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PERSICA ANTIQUA

RESEARCH ARTICLE

Tepe Talebkhan: A Bronze Age Settlement in Sistan, Iran

Hossein Ali Kavosh[1], **Zohreh Oveisi-Keikha**[2]

Abstract

In the second half of the fourth millennium BCE, a settlement was established at Shahr-i Sokhta in Sistan. Simultaneously, during this period, the Porto-Elamite horizon emerged in a large zone of the Near East, especially on the eastern part of the Iranian Plateau. During the first quarter of the third millennium BCE and the early urbanization phase, Shahr-i Sokhta, an early urban center, expanded largely, and many satellite sites developed around it. To obtain some information on the economic and cultural interactions between Shahr-i Sokhta and these peripheral settlements, Tepe Talebkhan has been chosen for excavations and further detailed studies. In the article, by using the materials found during the fifth season of excavations at Tepe Talebkhan, the focus was to shed more light on the main cultural characteristics of the site and its mutual ties with Shahr-i Sokhta. Ceramic data indicates that the settlement was founded at the end of Shahr-i Sokhta III period and continued through the entire posterior period i.e. Shahr-i Sokhta IV. The carbon 14 results also provided an absolute date for the settlement sequence between 2500 and 2300 BCE.

Keywords: Sistan; Southeastern Iran; Bronze Age; Bullae; Token; Architecture.

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Introduction

Shahr-i Sokhta is the most well-known protohistoric site in the "Helmand culture" with an area of more than 270 hectares. This site, along with Mundigak, another important site in the Helmand basin near Qandahar, was a point of contact between the Iranian Plateau and the Indus Valley (Cortesi *et al.*, 2008; Seyyed Sajjadi, 2023) on the one hand, and with Susa and Mesopotamia on the other. Archaeological investigations carried out at Shahr-i Sokhta by Italian and Iranian archaeologists brought to light the residential area, the craftsman zone, a monumental area, and a large cemetery (Tosi, 1968; 1969; Piperno and Tosi, 1975; Seyyed Sajjadi, 2015; 2019; Ascalone and Seyyed Sajjadi, 2022a-b).

The number of Bronze Age sites around the protohistoric settlement of Shahr-i Sokhta increased from 2800 BCE due to urbanization and economic exchanges. The region benefited from an ideal geographical position at the crossroads of a commercial route connecting northeastern and eastern raw material centers (Badakhsahn's lapis lazuli, Indian cornelian, and Central Asiatic turquoise mines) to Susa and Mesopotamian city-states in the west (Salvatori and Tosi, 2005). This phenomenon lasted until the end of the Shahr-i Sokhta III period, when urban life ceased.

With the prosperity of artisanal activities at Shahr-i Sokhta and commercial exchanges with neighboring and distant regions, the importance of satellite sites around Shahr-i Sokhta increased. Undoubtedly, these peripheral sites were engaged not only in producing prestigious and ordinary goods used at Shahr-i Sokhta (the central settlement in the region) but also in exporting them to western centers.

So far, most research regarding the Bronze Age in Sistan has concentrated on Shahr–i Sokhta, and little attention has been paid to studying the satellite settlements around it to obtain information about them and their roles in regional and trans-regional interaction spheres. Within this perspective, in the present article, we aim to shed more light on one of these peripheral sites, i.e., Tepe Talebkhan, located 20 km southwest of Shahr-i Sokhta. The excavations at Tepe Talebkhan have provided valuable data regarding artisanal developments at the end of the third millennium BCE, as well as the cultural sequence of the later periods at Shahr-i Sokhta (Shahr-i Sokhta III-IV). By studying the materials found during the fifth season, we aim to answer the following questions: What is the chronological sequence of Tepe Talebkhan? What is the function of the site, and what are its cultural contacts with other regions?

Bronze Age in Sistan

Following his extensive studies, Aurel M. Stein also visited some sites in Sistan, including Shahr-i Sokhta (Stein, 1928). In the 1950s, Walter Fairservis from the American Museum of Natural History was another archaeologist who studied in Sistan of Afghanistan and identified some Bronze Age sites in Gardan-i Reg and Godar-i Shah (Fairservis, 1961). In 1959, Giuseppe Tucci, the president of the Istituto Italiano per il Medio ed Estremo Oriente (ISMEO), proposed a research

Fig 1. Overview of Tepe Talebkhan

program focused on archaeological activities in Iranian Sistan by beginning a survey that resulted in the identification of several sites. In 1967, the Italian team led by M. Tosi started excavations at Shahr-i Sokhta (Tosi, 1969; 1970; 1973; 1983; Cortesi *et al.*, 2008). After the Islamic Revolution in Iran, the activities of the Italian expedition in Sistan ended. In 1997, after some time, archaeological research was resumed by the Iranian Center for Archaeological Research (ICAR), directed by S. M. Seyyed Sajjadi (Seyyed Sajjadi and Moradi, 2022; Ascalone, 2020; 2022; Ascalone and Seyyed Sajjadi, 2022a-b).

In 2008 and 2009, R. Mehrafarin and S. R. Mousavi Haji conducted an archaeological survey of the Sistan plain, identifying more than 850 Bronze Age sites (Mehrafarin and Mousavi Haji, 2009; Mousavi Haji and Mehrafarin, 2010). The University of Zabol started excavations at the satellite sites around Shahr-i Sokhta in 2003 and has so far excavated Tepe Talebkhan, Tepe Graziani (Kavosh *et al.*, 2019), Tepe Yalda (Kavosh, 2012), and Tepe Rostam (Kavosh, 2020). In recent years, two other sites in the region, e.g., Tepe Sadegh (Shirazi, 2019) and Tepe Dasht (Mortazavi *et al.*, 2011), were excavated by the Department of Archaeology of the University of Sistan and Baluchestan, Zahedan, providing valuable information about the cultural sequence and evolution of Sistan.

Tepe Talebkhan

Tepe Talebkhan is located in the southern part of Qala-e Rostam district, 76 km southwest of Zabul and 20 km south of Shahr-i Sokhta. It is a roughly round mound with dimensions of about 70 × 50 m and an altitude of about 8 m (Fig. 1 and 2). The site has been severely damaged due to its location alongside the Zahedan to Zabol road in the west and a water transfer canal from Zabol to Zahedan in the east. S. M. Seyyed Sajjadi ensured the direction of the first and second seasons of excavations at Tepe Talebkhan. Then, Mehdi Miri was responsible for the excavations of the third and fourth seasons (Miri, 2007); Kavosh supervised the fifth season (2009) and the sixth season

(2015). The purpose of the research program was to study the cultural sequence of the site, its function, and its relationship with Shahr-i Sokhta, as well as to train archaeology students in practical courses.

