

New Evidence of the Emergence of Complex Societies Discovered on the Central Iranian Plateau

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The archaeological mound of Sofalin south of the Alborz Mountains of Northern Iran (Eastern Rey plain) sheds considerable light on at least four problems connected with the emergence of complex societies in this part of Iran. The first, it helps fill a chronological gap in an important archaeological sequence by revealing a previously unidentified late fourth and third millennium B.C. sequence of occupations. Second, the remains recovered from the mound illustrate a surprising sophistication in the use of proto-Elamite economic and numerical tablets, as well as cylindrical seal impressions. Third, it shows an early stage of an administration system in this area which has not been identified before. Finally, the data may reflect a development from a rather generalized subsistence economy based on agriculture to an economy based on long-distance trade connected with the import and export of goods.

Keywords: *Tape Sofalin, Central Iranian Plateau, Late Plateau- Proto Elamite, Tablets, Seal Impressions*

Introduction

The site of Sofalin (fig. 1) lies in the eastern Rey Plain¹ of the north-Central Iranian Plateau, at Lat. 51° 44' 06" N., Long. 35° 18' 58" E., at about 966 meters above sea level. This location is some 10 kilometers east of the city of Varamin (fig. 2). The site takes its name from the density of pottery sherds on its surface (in Persian, *sofalin* means pottery sherds). The site itself is about 15 kilometers south of the Khorassan Road, the major East-West trade route, between southern Mesopotamia, the Iranian Plateau and Central Asia.

The remains of Tape Sofalin, extend over an area of about 500 meters long and 400 meters wide. The mound rises to a height of about 10 meters, and consists of material cultures which dated between the late 4th millennium and the Iron Age III. A very

small portion of this extensive site, less than 0.5% of its total area, was uncovered during two seasons of work (2006, 2007) by an expedition of the Archaeological Service of Islamic Azad University of Varamin-Pishva under the direction of Morteza Hessari, in cooperation with the Iranian Center for Archaeological Research (ICAR) (Hessari 2006; 2007). The above fieldworks indicated that only some parts of the mound consisted of occupational debris, the lower core being a vast natural hill. The plan profile of the mound (fig. 3) is roughly ovoid and about 300 meters in diameter; the main irregularity is a straight indentation on the northern and eastern flank, due apparently to some stage of human construction activities in recent years.

Tape Sofalin provides a particularly clear illustration of cultural interaction in the fourth and early third millennia between the Iranian Central Plateau and the more densely populated settlements on the alluvial plains of Khuzestan. Some of the trenches opened during the excavation contained proto-writing and proto-Elamite tablets and blank tablets, sealing impressions with strong parallels to Late plateau, Susa II and III², and polychrome proto-Elamite 1/ Jemdet Nasr ceramics. In this article, the authors only discuss the materials of late 4th millennium and early third millennia.

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¹ The Rey plain is located in north- Central Iranian Plateau at an elevation of between 800 to 1200 m. This semi-arid fertile plain is limited by the Alborz mountain range in the north and the Dasht-e-Kavir desert in the south. The plain is covered with water-transported alluvial sediment. The Rey plain is irrigated by couple of permanent rivers that flow from the Alborz Mountains. The main rivers are the Karaj, Shour and Jajrood. Irrigation is possible in many locations through the manipulation of the many streams, rivers and springs. The Alborz Mountains create a climatic border between the coastal plains of the Caspian region and the great Central Plateau of Iran by obstructing precipitation from entering the interior of the country.

²For more information about late plateau and Susa II= late Uruk and Susa III= Jamdat-Nasr. See: Malek Shahmirzadi 2006:98 and Dittmann 1986 c :76- 147.





Fig. 1: General Views of Tape Sofalin.



Fig.2: Satellite Image of Rey Plain. (27/03/2011)



