An Impressed Pottery Sherd: A Chalcolithic Newfound in the Southern Highland of Abharroud River Basin

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In prehistoric studies of Iran, the Abharrood River Basin, located on the east of Zanjan province and in the northwest border of the Central Plateau, is one of the little-known and dark regions. Studying this region according to its environmental features and geographical location is important for understanding regional relations and interregional interactions between three cultural-geographical areas, the northwest, the west and the central plateau. So far, this region has not undergone major archaeological research and our knowledge of the nature of the prehistoric settlements is imperfect.

A new trend in regional archaeological research began with two seasons of surveys, in 2003 and 2005. These surveys shed a light on the past of this region. In the first season, the site of Chakhmaqlokh, in the southern highlands of the Abharrood River Basin, was identified. In 2009, on a second visit, cultural material of the Chalcolithic period and a pottery sherd with a flat seal impression were collected from the surface of the site. It is likely that this sherd is the oldest piece of pottery with a seal impression that has been ever found in Iran. Therefore, valuable knowledge about important aspects of Chalcolithic settlements in this region can be determined. After describing the area and introducing the site, the authors study the surface material and introduce, compare and date the sherd.

Keywords:*Abharrood River Basin, Chakhmaqlokh site, Chalcolithic period, Impressed pottery, Impression*

Introduction

Our archaeological knowledge of the prehistory of the northwest border of the central plateau, Zanjan province and specially the Abharroud River Basin is slight, imperfect, obscure and scattered. Until recently, no detailed knowledge about the prehistoric cultures in the Abharroud River Basin was available. Only in the past two or three years have reports on the prehistory of the area been published (Aali 2006; Alibaigi and Khosravi 2007,Alibaigi and Khosravi 2009, Alibaigi et al. 2010, Khosravi 2009; Khosravi and Alibaigi 2008, Khosravi et al. 2009, Masoumi 2008).

Despite the capacities of the region and its importance for understanding regional relations and extra-regional interactions among the northwest, west and the central plateau, little attention has been paid to understanding and studying the situation of the settlements, especially in prehistoric times. Hence, from an archaeological viewpoint, the Abharroud River Basin is one of the most unknown regions in Iran. This paper is a short report of the survey of Chakhmaqlokh in Abhar city, which was identified during the study of the prehistoric settlement in Abharroud River Basin from the beginning to the end of the Bronze Age, conducted by Shokoh Khosravi in the fall of 2008.

Abharroud River Basin

The Abharrood River drainage basin is one of the important sub-basins in the center of the Iran Plateau, located on the east of Zanjan province and in the cities of Abhar and Khorramdarreh (fig. 1).This region includes mountainous areas, narrow valleys and small and broad intermountain plains, which are located at 48 48 to 30 49 east longitude and 35 57 to 36 36 north altitude. Respectively, the Abharroud River drainage basin is limited on the north, south and west by the Qezal Ozan drainage basin, the Kharroud drainage basin and Zanjanrood. Abharroud, 60 km long, is a vital artery river that originates in the highlands around the Soltanie, in the most western part of the basin and after irrigating the valley and broad intermountain plain of Abhar-Khorramdarreh-Saeein Qaleh, near the Takestan