Three trenches have been opened in the fifth season: a stratigraphic deep trench, a stepped trench, and an extensive trench. During the excavations, various features, architectural structures, and artifacts such as rooms, hearths, pits, as well as pottery, clay, and stone objects were found, bearing witness to economic and cultural interactions with Shahr-i Sokhta and other adjacent sites.

Trench I (Stratigraphic Vertical Trench)

Trench I (2×1 m) was excavated on the west side of the site. This trench identified 36 contexts with about 310 cm of deposits, including five occupational phases. The first phase consists of a deposit and heated soil located in the southeast corner of the trench. From this phase, heated soil and a fired structure were recovered. The second phase (70 - 120 cm depth) consists of mud-brick debris of walls mixed with soil and ash. The remains of the third phase (120 - 190 cm) include a small architectural unit formed by six mud-brick walls. The walls in this phase are oriented north-south and east-west, and the mud bricks have been placed both lengthwise and transversely. Due to the small size of the trench and the location of the walls, the analysis of architectural spaces is impossible. The fourth phase consists of two walls, each made of two rows of mud-bricks positioned lengthwise next to each other, located at a depth of 190 to 250 cm from the trench surface. The fifth phase (250 - 310 cm from the trench surface) is the last one and includes a mud-brick wall and several layers of soil and ash deposits, located above the virgin soil (Fig. 3).

Trench II

This trench (2×2 m) was excavated on the eastern slope of the site. About 350 cm of cultural deposits, including six settlement phases (43 contexts), were identified, of which four phases delivered architectural remains, and two others revealed only cultural deposits, including soil and ashy layers (without architectural vestiges). The first phase starts from the surface of the trench and continues to a depth of about 60 cm, containing soil and ashy deposits. The second phase is recognized from 60 cm to about 100 cm and consists of three mud-brick walls and a floor. Two walls (contexts 2010 and 2012) are connected, forming a right-angled space on the southwest side. The other wall (context 2011) is located on the north side of the trench. Both sides of it are covered with plaster (Fig. 4). The most important findings of this phase include some potsherds, a fragment of an alabaster vessel, slings, animal figurines (Fig. 10, No. 1-3), and animal bones. The third phase (from a depth of about 100 cm to 160 cm) includes deposits of soil and ash without architectural remains. The fourth phase (starting at a depth of 161 cm) includes a wall constructed with red-heated mud bricks in a south-north direction. The fifth phase of settlement begins at a depth of 197 cm and continues to a depth of 287 cm, including an L-shaped wall connected to the northern and eastern sides of the trench. The sixth

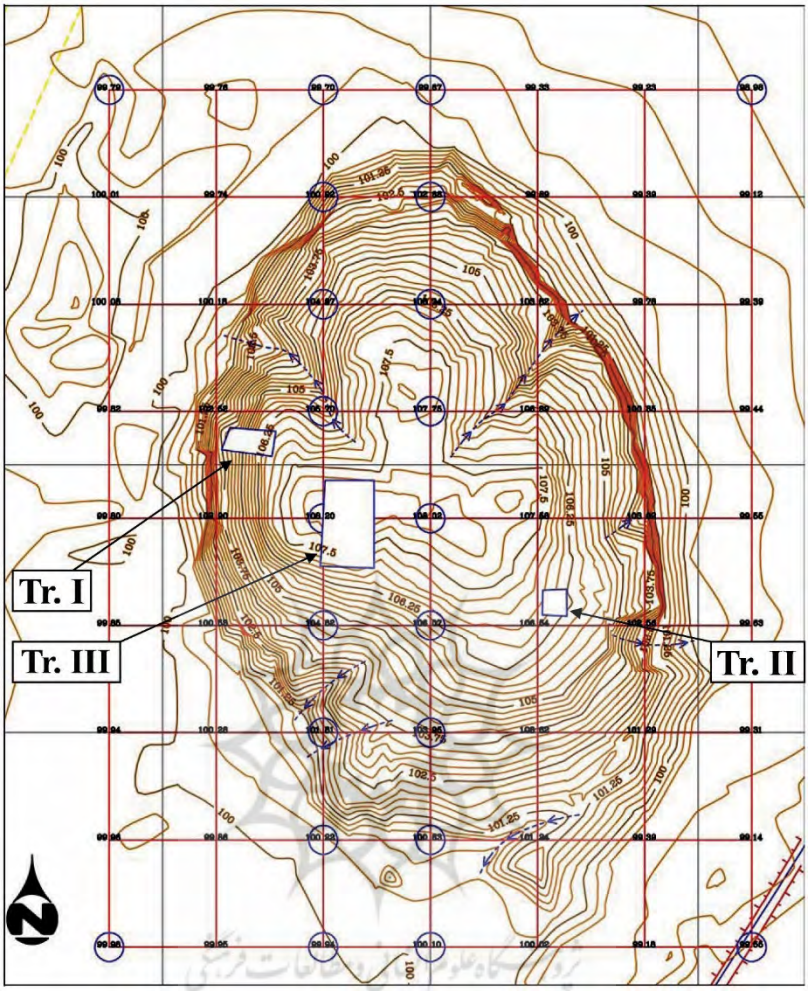

Fig 2. Topography of Tepe Talebkhan

phase begins from a depth of 287 cm to 326 cm. The most important finding of this phase is a complete hearth (full of charcoal and ashes) located approximately in the center of the trench on the virgin soil.

Trench III (Extensive Trench)

In order to understand the architectural features at Tepe Talebkhan, a horizontal trench (8×5 m) near Trench I (about 2 meters southeast of Trench I and 15 meters west of Trench II) has been excavated. In total, 56 contexts and two architectural phases were identified. The first phase consists of a mud-brick platform, some mud-brick walls, a doorway, a buttress wall, and beaten floors. Buttresses are a particular architectural element in the burnt buildings of Shahr-i Sokhta, dating back to Period IV. The mud-brick platform has been identified in the southwestern corner of Trench III. This platform is made of 4 to 5 rows of mud