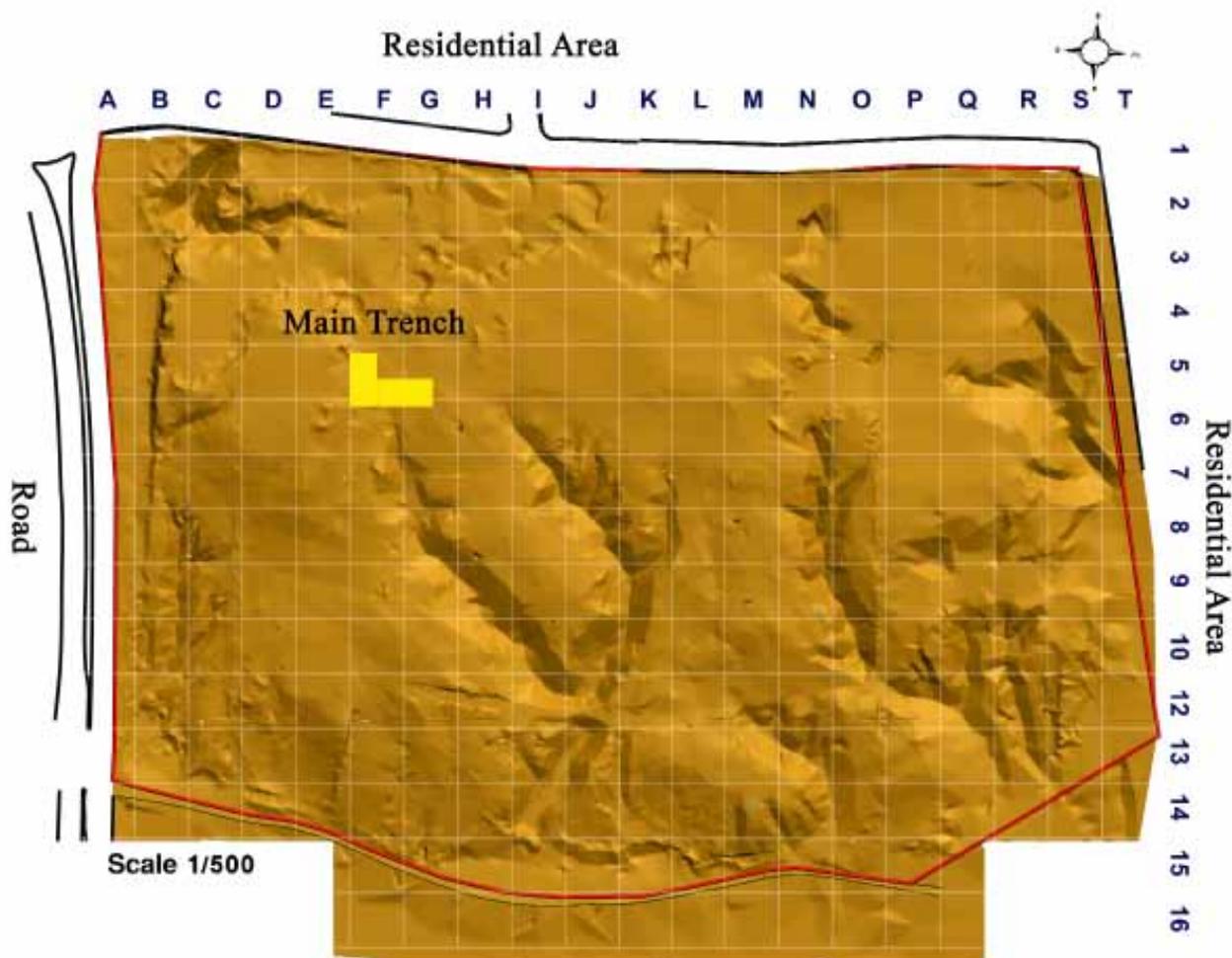


Fig. 3: 3D Reconstruction of Tape Sofalin.

Archaeological Evidence for Late Fourth Millennium BC Societies in Iran

Numerous archaeological investigations concentrating on the emergence of complex societies have been initiated in Iran in recent decades. Under the direction of Perrot (1971, 1977), French archaeologists at Susa have re-examined sections left from earlier work on the Acropolis, conducted limited excavations, and produced a reliable, stratigraphically determined sequence extending from the late Susiana times (c. 4000 B.C.) to the end of the Protoliterate period. Excavations at Chogha Mish by Helen Kantor (Kantor 1976, 1978 and Alizadeh 1996) cover the complete chronological span from the Neolithic up to the Proto-Literate period and provide vital new information on the cultural developments of

the late fourth millennium communities and early administrative systems. Both Sumner (1974, 1986) at Malyan, the ancient Elamite capital of Anshan, and Young (Young 1969, Weiss and Young 1975) at Godin Tepe have unearthed large literate settlements on the Iranian Plateau, which date to the late fourth millennium. Similar Proto-Elamite tablets have also been published from Tal-i Ghazir (Caldwell 1968, Whitcomb 1971) discovered at Tepe Yahya (Lamberg-Karlovsky 1971; Damerow and Englund 1989)¹.

Through a series of diagnostic chronological markers at Tepe Yahya, Lamberg-Karlovsky (1972) has demonstrated the contemporaneity of these developments in eastern Iran with the more

¹This vast geographical range of the Proto-Elamite script has been explained as gradual cultural diffusion, traders' settlements of perhaps demographic developments (Alden, 1982; Tosi 1984).



spectacular changes in Mesopotamia and Khuzistan. Excavations at Shahr-i-Sokhta (Tosi 1984) have presented evidence for craft specialization, and the work of Iranian archaeologists at Shahdad (Hakemi 1972; 1997) has shown the accumulation of wealth and, most likely, the beginnings of class stratification on the eastern Iranian Plateau in the early third millennium BC. Bampur and Tal-i Iblis, two sites originally investigated by Sir Aurel Stein (1937), were re-excavated in the 1960s by de Cardi (1970) and Caldwell (1966, 1967). The latter site yielded evidence for the smelting of copper in the early fourth millennium BC and contained rare but diagnostic ceramic parallels with sites as far west as Mesopotamia.