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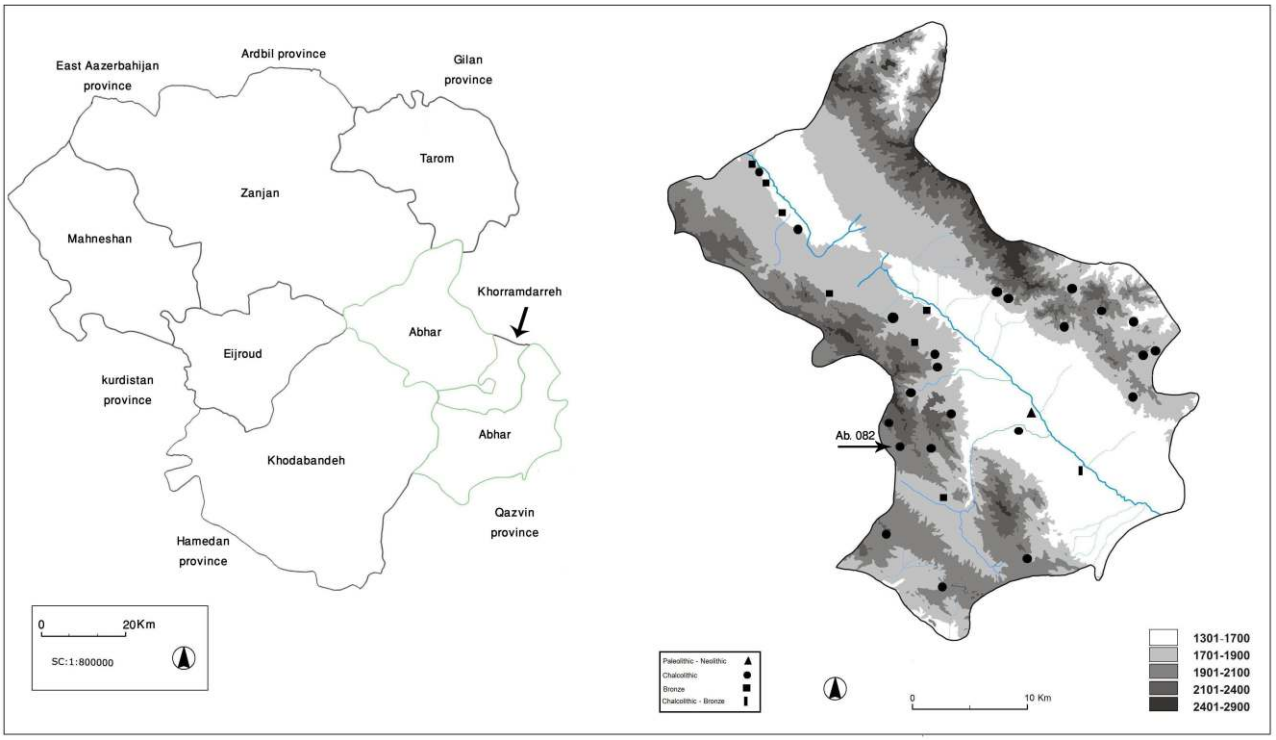


Fig.1: *Map show distribution of the Prehistoric site in the Abharroud Basin(Drawing : Z. Ghaffari and S. Alibaigi)*

joint to Kharroud and then to Namak Lake.

Chackmaqloukh Site

The site of Chackmaqloukh (AB. 082) in the southern highland of Abhar city is located in a very mountainous area (fig. 2). Chackmaqloukh is located 1/3 km northwest of the village of Qara Aghaj,1/7 km southwest of the village of Zerehbash, and approximately 400 m east of the asphalted road between Qara Aghaj and Zerehbash. This site is located at 49 0 297 east longitude and 36 8 506 north latitude and 2002 m ASL. Chackmaqloukh is not a big site, with maximum dimensions of 100×25 m. It is about a quarter of a hectare wide. The site is located on a hill and its surface is not higher than the surrounding area. Three sides are steep, limited by the watercourse, and from the north side, by rough terrain. Its surface is plain and it tilts slightly from east to west. In some parts of the site, illegal excavation pits are visible. Many pot sherds, lithics and rubble stones and human bones are scattered on the surface of the site.

In 2003, during the archaeological survey on the Abharroud River drainage basin, which was conducted by Abolfazl Aali, the site was identified and studied for the first time (Aali 2004: 82). Five years later, in October 2008, the site was revisited and evaluated by the authors (Khosravi 2009).