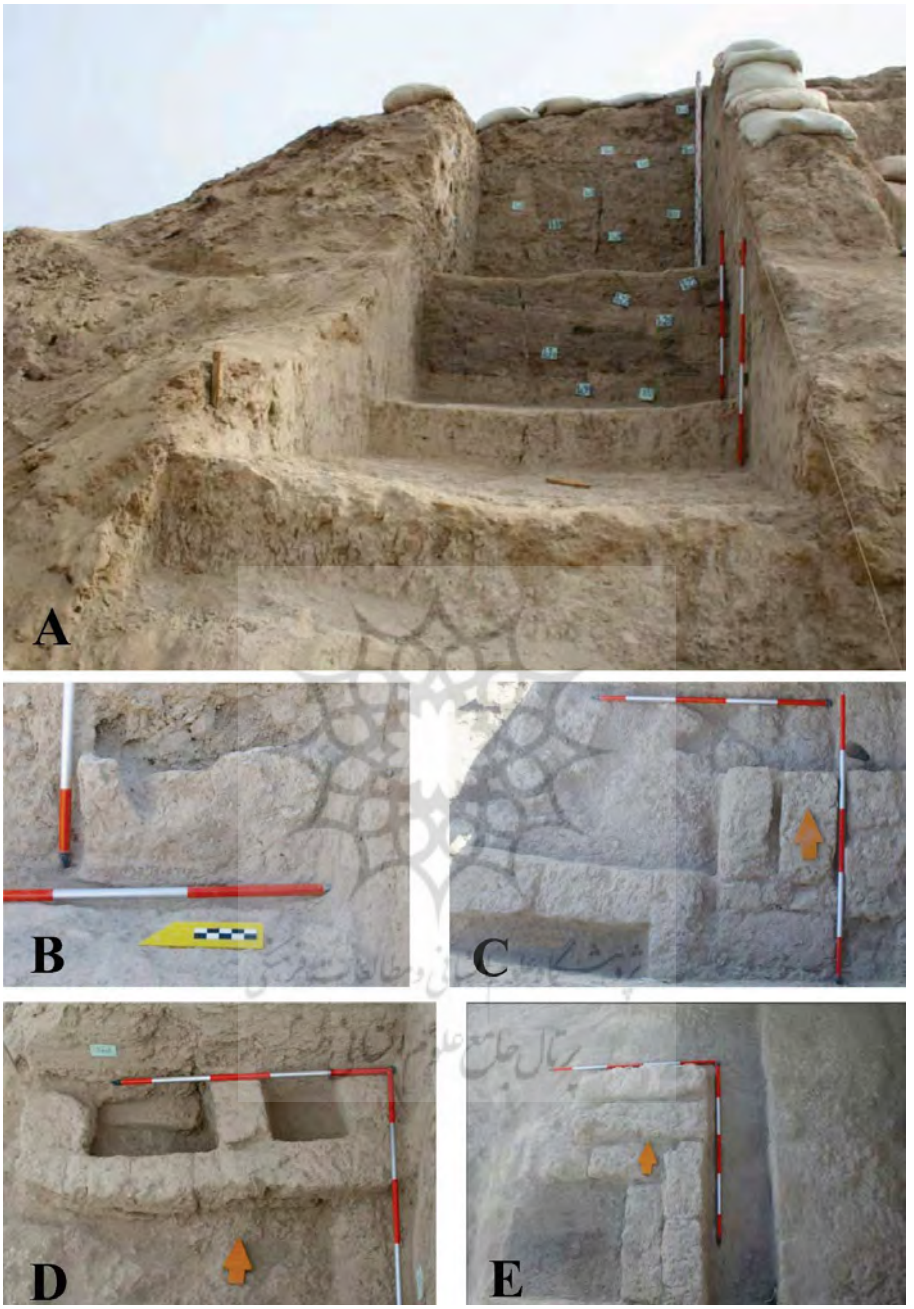

Fig. 3. Architecture from Trench 1, A. Overview of the Trench, B. Architecture of Phase 2, C. Architecture of Phase 3, D. Architecture of Phase 4, E. Architecture of Phase 5

bricks (45 × 23 × 15 cm) and has been covered by a clay plaster (Kah Gel). The platform is built on compacted soil (contexts 3005 and 3032) and is surrounded on the west by a buttress wall (context 3025) with six rows of mud bricks. The wall has

Fig 4. Architecture from Trench 2, A. Architecture of Phase 2, B. Architecture of Phase 4, C. Architecture of Phase 5, D. Architecture of Phase 6

Fig. 5. Overview of Trench III

dimensions of 190 × 50 cm and was built in an east-west direction. Another architectural structure of this phase is a mud-brick wall (context 3009) on the north

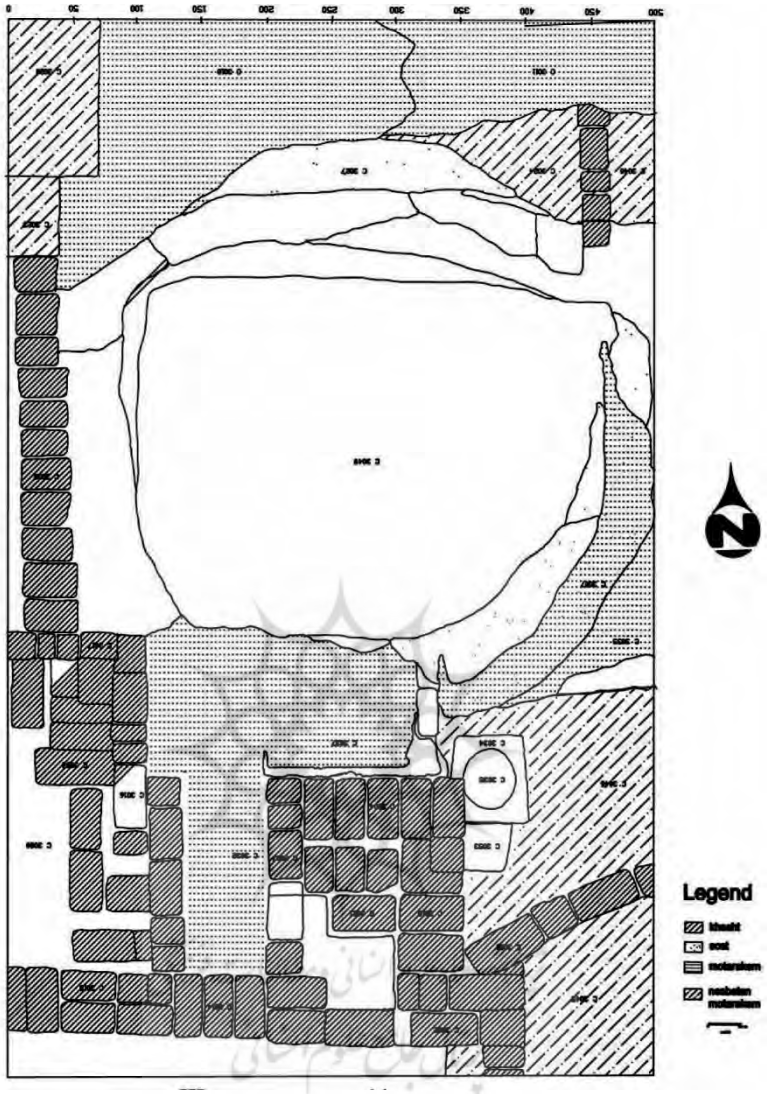

Fig. 6. Plan of Architecture from Trench III

side of the trench, built in a north-south direction. This wall is made of three rows of mud-bricks and is 260 x 40 cm long, covered by very dense clay plaster. The second architectural phase (identified at a depth of 220 cm) comprises several structures, such as a mud-brick wall (context 3036), a hearth (context 3034), and a lens of heated soil (context 3046). The identified hearth is located in a square structure (70×60 cm) in the southwestern part of the trench with a circular shape (with a diameter of 56 cm). Similar hearths have been found at Shahr-i Sokhta (Tosi, 1983), Tepe Graziani (Kavosh *et al.*, 2019), and Tepe Yal (Oveisi-Keikha & Kavosh, 2023). In the central part of Trench III, after removing context