The evidence from Sialk Period IV is similar to that from Godin V; tablets (which at Sialk are indubitably Proto-Elamite economic texts), ceramics, and seal impressions were found in an architectural complex situated on the highest part of the southern mound at the site. The site of Arisman, 60 km southeast of Kashan, suggests settlement activities over the whole area from the late fifth to the third millennia B.C. The oldest occupation of the so-called Sialk IV period illustrates craft specialization and the development of administration systems in the Central Iranian Plateau. (Chegini et al.2000; Helwing 2005).

Tape Hissar, the largest known urban settlement in northeastern Iran, provides the primary archaeological record in the region, with its continuous habitation levels from the fifth to the second millennia B.C. The importation of lapis lazuli and turquoise implies connections with the east; at the same time links with the west are indicated by the presence of blank clay tablets reminiscent of proto-Elamite tablets, and a cylinder seal.¹ Farhardgerd, at which Gropp identified beveled rim bowls, is located near the modern city of Fariman in northeastern Iran, and is the farthest eastern settlement related to the proto-Elamite administrative complex (Gropp 1995. 45-48). Unpublished polychrome pottery shreds kept from Cheshmeh Ali collection at the British Institute in Teheran confirms the existence of late fourth millennium BC communities in Central Iranian Plateau. At Tepe Sagzabad, Talaie

¹ Unpublished report of Hissar- excavations under direction of E. Yaghmaie.

discovered more than 50 proto-Elamite numerical tablets, cylindrical seal impressions and beveled rim bowls of late fourth millennium (fig. 4).

Giyan (Dyson 1965:232), Deshaver (Braidwood 1960:697), and several sites in the Luristan region such as Mahidasht (Levine 1976:287, 289), Hulilan (Mortensen 1975 and 1976:45), Malayer (Howell 1979: 157), and Tarhan/Rumishan/Kuh-I Dasht Plains (Goff 1971:139-46) have yielded occasional beveled-rim bowls or other Uruk-related ceramics. There is no published mention of Jemdet Nasr or Banesh style polychrome pottery from these areas, and in fact much of Luristan may have been abandoned between the mid-4th and the early 3rd millennium B.C. (Mortensen 1976:47).

a: The Diagnostic Wares of the Late 4th Millennium from Tape Sofalin

The ceramics discussed here were excavated in 2006 and date to the late fourth millennium BC and early Bronze Age. The late fourth and early third millennia BC occupation at Tape Sofalin appears to have been relatively brief, and this is reflected in the overall coherence of the pottery assemblage. With few exceptions of local pottery assemblage, most types occur throughout the proto-Elamite sequence. The late fourth millennium BC and proto Elamite levels at Tape Sofalin (Late Plateau) are contemporary with Godin V (Young 1986:217-18) Susa 16- 14B, (LeBrun 1971, Dittmann 1986a: 171-72; 346-47; 1987) Ville Royale 18-16 (Carter 1980, Dittmann 1986a: 173-75,182; 1986b: 347), Tepe Farukhabad (Wright 1981) Yahya IVc (Lamberg-Karlovsky 1970, Lamberg-Karlovsky and Potts 2001), late middle Banesh building level 3 of Malyan (Banesh C-D) (Sumner 1986, Dittmann 1986c: 334-37, Nicolas 1990) Sialk IV2 (Ghirshman 1938), and Sagzabad².

Proto-Elamite pottery assemblages were produced at the site of Sofalin. This is attested by the presence of wasters and warped sherds on the surface, and also by the discovery of one kiln on the northern zone of the mound. Although Late Plateau occupations were not located during the excavation, a few Susa II standard pottery sherds appeared in

²Thanks to Dr. Talai and Dr. Chaichi for their information.