Survey Findings

During the survey of the site, surface cultural material, potsherds and lithics, was collected. Overall, the material belongs to two periods, Chalcolithic and Iron Age. Considering the objectives of second survey, only material belonging to the Chalcolithic period was collected. This paper does not discuss the Iron Age materials, but the authors hope in the future to make a detailed study and publish it. During the re-examination of the site, 40 pot sherds and six lithic pieces were collected. These materials came from different parts of the site, especially in the southern half.

Pottery

For this study, 40 pieces of pottery were collected from the surface of the site (figs. 3, 4 a-d). These materials, which all belong to the prehistoric settlement of Chackmaqloukh, were mostly collected from southern part of the site. However, a few pieces of prehistoric pottery were obtained from other parts of the site, as well.

The pottery that was collected, based on



Fig. 2: *General Viwe of the Chakhmaqlokh site (Photo: S. Alibaigi)*

technological features, falls into three different groups. The first group contains 29 sherds, the core colors of which are red, brownish red and buff red. The surface was covered with brown, red, pinkish orange, orange red and buff red slip. This pottery is chaff tempered and there are some combinations of chaff and sand. Pieces of sand, in some cases, are visible as impurities. All these sherds are handmade and low fired, so the cores are grayish and smoky. The pottery, based on consistency and quality, ranges from very rough, to rough to medium; fine and well-made pottery is not found in this assemblage.

Only a few pieces of pottery have decoration; most are simple and lack decoration. Decoration consists of prominent applied clay elements; only in one case is the decoration painted. Decorations include the rows of close parallel bands located just below the rim, on the outside part of the ware. These bands are 5 mm in width and height. Decorations are found on the ware with vertical and slightly open rims covered by dark red slip. The only instance of painted pottery is ceramic pieces with a relatively rough and smoky texture, chaff temper, dark red slip and black parallel bands that are painted on the outside surface. Based on form, this group of ceramics from Chackmaqloukh, can be divided into closed and open mouth wares. Most pieces include small and large bowls with open mouths, and relatively large containers with vertical edges and walls. Usually, large bowels are shallow with thick walls and flat bases. A much lower percentage consists of closed mouth wares. Among the closed mouth wares, crock bowls and jar-shaped wares with short necks are found. Among the open mouth ware, large bowls are made fairly roughly and carelessly.

Two of these containers have horizontal handles near the rim. In addition, one container has a round handle 35 mm in diameter; it likely belongs to a basket handle ware. One of the other finds is a