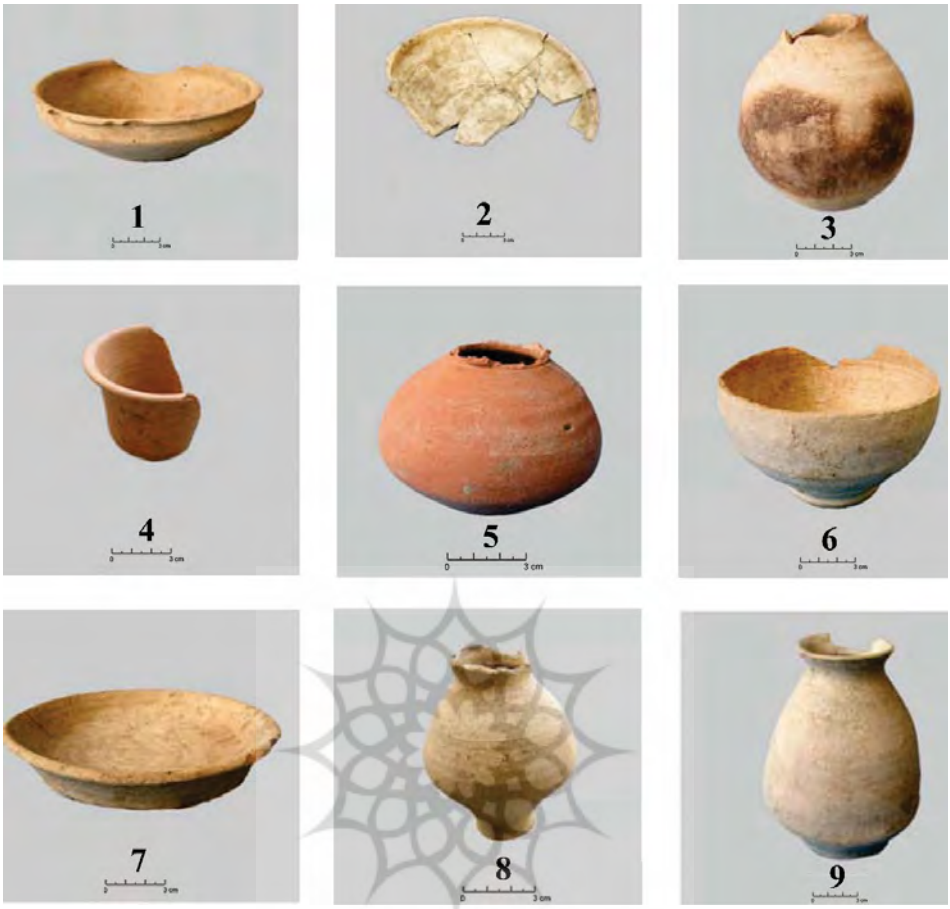

Fig. 7. Various Pottery Vessels from Tepe Talebkhan

3005, the remains of a seemingly new pit containing deposits of soil, wall debris, potsherds, and other artifacts were identified. On the northern edge of the pit were three small cavities (contexts 3050, 3051, and 3052), probably used for climbing into and out of the pit. Excavation in this pit was stopped at a depth of 610 cm due to the trench's flimsy walls (Fig. 5-6).

Findings

Pottery

Analyzing the numerous pottery findings is one of the main challenges posed by excavations of the Bronze Age sites in Sistan. The excavations at Tepe Talebkhan have provided us with abundant ceramic materials that can only be used with the most advanced systems for recording and documenting cultural materials, which can enable us to find a convenient and systematic typological approach. Since the beginning of pottery analysis by the Italians in the region coincided with the application of analytical typology, we adopted the same approach for studying the ceramic corpus.

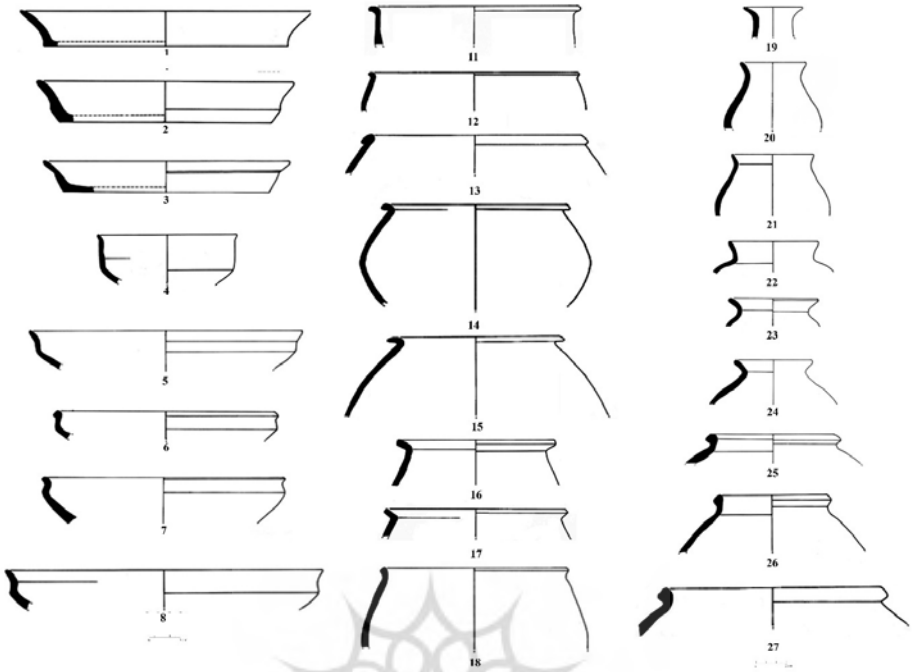

Fig. 8. Unpainted Bowls, Large and Medium Jars Pottery from Tepe Talebkhan

The pottery assemblage from Tepe Talebkhan can be classified into three main categories based on their paste and surface color: buff, red, and gray wares, all generally grit-tempered. It seems that the use of fast wheels was unknown to the proto-historic potters of Sistan. However, they successfully developed sinuous contours, polished surfaces, and straight, fine, homogeneous walls (Tosi, 1969: 314).