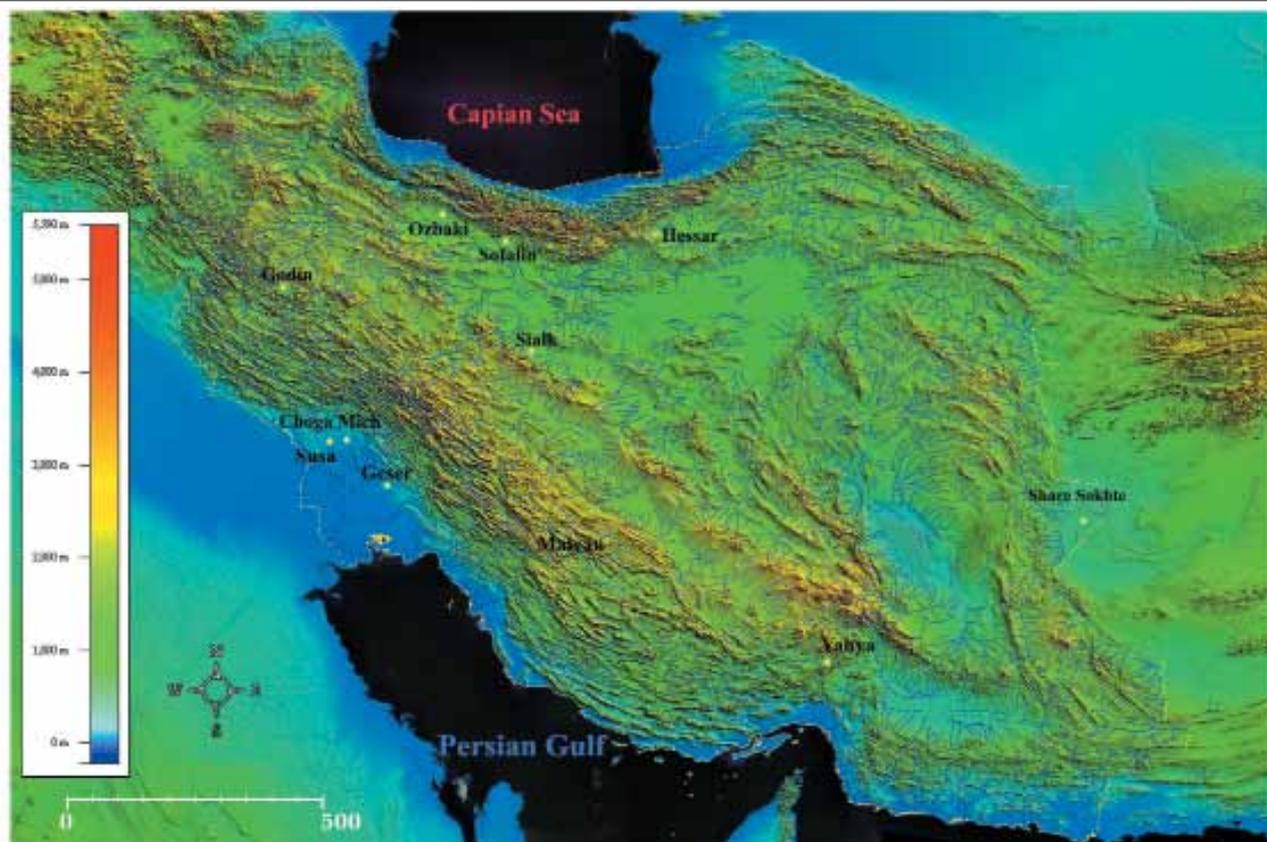


Fig. 4: Distribution of Late 4th Millennium Sites Across Iran.

Trenches 12, 20, 22 and on the surface.

All the ceramics were analyzed during the excavation seasons. Body shreds were stored according to the following categories and the numbers in each category were recorded: total number: 43673, painted, combed, corrugated, with pot marks, scraped, washed, burnished, slag, pierced shreds, shreds with bitumen coating, and neck-shoulder joins of jars. Diagnostic pieces include rims, bases, handles and other identifiable parts of vessels that were classified into number of types. Each type was named and a form was produced with spaces for data on appropriate variables for the type, then each shred was recorded on the appropriate form for its type, and data concerning variables within the type (diameter, core and surface color, temper, etc.) were recorded. The percentages were calculated using only examples for which a given piece of information was recorded. Since the analysis of wares is currently incomplete, we will limit discussion of Tape Sofalin Wares to a brief description of those present.

1- Chaff-Tempered Wares

Generally speaking, formal classification of the chaff-tempered ceramics at Tape Sofalin is simple. All parts include of bases, mid-sections and rims of low trays, drain pipes, bevel-rim bowls and cups are readily identifiable. Similarly, the bases and mid-sections of pedestal-based goblets are easily recognizable.

1-1 - Bevel-Rim Bowls (fig. 5)

Like bevel-rim bowls elsewhere, these vessels appear to have been made using prepared holes in the ground as mold (Johnson 1973: 131); the exterior side walls and the undersurface of the base are crinkly and the interior of the base frequently shows a thumb impression where the clay was pressed down into the mold. The interior of the vessel was smoothed, and the exterior rim finished off by smoothing the upper exterior edge of the rim in such way as to create the characteristic bevel. The walls are completely oxidized or have only as



light grey tinge in their center, even under low firing conditions. Except for one complete specimen, the Tape Sofalin bevel-rim bowls cannot be used to further test the hypothesis that in Mesopotamia such bowls were used as ration containers.

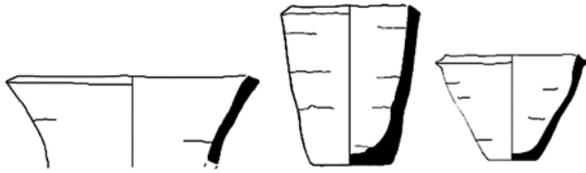


Fig.5: Bevel-Rim Bowls.

