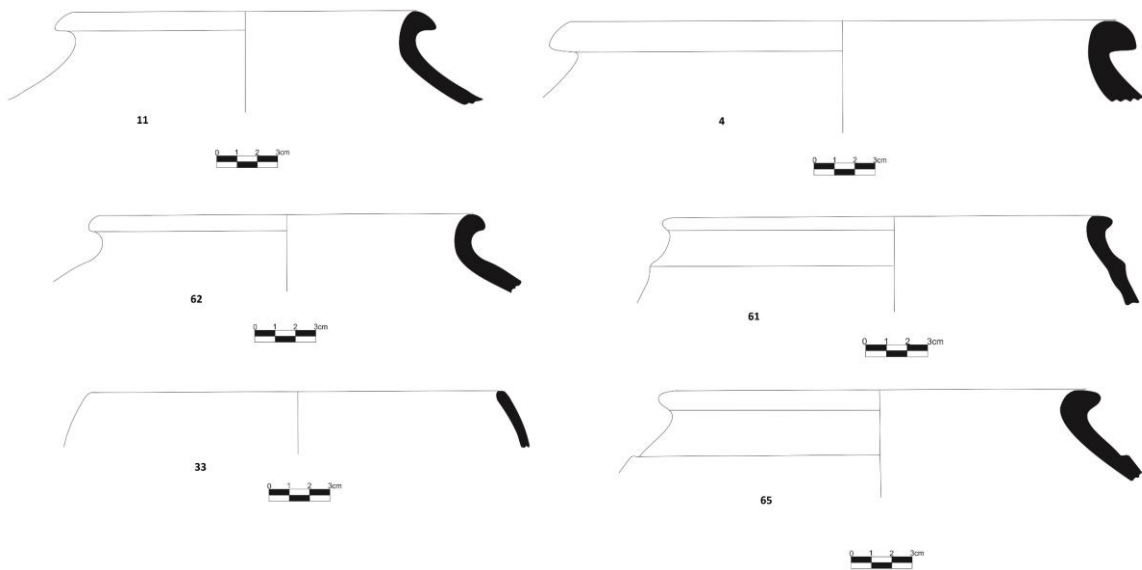


Figure 11. Excerpts from the Qal'e Asrar pottery design (by Authors).

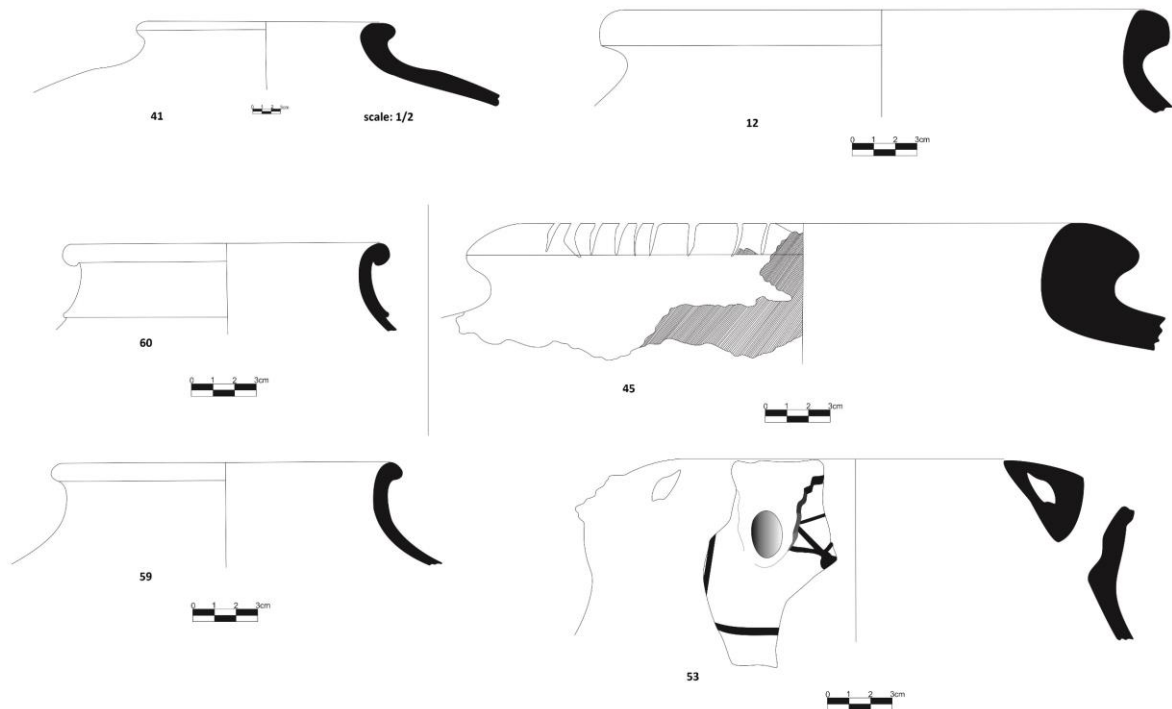


Figure 12. Excerpts from the Qal'e Asrar pottery design (by Authors).