Buff ware is the most common type of pottery throughout the entire Bronze Age in Sistan. Most of the pottery found at Tepe Talebkhan is also related to plain and unpainted buff ware (Fig. 7). The rare painted pottery is decorated with dark to light brown colors and geometric motifs. The coil-building method is the most frequent manufacturing technique for buff ware vessels (medium to large-sized vessels). In this method, the walls of the vessel are formed by the application of superimposed rolls of clay. The surface of a high percentage of the buff ware vases was not even smoothed over, so the joins between one coil and another are still visible. According to our observations, the small-sized vases, including beakers, small jars, and bowls, were modeled by hand, and it seems that during this phase of manufacturing, turntable slow wheels were used. The bowls can be divided into three types: deep, medium, and shallow (shallow bowls: Fig. 8, No. 1, 7; medium bowls: Fig. 8, No. 6, 7, 8; deep bowls: Fig. 8, No. 4). We can also add that for the production of large-sized vessels, such as barrels and large jars, the ring-building method was probably used.

Table 1. Radiocarbon Dates from Tepe Talebkhan

Context	Trench No.	Depth	Date BC	Lab Number
2005	II	44	2488-2338	OxA-23163
2017	II	123	2300-2343	OxA-23164
2024	II	189	2476-2297	OxA-23165
2034	II	268	2495-2336	OxA-23166

Red ware pottery ranks second in quantity at Tepe Talebkhan. These pieces often have a red or buff-red (pinkish) paste, sometimes covered by a red slip (Fig. 7). The techniques used for manufacturing the red ware are the same as those applied to the buff ware. The red color is probably due to the lower temperature during the firing process. The main forms among the red ware vessels are bowls and small to medium-sized jars.

Gray ware comprises only a small percentage of the pottery corpus. It is wheel-made pottery with a medium to coarse paste, decorated with burnished and incised motifs. The main forms are conical and cylindrical medium-sized jars. These pieces are probably imitations of soapstone vessels produced and used in a large area spanning the Indo-Iranian Borderlands during the third millennium BCE.

Talebkhan's plates are thick and rough dishes. Pottery pieces No. 1, 2, and 3 (Fig. 8, No. 1, 2, 3) include dishes and are comparable to the pottery found from phases 1 and 0 of Shahr-i Sokhta (Biscione, 1974: fig 9), Shahr-i Sokhta IV (Moradi, 2019: Fig. 9), related site No. 29 (Moradi, 2021: Fig. 11: No. S.29.2), Tepe Graziani (Kavosh *et al.*, 2019. Fig 121 no. 2) and Bampur VI (De Cardi, 1970: 317, Fig: 443, No: 464).

One of the most common and diverse forms of pottery on Talebkhan is bowls, which are generally open mouths with a carinated body. Vessel No. 4 (Fig. 8, No. 4) contains a bowl with an out-flaring rim comparable to the pottery discovered from Mundigak IV.3 (Casal, 1961, p. 97; nn. 720), pottery No. 6 (Fig. 8. No. 6) also includes an open mouth bowl with turned inwards rim, comparable to the phase 0 of Shahr-i Sokhta (Seyyed Sajjadi, 2019: 63, Figure 56), pottery No. 7 (Fig. 8, No. 7) including an open mouth bowl with turned inwards rim which in terms of form, it is comparable to the 0 phase pottery of Shahr-i Sokhta (Seyyed Sajjadi 2019: 63, Figure 56), Shahr-i -Sokhta IV (Moradi 2019: Figures 7, 10 and 11) pottery from Shahr-i -Sokhta related-site No. 32 dated to the period of IV in Shahr-i Sokhta by Moradi and his colleagues (Moradi *et al.*, 2021: Fig. 11, No. S.32.2), Garaziani (Kavosh *et al.*, 2019. Fig. 123 no. 6), IVB1 period of Yahya (Lamberg-Karlovsky & Potts, 2001, P: 173, Fig: 6.12, No: J) and Mondigak IV.3 (Casal, 1961, Il, p. 128; nn. 737). Pottery No. 8 is comparable to the pottery from Shahr-i -Sokhta related-site No. 32, which is dated to the period of IV in Shahr-i Sokhta (Moradi *et al.*, 2021).

Another common form is Cauldron pottery. The smoky surface of some of these wares indicates their use in cook-