1-2 - Pedestal-Based Goblets (fig. 6)

These vessels are wheel-made, with string-cut bases. The diameters of these vessels varied from 21 cm to 29 cm in the Sofalin pottery assemblage. The bases are not completely solid pedestals, but have hollow centers, which have penetrated down to varying depths into the base from the body of the vessel. The upper portions of the bases are waisted distinctly narrower than the foot. The body of the vessels is generally symmetrical rather than asymmetrical in appearance, with the upper walls thinning significantly to end in one of a small variety of simple and pinched rims. The exterior and interior of these vessels are smoothed.



Fig.6: Pedestal-based goblets.

1-3 - Unrestricted Chaff-Ware Forms (fig. 7)

This type is consisted of plates and trays. These vessel forms frequently turned up as shreds of complete profile with a rim diameter in the extra-

large range, although oval rather than round. This is handmade, has a flat base of about 16cm and sides, which flare smoothly down from the rim to base.

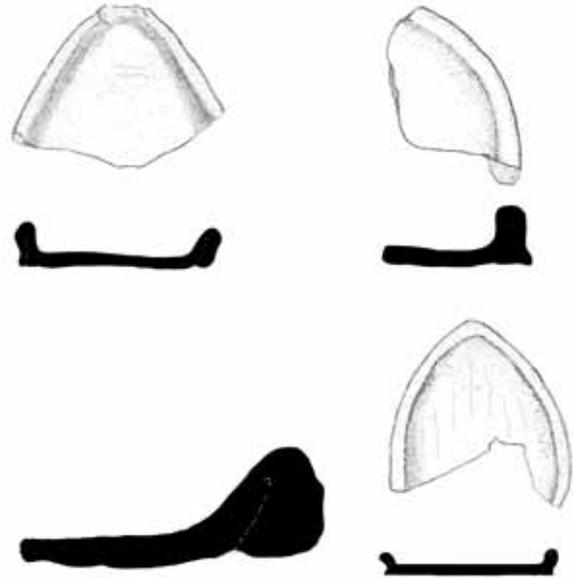


Fig.7: Banesh Trays: Grit- Tempered Wares: Restricted Forms.

2 - Grit-Tempered Wares

By count, grit-tempered wares of Tape Sofalin constitute approximately half of the total assemblage recovered from Tape Sofalin expedition. Unfortunately, a small number of complete profiles of vessels with grit-tempered were discovered. For the reason explained earlier, it is clear that rims are much more useful in classifying functional variation within a contemporaneous assemblage of pottery than are bases and body sherds.

2-1 - Restricted Grit-Ware Forms

Inward orientation of upper body wall without a distinct neck.

2-2 - Hole-Mouth Wares (fig. 8)

A hole-mouth rim is one that is inwardly rather than outwardly or vertically oriented, and that arises



directly from the wall of the vessel without the existence of a distinguishable neck area.



Fig. 8: Hole Mouth Wares.

2-3 - Drooping Spout Wares (fig. 9)

This kind of pottery was not found in great numbers in the Tape Sofalin assemblage. The smoothed sides of these vessels do not turn inward to create a waist, but rise more or less flaring from the base. It is probable that the upper portion of these vessels ended in simple or pinched rims such as those known to occur on the pedestal-based vessels. The spout is appliqué vertically at a 45-degree angle.

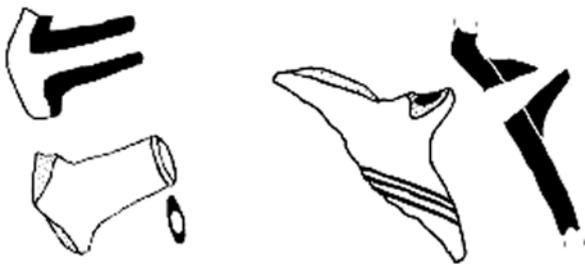


Fig. 9: Drooping Spout Ware.

2-4 - Restricted Vessels with Uppermost Body Wall (Necked Forms)

This group consists of small-restricted vessels closer to the body.

2-4-1 - Everted Wares (fig. 10)

This rim group consists of unexpanded forms, which bend or flare outward, generally at an angle 45 degrees from a point on the shoulder of the vessel; this bending point is thus an area of construction.

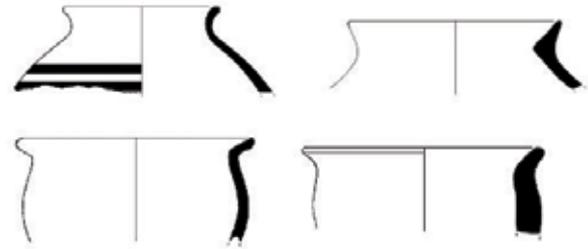


Fig. 10: Everted Wares.