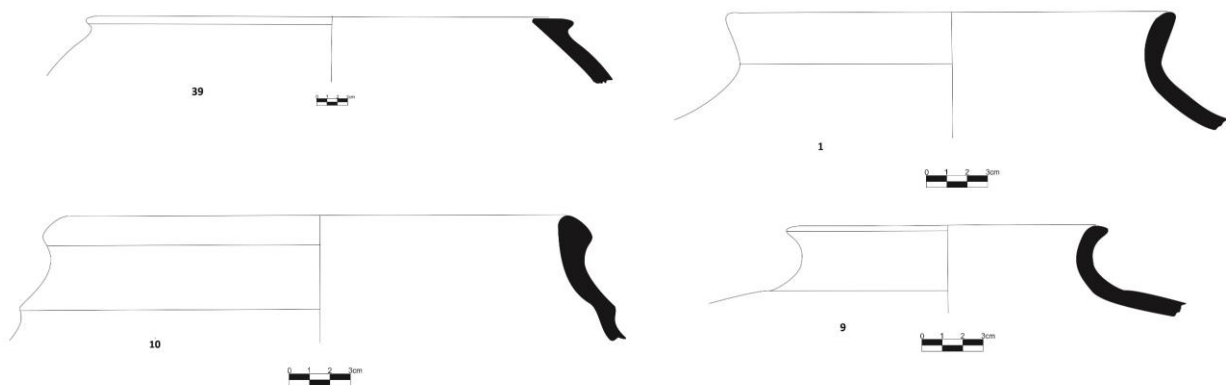


Figure 13. Excerpts from the Qal'e Asrar pottery design by Authors.

A total of 68 pieces of pottery consisting of the edge, body, and pipe were collected from the surface of the yard⁴. 88% of these potteries are edges, 10% are body, and 2% are pipes. Naturally, the statistics of the type of piece cannot be a criterion for the characteristics of the potteries of this area. However, other characteristics of the potteries can be considered as a criterion for the whole Qal'e Asrar potteries collection. The clay is 72% red, 18% buff, 7% gray, and 3% other colors. Interestingly, the color of the coating of these potteries is different from their clay. Thus, 83% of the potteries have a buff coating, 15% a red coating, and 2% a gray coating. Also, 78% of potteries have only an outer cover, 3% only an inner cover, and 16% on both

surfaces. Indeed, 3% of potteries also have no cover. Moreover, 56% of these coatings are concentrated mud, 38% are thin mud, 3% are both types of coatings, and 3%, as mentioned, have no coating. The pottery clay comprises gravel (61%) and a combination of sand and gravel (39%). Also, 78% of potteries are well-cooked, 12% undercooked, and 10% overcooked. Moreover, 93% of the potteries are wheel-made, 3% are hand-shaping, and the other 4% are unknown. On the other hand, 78% of the potteries are plain, and 22% are patterned. Patterned potteries have geometric patterns in the form of vertical, upward arrows (Fig. 5: 46), vertical diagonal lines (Fig. 5: 46), zigzag lines (Fig. 5: 48 and 51), curves (Fig. 5: 50 and 51) and the animal patterns are in the form of a bird. Due to the painted

⁴ The criterion for collecting these pieces of pottery was that they were significant. Thus, painted edges, floors and bodies were selected from surface pottery.

image and the accuracy of the shape and placement of the toes, as well as the long tail and the end of the striped wing, the engraved bird appears to be a bird of prey resembling a hawk or an Eurasian sparrowhawk⁵ (Fig. 5: 48, 49 and 68). The pattern on the pottery is red, maroon, and brown.

V. Qal'e Asrar Sealed pottery

One of the important findings of the survey of the site is the discovery of a sealed piece of pottery with the effect of a cylindrical seal on it, which is very important in dating the pottery collection of the site.

This piece is a buff-ware with dimensions of 11.5×10.5 with a thickness of 0.5 cm and is a part of the body of the container.

The inner part of the pottery is not the actual thickness of the pottery due to weathering and destroying some parts of the thickness, but the evidence shows that this piece belongs to a hand-shaping vessel.

However, due to the curvature of the existing piece, which is small, it seems that this piece of pottery belongs to a jar or any medium-sized pottery and that it is related to the upper part of the body or the part between the body to the neck of the container.

The dimensions of the cylindrical seal are 3 cm wide, and the maximum remaining height is about 2 cm. Unfortunately, the upper part of the seal is

broken. The sealing effect has a human, horse, and bird design (Fig. 14).