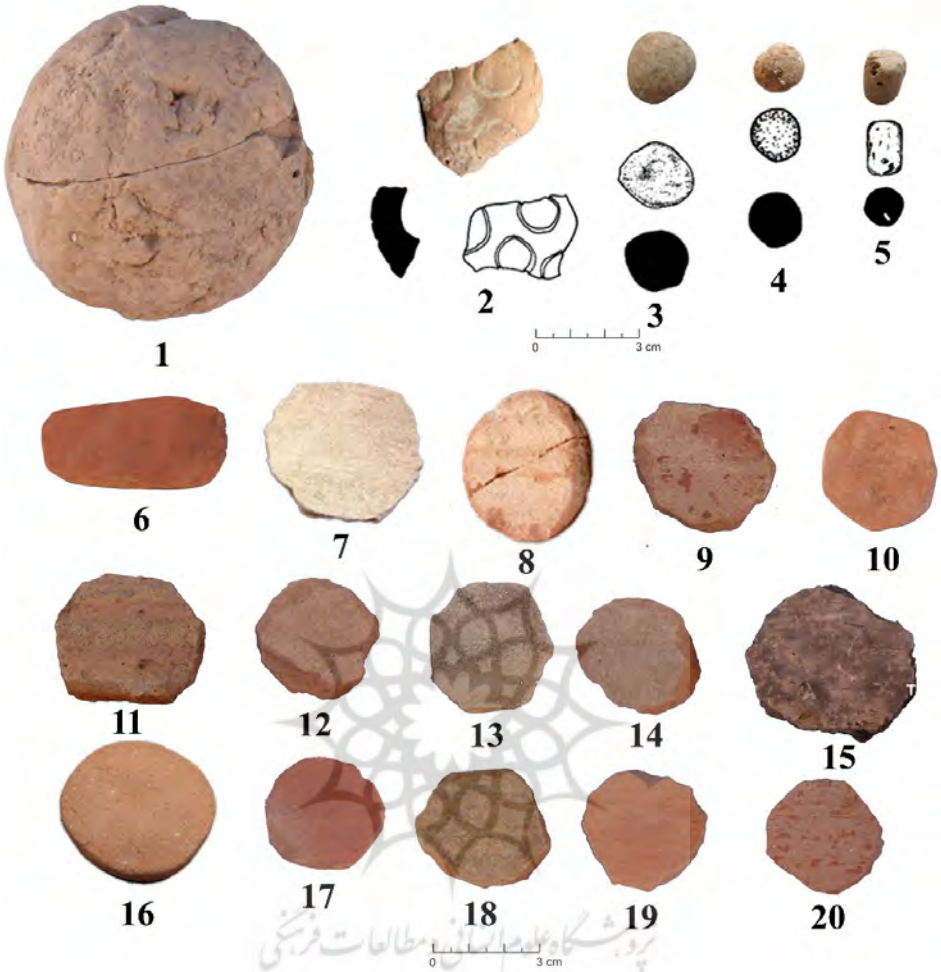

Fig. 9. Administration Tools, 1-2: Bulla, 3-5: Token and 6-20: Shard

ing. Pottery No. 12, 15, and 18 are comparable to Graziani pottery (Kavosh *et al.*, 2019. Fig. 124 no. 1-15-6). The high quantity of these vessels and bowls shows that their functional value was higher than other vessels on this site. Potters usually made such vessels with a spherical body, a short foot, a closed mouth, and a wholly everted rim. Pottery jars include 1- a pear-shaped buff jar with a flat base and a thick round rim without a neck, 2- A pear-shaped buff jar with a flat base, and a close mouth with a short neck everted rim, which is rougher than the previous type. 3- large jar with a flat base and open mouth.

Pottery No. 20 (Fig. 8, No. 20) is comparable to Shahr-i Sokhta phases 1 and 0 (Biscione, 1974: fig 9) and layers attributed to Shahr-i Sokhta III and IV Graziani (Kavosh *et al.*, 2019. Fig. 123 no. 18), pottery No. 24 comparable to the pottery of

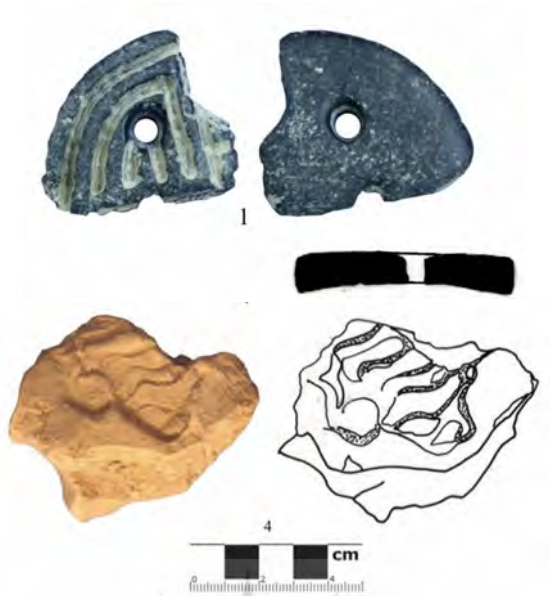

Fig. 10. Stamp Seal and Clay Seal Impression from Tepe Talebkhan

the related site no 29 of Shahr-i Sokhta dated by Moradi to the IV period of Shahr-i Sokhta (Moradi *et al.*, 2021: Fig. 11, No. S.29.18), pottery No. 26 comparable to pottery Graziani (Kavosh *et al.*, 2019. Fig. 124 no. 12) that by comparing the discovered pottery the settlement of this site can be considered relatively related to the Shahr-i Sokhta III and IV phases.

Evidence for Archiving and Administrative Control

Several clay objects related to archiving or economic management control were found at Tepe Talebkhan. Here, we present three categories of materials, including bullae, tokens, and seals, as indicators of an archiving/accountability or economic control management system. A full description of these objects can be found in the following paragraphs.

During the excavation at Tepe Talebkhan, both solid and hollow bullae were discovered, including a complete but broken sphere and a fragment of the same spherical type decorated with circles. These samples (Fig. 9, Nos. 1-2) can be compared with those already found at Shahdad (Hakemi 1997: 713, Fig. No. 5042, surface finding), Tal-i Malyan (Nicholas, 1981: 46), Tepe Yahya (Schmandt-Besserat 1992), Susa (Le Brun and Vallat, 1978; Vallat, 1986: 336), Chogha Mish (Kantour and Delougaz, 1996), and Tepe Sofalin (Hessari, 2013: 134, Fig. 18-19).

Three baked clay objects were found on the surface and in archaeological layers (Fig. 9, Nos. 3-5). From a morphological point of view, the objects are classified as circular, spherical, and cylindrical. Regarding their function and use, different interpretations have been proposed (Khanipour *et al.*, 2021a), including as accountability objects and tokens (Schmandt-Besserat, 1992), personal dec-

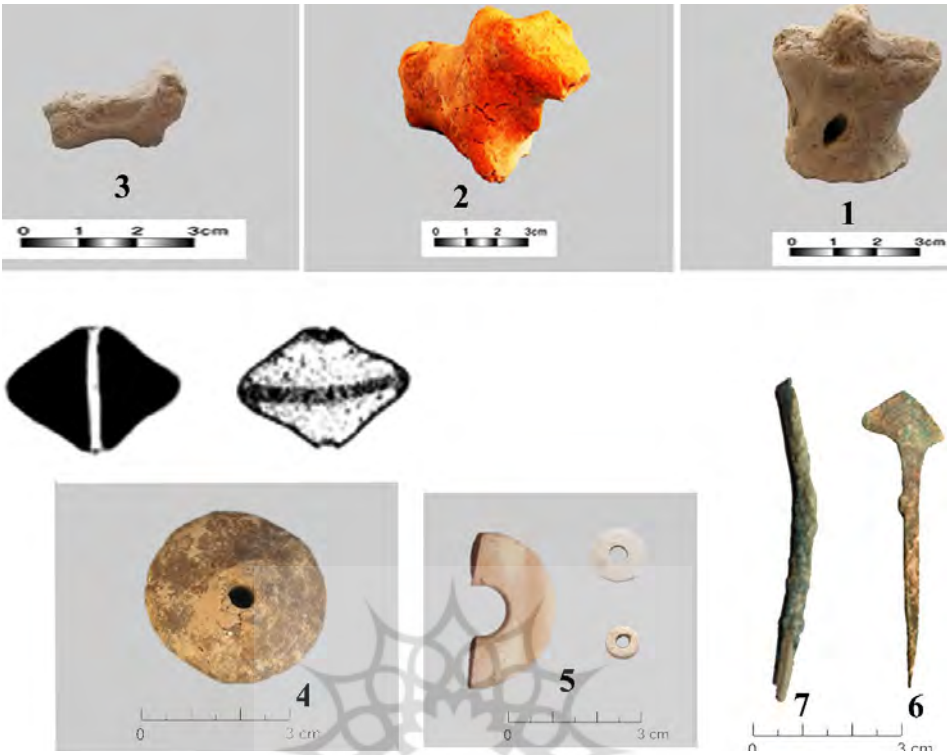

Fig. 11. Small Finding from Tepe Talebkhan, 1. Human Figurine, 2-3. Animal Figurines, 4. Spindle Whorls, 5. Bead, 6-7. Bronze Pins

orations and gaming pieces (Masson & Sarianidi, 1972: 42).