2-4-2 - Folded Wares (fig. 11)

A folded rim has the appearance of an everted or expanded rim that has been pushed first down and back in approaching to or against the neck of the pot.



Fig. 11: Folded Wares.

2-4-3 - Ledge Rim Wares (fig. 12)

A ledge rim bends out from the vessel wall at an approximate angle 90 degrees. It is generally thin and flattened in appearance, creating a self around the actual orifice of the vessel.

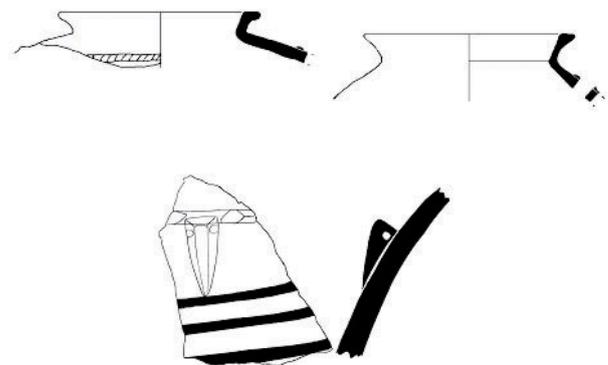


Fig. 12: Ledge Rim Wares.



b: Administrative Evidence

1. Tokens (fig. 13)

Sculpted and incised clay tokens, discovered from contexts as early as ninth millennium B.C. contexts, have been cited as three-dimensional precursors for the first cuneiform signs (Schmandt-Besserat 1992: 6-7). Simple baked tokens are ubiquitous artifacts found in administrative contexts across excavations in Iran and Mesopotamia. These tokens are also referred to as “counters”, thus implying their function as numerical administrative tool.

During the excavation at Tape Sofalin clay tokens of different shapes were discovered. Similar in size to marbles, these tokens are found in a wide variety of shapes; simple sphere, cones, rectangles, triangles, bi-conoids, and even jugs and animals. Complex tokens, in addition to being plastically molded, bear incised marks on the surface, which presumably added more detail to the information imparted by the plastic form alone.



Fig. 13: Geometric Animals Tokens.

2. Clay Balls (fig. 14)

Clay balls first appeared during Susa II, in Khuzistan a phase of development of administrative technology in Mesopotamia and southwestern Iran. The clay balls with cylinder seal impression are found along with the impressed tokens at Susa, Chogha Mish, and Habuba Kabira; interestingly, this combination is never found at Uruk. At Uruk the hollow clay ball is immediately followed by

the appearance of early tablet with numerical signs. Accordingly, the Late Plateau period, proto-writing materials in Tape Sofalin can be termed the bullae period, the earliest stratigraphically speaking. This was a phase of development in administrative technology, in which the geometric clay counters were enclosed in clay envelopes called bullae. Tape Sofalin's bullae bear impressions¹ from cylinder seals or impressions from tokens. It is 7.6 cm in diameter and is made from well-levigated clay.



Fig.14: Hollow Clay Ball.

Although it was broken when found, it still contained one cm size token of unbaked clay. The Sofalin bullae were found at the lowest context on the sterile soil in which almost all of the Middle Plateau (Middle Uruk) administration materials emerged. The tokens are simple plain spheres; the clay of the tokens is very fine and was obviously smoothed to remove all inclusions. The tokens seem to have been modeled wet since the fingerprints of the maker is visible. The tokens are completely identical with token came out of the clay balls at the other late Susa II- Uruk sites (Schmandt-Besserat 1977:141, XIX,b). In the Uruk phase, Tape Sofalin's bullae shows more parallels with Susa and southwestern Iran, rather than with Southern Mesopotamia.

¹The Bullae's surface is badly effaced and does not let us to determine whether it was impressed by a seal or not! But since it does not have any token impressions on its exterior surface, it can't be later than Middle Plateau (Susa II) Bullae from Chogha Mish and Susa and Habuba Kabira. Presumably, it covers earlier time span of late Uruk period in Mesopotamia.



3. Early Numerical Tablets (fig. 15)

Flat and rounded, sealed and unsealed tablets appear for a short period of time towards the end of the late Susa II=Uruk period. These tablets bear marks made with a new administrative tool – the stylus. It seems that the molded clay balls from the previous stage had become flattened. This was perhaps due to the fact that the numerical impressions on the surface were found to be sufficient to impart the information previously contained within the bullae. A more formalized version of the rounded tablets becomes common from about 3250-3200 B.C. During this 50-years period, the numerical notations become standardized. During the excavations in 2006, in Trench Z, an early numerical tablet with rudimentary stylus impression was discovered accompanying large storage jars¹. It is a completely preserved oblong, convex, and unsealed tablet. It bears only three notations on its obverse, impressed



Fig.15: Numerical Tablet.