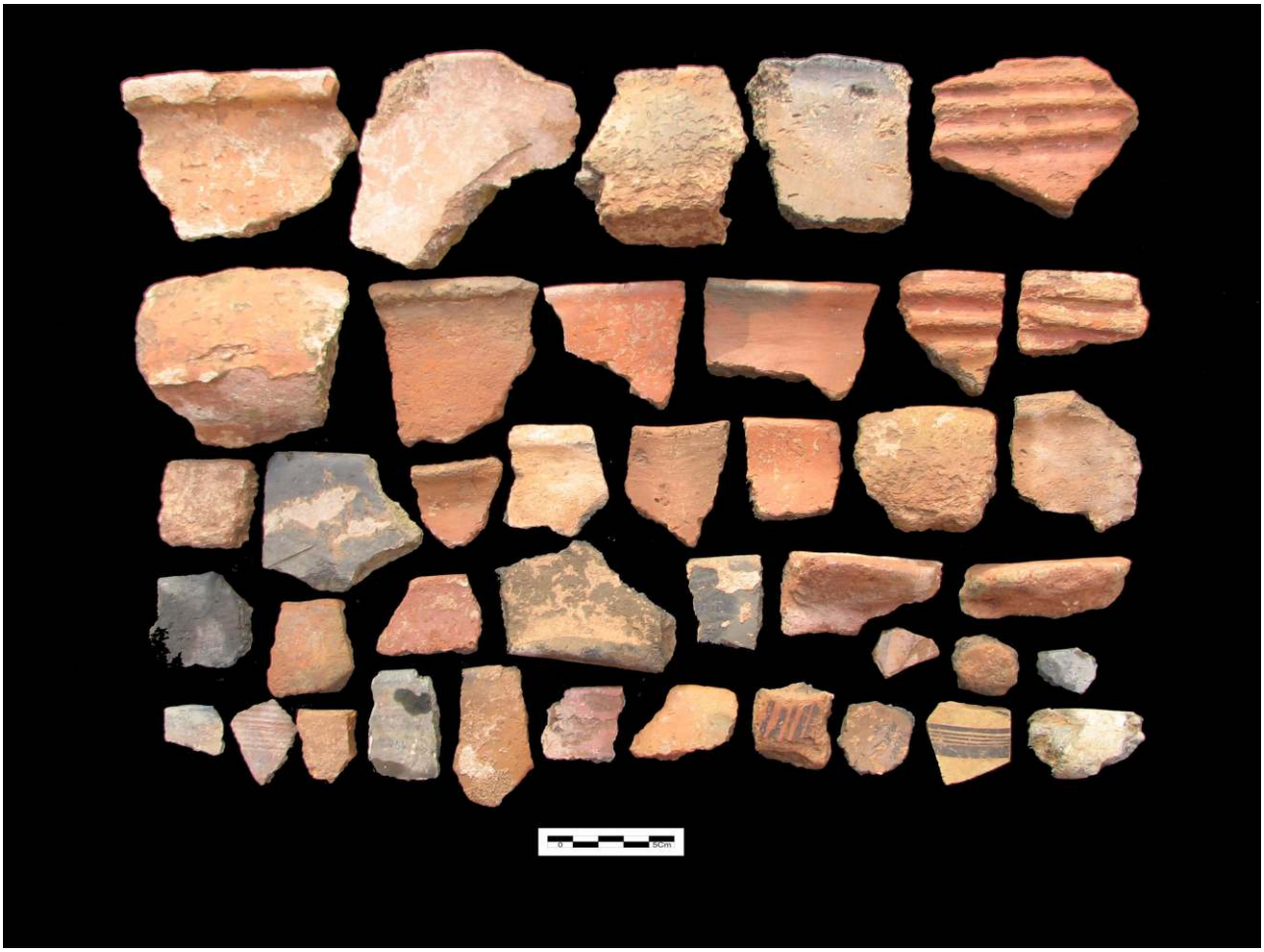
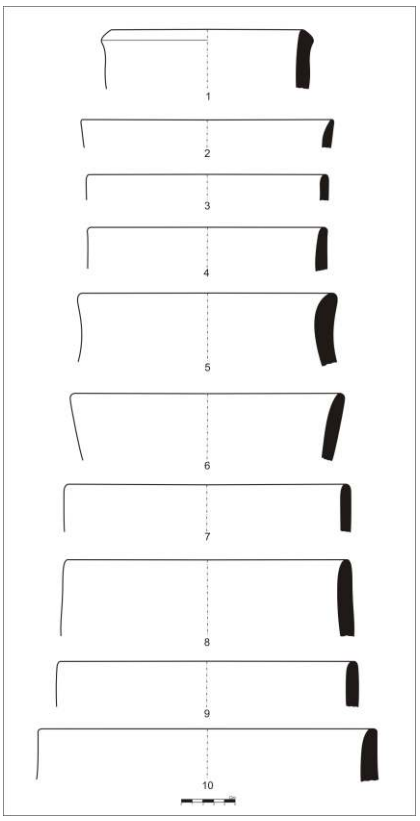