A fragment of a chlorite compartmented stamp seal was found in the archaeological layers of Trench III. This perforated seal has a circular shape with geometric motifs (Fig. 10a). These types of seals are very common in a vast geographical zone extending from southern Turkmenistan to Khorasan, the Helmand basin, and Kerman (Baghestani, 1997). A stamp seal impression in clay is another finding related to the glyptic tradition of Tepe Talebkhan. On this clay impression, geometric motifs in the form of wavy parallel lines ending in circular patterns are visible (Fig. 10b). It seems that it was part of a door or vessel sealing. Numerous seal impressions have been reported from all cultural sequences of Shahr-i Sokhta (Tosi, 1968 and 1969; Seyyed Sajjadi, 2019).

Figurines

The figurines found at Tepe Talebkhan include a human representation and two animal figurines (Fig. 11, Nos. 1-3). The human figurine was discovered in context 3022 in Trench III. It is a human bust with no head and arms. Similar examples have been found at Shahr-i Sokhta (Salvatori and Vidale, 1997: 160, Fig. 236 No. 17; Shirazi, 2007: 159). One of the animal figurines, similar to those discovered at Shahr-i Sokhta and Tepe Yalda, represents a zebu whose legs and tail are

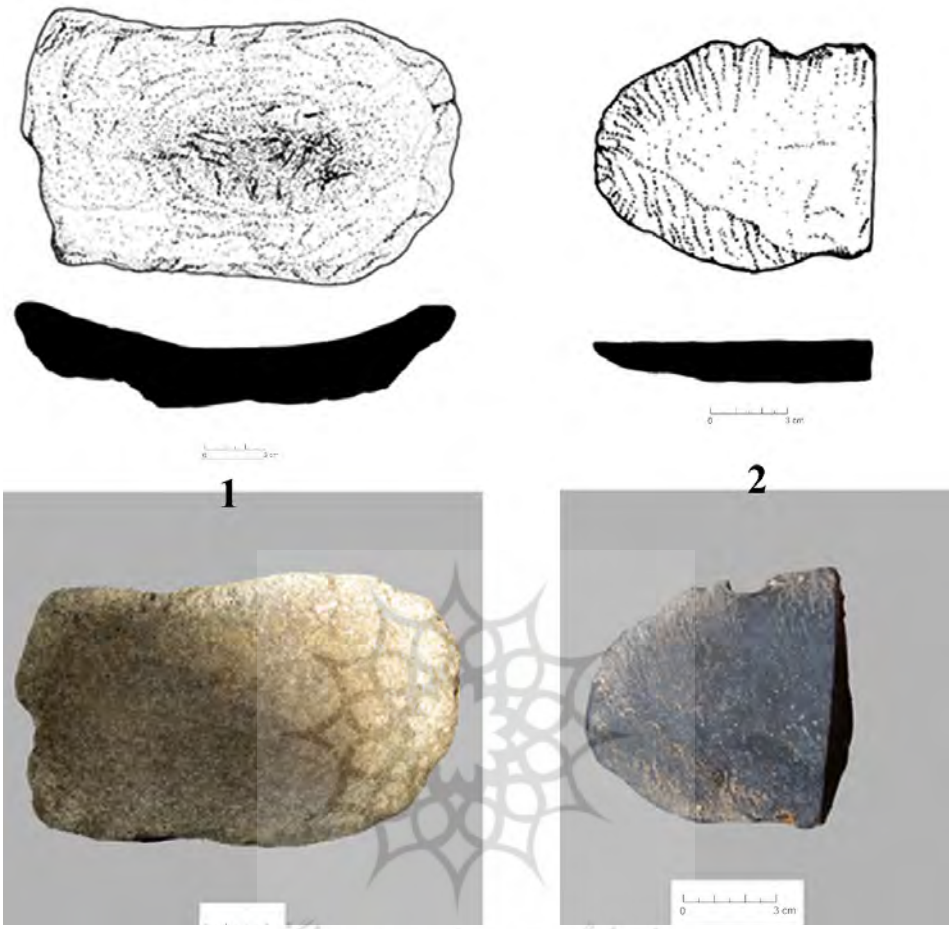

Fig. 12. Ground Stone from Tepe Talebkhan

missing (Salvatori and Vidale 1997: 163, Fig. 239 No. 2).

Spindle Whorls

Two spindle whorls found at Tepe Talebkhan were made of clay (Fig. 11, Nos. 4-5). One of them has a conical shape, and the broken sample has a dental contour. Similar samples have been reported from Shahr-i Sokhta (Salvatori and Vidale, 1997: 164, Fig. 240). The presence of spindle whorls in ancient sites indicates the basic need of the people for the fabrication of textiles and cloth (Alt, 1999).

Beads

Five white circular beads were found during the excavations (Fig. 11, No. 6). They vary in size, ranging from 5 to 10 mm in diameter and less than 3 mm in thickness. They are made from calcite. The most impressive assemblages of beads, dated to the mid-third millennium BCE, come from Shahr-i Sokhta II and III. Here, various materials, includ-

ing lapis lazuli, carnelian, and turquoise, were used for manufacturing the beads, and some workshops engaged in bead production have been reported from the Industrial Zone of Shahr-i Sokhta. One of Sistan's main characteristics during the proto-urban period was the mass production and export of jewelry items to western markets, including Susa and Mesopotamia.

Miscellaneous

Some small metallic objects, including bronze pins (Fig. 11, Nos. 7-8), fragments of stamp seals, and kiln slags, were discovered during the excavations. Additionally, fragments of alabaster vessels were found during the fifth season of excavation. Alabaster containers in the form of bowls, mortars, flacons, and torches are quite common during the third millennium BCE in the Sistan region, and it seems that a group of specialists was engaged in the production of alabaster vessels (Seyyed Sajjadi *et al.*, 2003). Some samples of sling shots, complete or fragmentary, were also found in Trench II.