¹ The first eleven tablets have been prepared for publication by Jacob Dahl, University of Oxford, and Iranian team and will appear shortly.

with tokens or with a stylus cut and shaped to imitate such tokens, representing numerical values. This script is indubitably a numerical tablet (Strommenger 1980a; 1980b: 480). In all of its general attributes and in most particulars, it is very similar to the early numerical scripts. The tablet has a small size, measuring 39×26×15 mm, running from right to left. It was assembled from three large deep circular numerical notations sunk 0.5 cm into the clay and about 0.5 cm in diameter, on the same line on the obverse and the reverse and the edges. There is not any effacement of the obverse. According to its format, it is typologically similar to early scripts from Susa Acropole 1, Levels 18, Godin V and the tablets in Red Temple of Uruk (Dittmann 1986c:78).

It is interesting that the tablet was left unfinished², which proves the local entity of the scripts. Falkenstein (1963) identified deep circular sign; ATU³ 913, as number, 100 but Vaiman (1974) believes ATU 913 is measure of capacity equal to 100 units. Friberg (1979) judges ATU 913 to be units of grain metrology, equal to 10 bariga.

4. Numero-Ideographic Tablets (fig. 16)

The first inscribed tablets with Numero-Idiographic tablets are dated to around 3200 B.C. The surface is marked with numerical notations, seal impressions and one or two inscribed images. Scholars refer to these inscribed images as signs, primarily because they are inscribed. Rather than being impressed by the flat end of the stylus, these signs are drawn into clay with a pointed end of the stylus. Akin to line drawings made in the clay, signs were shaped as some type of commodity such as a jug of milk or a sheep – meaning that they only represent discrete objects, not ideas or concepts.

During the excavation at Tape Sofalin in 2007, eleven Numero-Idiographic tablets were discovered in Trenches 1 and 2, at southern edge of the mound. These tablets are certainly identifiable as proto-

² The tablet is a shallow circular sign near the numerical notation indicates that an owner wanted to incise another notation, but perhaps because of mistake he or she made, the script was discarded.

³ATU: Archaische Texte aus Uruk



Elamite texts. The Proto-Elamite tablets of Tape Sofalin are the earliest complex written documents from the north-Central Iranian Plateau. The script consists of both numerical and ideographic signs; the form and content of these eleven tablets are entirely consistent with that of the standard and late Proto-Elamite tablets from Susa. Although a majority of the inscribed objects from Tape Sofalin are very fragmentary, they document the existence of a developed administration system and advanced bookkeeping techniques. Only a limited number of tablet-content categories are present in the current sample of texts and fragments, however. For example, texts 1, 2, 4, and perhaps 7 and 8 all relate to workers and rations. Text 9 deals with livestock (sheep). Texts 3, 5, 6 (a complex text), 10, 11, and 12 are of uncertain content. Many more tablets were found in subsequent excavations, these will be published as soon as possible.

Except for two texts, all of these documents date to the late (standard) period of the Proto-Elamite writing system (TSF 12 is so poorly preserved that we wish not to make any statement on its date). A majority of the signs on the twelve tablets from

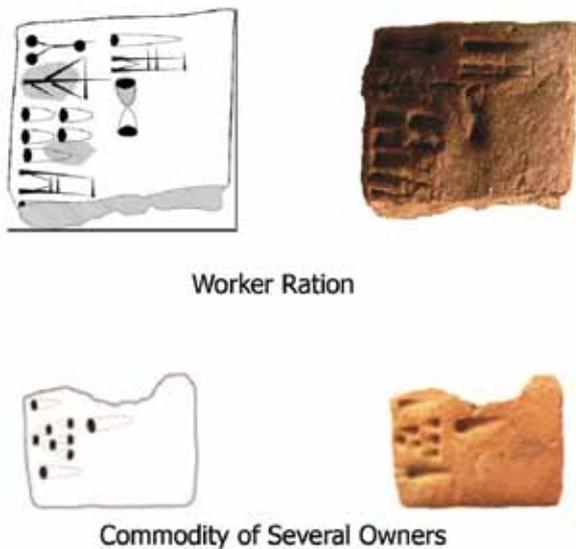


Fig.16: Ideo-Numerical Tablets.

Tape Sofalin are found in the Susa repertoire as well, but tablets from subsequent seasons reveal more variation.

All of the numerical signs in the texts from Tape Sofalin are known from the Susa texts (a tablet found during season four in 2009 has a new numerical system using the same signs found in Susa and beyond). The seals on the tablets and sealings from Tape Sofalin are strikingly similar to seals found at Susa as well. Tape Sofalin therefore provides a particularly good illustration of cultural interaction in the late fourth and early third millennia BC between the different parts of the Central Iranian Plateau and the more densely populated settlements on the alluvial plains of Khuzestan.