Figure 14. Sealed pottery Qal'e Asrar (by Authors).

VI. Chronology

Since this area has not been explored and there is no absolute dating for it, cultural materials should be used for relative dating. Unfortunately, the architectural remains do not help much in dating this site. Pottery is usually one of the most important cultural materials for comparison and relative dating. As can be seen, the pottery has homogeneous characteristics, and all seem to belong to a historical period. Unfortunately, pottery comparisons are not very helpful, and except for two pottery pieces, the pottery of this area is not comparable to other periods except the Achaemenid period. In addition, two pieces of pottery on this site are similar to the Achaemenid pottery of Persepolis and Pashto Pasargadae (Fig.7: 8; Fig. 8: 34).

Table 1 details the pottery

Number of potteries	Name of site	Reference	Period
Q.A.34	Persepolis	Ataci, 2004, Tablet 2, No. 9	Achaemenid
Q.A.08	Pasargadae	Stronach, 1978, fig 116, No. 20 Stronach, 1978, fig 118, No. 9	Achaemenid Post- Achaemenid

Dating the site based on two pieces of pottery alone cannot be a criterion for the age of Qal'e Asrar, so in addition to pottery, other criteria must be used for dating. One of the most important criteria for the antiquity of Qal'e Asrar is the presence of pottery designed with bird paintings. This type of pottery is similar to the patterned Taxčar Ābād (Fig. 5: 48 and 68). This type of painted pottery has been introduced in another article as one of the characteristics of the late Iron Age and early Achaemenid period in this part of eastern Iran (Dana, 2019). The most important criterion for dating the Qal'e Asrar site seems to be its sealed pottery. There is a cylindrical seal on this pottery, with human, horse, and bird designs. This sealing effect can be examined in terms of appearance as well as iconography, and based on the designs on it, relative chronology can be suggested. One of the key designs on

this seal is the horse. The presence of horses with cultural materials, such as horse reins and related objects, cups, and other metal objects, existed in Iran since the second millennium B.C. However, the design of a horse on a seal of the cylindrical type has been found in only two sites so far.

The first example of Hasanlu's period 4b is obtained in the central Assyrian style (Marcus, 1996, Pl. 79, No. 57). Period of 4b Hasanlu with new dates is dated to the Iron Age 2, equivalent to 800-1050 B.C. (Danti, 2013: 332). From the second site, Sialk, more cylindrical seals with horse designs have been obtained. Three cylindrical seals with a horse design have been discovered in B. Sialk Cemetery (Ghirshman 1939, Pl. 06, No. 1386; Pl. 96, No. 1327; Pl. 96, No. 810). Interestingly, Sialk B Cemetery is one of the few sites in Iran with a horse design on its potteries. Sialk

⁵ The study and identification of these animals has been done by Abolghasem Khaleghizadeh, an ornithologist.

B Cemetery Ghirshman first to 1200-1100 B.C. (Ghirshman, 1939: 245) and then dated to 1000 B.C. (Ghirshman, 1964: 280). Medvedeskaya dates it to the 8th century B.C. (Medvedeskaya 1983), and it is also dated to the middle of the 8th century B.C. (Malekzadeh, 2003: 20). In addition to dating Sialk B to about 700 B.C., Dyson considered it part of the triangle ware tradition (Dyson 1965: 200-201, Pl. XLI). Thus, Sialk Cemetery should be classified as the late Iron Age period.

The construction and use of cylindrical seals began in Mesopotamia and simultaneously in the southwest of Iran (Susiana plain) from the fourth millennium B.C. In Iran, the making of such seals is completely obsolete at the end of the Achaemenid period (Talaei, 2013: 154). Interestingly, the use of cylindrical seals in Babylon and Assyria was obsolete before the Achaemenid period and replaced flat seals (Porada, 1965: 252).

Therefore, according to the design of the horse on the seal, this role cannot be older than the 8th century B.C. According to the *terminus ante quem*, this pottery

sealed with a cylindrical seal could not be newer than the Achaemenid period. Thus, Qal'e Asrar, according to pottery comparisons, is a type of bird-painted pottery and stamped pottery from the late Iron Age / Achaemenid period.

VII. Conclusion

The Qal'e Asrar site, a site from the late Iron Age and the Achaemenid period, is located in an area that is weak in terms of archaeological studies. Qal'e Asrar, with its most important feature as a monolithic building, can be a criterion for recognizing other contemporaries in the region.

This area as a small castle can indicate its function as a watchtower or road guard. This indicates that a political system ruled in the area in the late Iron Age, which built a fort to monitor and guard the roads. Undoubtedly, future excavations in Qal'e Asrar could pave the way for studying the Iron Age and the Achaemenids of eastern Iran.

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