Ground Stones

Ground stones are among the most significant discoveries in prehistoric sites, providing insight into the subsistence economy of ancient peoples. The stones discovered at Tepe Talebkhan include hand mills, pounders, and grinders, made of stone. However, the samples discovered at Tepe Talebkhan were mainly used for making flour and food production (Fig. 12). In addition to their role in food production, studying ground stones can also provide information about their specific functions (Khanipour *et al.*, 2021b), social hierarchies, and the role of women in ancient societies (Darabi, 2016: 7).

Dating

For the absolute chronology of Tepe Talebkhan, charcoal samples were taken from various soundings and trenches. Since the goal was to provide an exhaustive sequence, the samples were selected from Trench II, which was excavated to stratify the sequence of the site. Four charcoal samples were sent to the Archaeology and Art History Institute Laboratory at Oxford University. The first sample was taken from context 2005, the second from context 2017, the third from context 2024 (from an ashy layer), and the final sample from context 2034 (a soil deposit containing charcoal). After preparing the charcoal samples in the laboratory, they were used for radiocarbon dating by accelerator mass spectrometry. The standard radiocarbon date was adjusted by carbon-13, based on the carbon-13 to carbon-12 ratio, directly measured and calculated with the accelerator. OxCal 4.1 software was used to calibrate the tested samples. The dated samples show a range from 2500 to 2300 BCE for the cultural layers (Table 1, Fig. 13).

Although several decades have passed since the beginning of archaeological research in Sistan, the proposed chronologies have always faced many challenges (Jarrige *et al.*, 2011). The radiocarbon dates from Tepe Talebkhan aim to shed more light on the cultural sequences of Sistan at the end of the third millennium BCE. According to the pottery data,

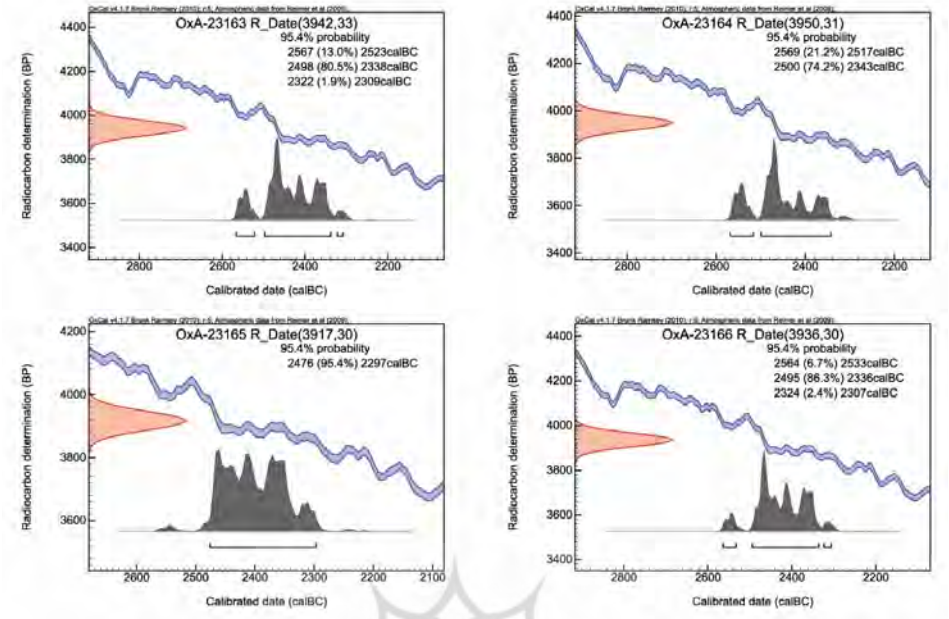

Fig. 13. C14 Dating Diagrams of Tepe Talebkhan

the first evidence of settlement at Tepe Talebkhan begins at the end of Shahr-i Sokhta III and continues until the end of period IV. The new results from Tepe Talebkhan suggest a span of time ranging from 2500-2300 BCE. These results align with other radiocarbon dates from Tepe Graziani (Kavosh *et al.*, 2019) and Tepe Sadegh (Shirazi, 2019). The new dates from the satellite sites around Shahr-i Sokhta propose a revision of the previously accepted chronology for the last two periods of Shahr-i Sokhta. It seems that we should consider an earlier date for these periods.

Conclusion

One of the main archaeological zones in the eastern part of the Iranian Plateau is the southeastern part of Iran. Based on the material culture, this region, which extends over a large part of the Indo-Iranian Borderlands, can be divided into three zones: 1) The Kerman area (Soghan Valley/Tepe Yahya, Halil Rud Valley/Konar Sandal, and Khabis/Shahdad); 2) Baluchistan and the Makran Basin (Chah Hosseini, Bampur, Miri Qalat, Shahi Tump, as well as sites located on the northern and southern coasts of the Oman Sea); and 3) The Helmand Civilization Basin (Shahr-i Sokhta and Mundigak). Although each region has its own cultural characteristics, many similarities and interactions are evident between them from the end of the fourth millennium to the middle of the second millennium BCE.

In general, the middle of the third millennium BCE is marked by a decrease in the number of settlements on the Iranian Plateau in regions such as Susa (De Miroscheji, 2003: fig. 3.3), Fars (Sumner, 1994: 48; Sumner and Miller, 2004; De Miroscheji, 2003: fig. 3.2; Khanipour *et*

al., 2017), and the Central Iranian Plateau (Matthews and Fazeli Nashli, 2022: 263; Vidale, *et al.*, 2018). Among these regions, Sistan presents an entirely different situation. During this period, Shahr-i Sokhta transformed into a huge settlement, reaching an area of more than 270 ha, with about 850 satellite sites around it. These sites show great homogeneity and economic interaction with the central site, i.e., Shahr-i Sokhta.

By comparing the pottery of Tepe Talebkhan with other sites such as Tepe Graziani and Mundigak, we can deduce that the settlement was probably founded at the end of Shahr-i Sokhta III and continued throughout the entire period of Shahr-i Sokhta IV. The radiocarbon dating results proposed a 200-year settlement duration between 2500 and 2300 BCE. These results, along with those from Tepe Graziani, challenge the current chronology of Shahr-i Sokhta IV by suggesting an earlier date for it. The results show that the end of period IV occurred between 2300 and 2200 BCE. After this date, main settlements such as Shahr-i Sokhta, Tepe Graziani, and the satellite site of Tepe Talebkhan were abandoned.

Regarding cultural materials, especially pottery, Tepe Talebkhan is quite similar to Shahr-i Sokhta, although it also shares similarities with Bampur, Tepe Yahya, and Miri Qala. The discovery of cultural materials related to archiving and economic management, such as bullae and tokens, highlights the importance of archiving and trade. It seems that with the increase in economic interactions, spherical bullae were invented to enclose the tokens. Other findings, such as ground stones and spindle whorls, also indicate daily household activities.

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