5. Cylinder Seal Impression and Container Sealing (fig. 17)

Another type of image-bearing device in the administrative system of Tape Sofalin – the cylinder seal impression – functioned in the same way as the stamp seal. The main difference between the two, however, was that the cylinder seal was rolled across the surface of the clay to create an impression

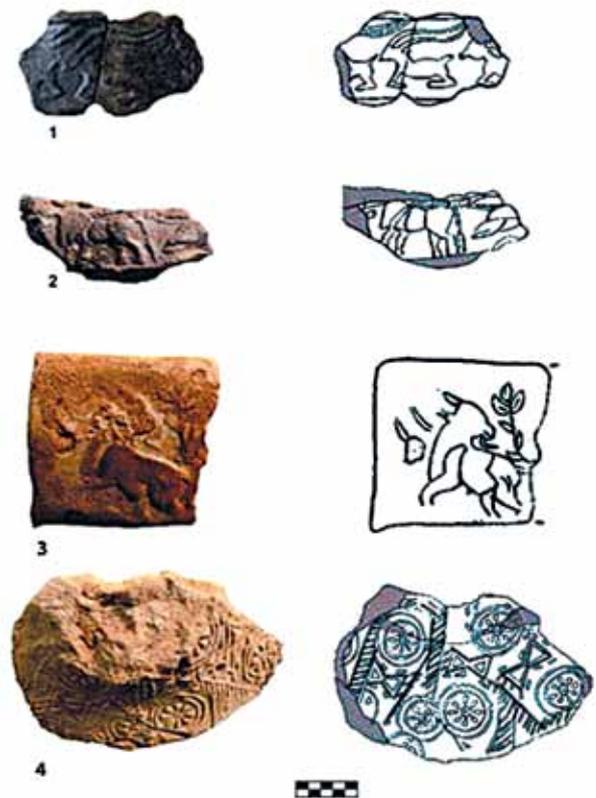


Fig. 17: Cylinder Seal Impression From Tape Sofalin.



that could cover much greater surface area. The themes of seal impressions of Tape Sofalin were composed from a set number of figural elements, arranged in a particular order. Most the cylinder seal imagery of Tape Sofalin during late 4th millennium is similar to the Proto-Elamite glyptic impressions from Susa. Human and animal figures are carved with great care. The iconography of the Sofalin seal impressions includes human figures, animals, geometric designs, and floral motifs. It appears that most Sofalin seal impressions are part of the Proto-Elamite I tradition of southwestern Iran. There are also a few images that depict stylistic traits typical of the late fourth millennium BC sealing tradition from southern Central Asia. Nevertheless, more than 95% of the sealing imagery fits stylistically and iconography into the previously mentioned Proto-Elamite I style.

Conclusions

The research presented in this article has helped to produce a picture of a developed urban center in the north-Central Iranian Plateau with a strong administrative system structured along the lines of the Proto-Elamite economic organization. The landscape features of Tape Sofalin documented during two seasons of excavation confirm the existence of long-distance trade between the late fourth millennium BC urban centers in the region. These features demonstrate that this trade network extend from the sites of southwestern Iran and perhaps to Central Asia. Definitive evidence of long distance trade between the southwestern Susiana plain, the Central Iranian Plateau, and Central Asia is surprisingly scarce. The evidence from Tape Sofalin, however, suggests an increasing dependence of Proto-Elamite centers in southwestern Iran on raw materials¹.

Based on the evidence, it seems that in the

¹Potts (Potts 1993: 394) stated that the semi-precious stones like carnelian and lapis lazuli, copper, tin and gold, and exotic woods arrived Mesopotamia and southwestern Iran chiefly by sea via the Persian Gulf, whereas the new evidence of Proto-Elamite administration system in northern Central Iranian Plateau (Majidzadeh 2001, Hessari 2006, 2007) by the main east-west route confirms the importance of ground trade routes in comparison with the marine trade routes in late fourth and early third millennia. See too: Dittmann 2002.

complex society of Tape Sofalin, an elite group with mutual relations to Proto-Elamite communities in southwestern Iran controlled both political and economic institutions and manipulated these institutions for their own benefit. Within the sphere of economic activity, it seems that the Proto-Elamite elites in southwestern Iran attempted to control the supply and minimize procurement costs for the items and materials that their societies required. They did so by establishing administrative offices along their trade routes. Tape Sofalin exemplifies this pattern, as one of the major sociopolitical organization on the major East-West trade routes between southern Mesopotamia, southwestern Iran, the Iranian Plateau, Central Asia, and Afghanistan.

The impact of the complex societies of southwestern Iran on less complex societies in nearby regions is dependent on the specific attributes of both societies. Based on these interactions, it is hypothesized that the social, political, and economic institutions that emerge in the adjacent society will in some ways determine the type of community it evolves into. The level of sociopolitical organization and economic specialization at Tape Sofalin indicates that strong mechanisms of trade-based finance emerging from the southwestern Iran (Susiana plain) led to the emergence of a developed complex society in the north-Central Iranian Plateau.

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