Fig.3: *The Chalcolithic potsherds from Chakhmaqlokh site(Photo: S. Alibaigi)*

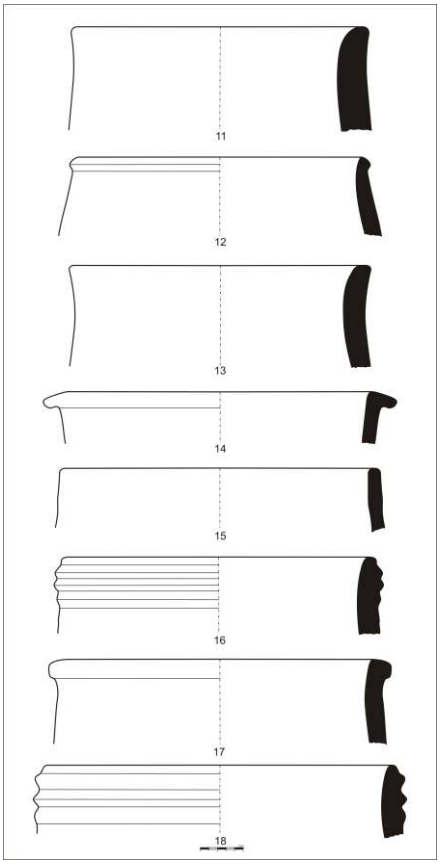
ceramic token (lathed ceramic?). This piece, made from pottery of the first group, is 35 mm in diameter and 17 mm thick. In this group, there is also a vessel with a seal impression (figs. 5a-b). This piece is a body sherd from the western part of the site. All features of this sherd, including the color of the core, slip, formation, baking and temper are identical to other pottery from the first group at the site. Comparable assemblages of Chackmaqlok pottery come from Tepe Ghabrestan in Qazvin Plain (Majidzadeh 1977: fig. 79: 4) and from Esmaeil Abad in the northern Qazvin Plain (Fazeli and Ajorloo 2006: 187, catalogue 1-5: 29; 191 catalogue 1-5: 120; Fazeli Nashli and Abbas Nezhad Seresti 2005: figs. 8-9). Based on this comparative data, we propose a date for this pottery of the Late Chalcolithic.

The second group of pottery includes just three pieces. These sherds core are buff or reddish buff and the color of their wash is same as the color of the core. The pottery is well levigated and it is tempered with fine sand. The exterior is painted with brown geometric and plant motifs (fig. 6). Considering to the close similarity between these samples and the Sialk III 6-7 pottery tradition in the central plateau, they can be attributed to the Late Chalcolithic.

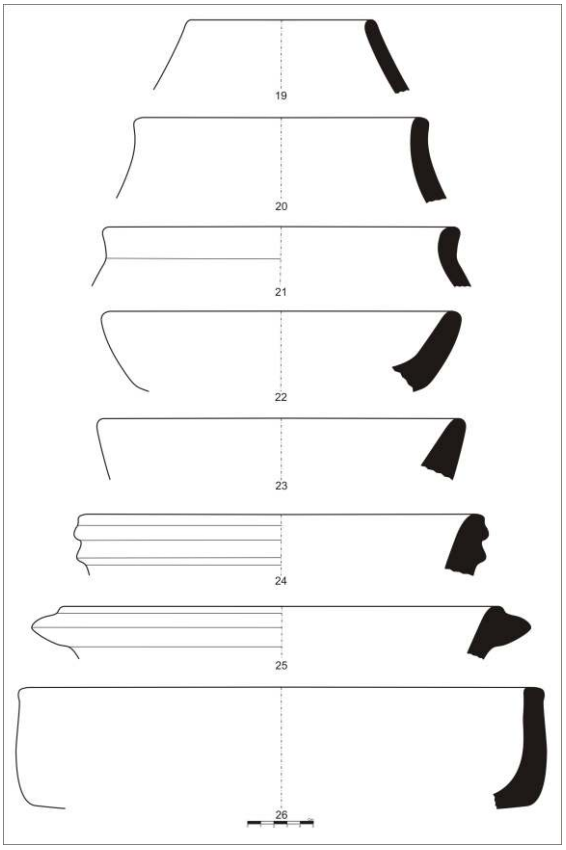
Comparable examples come from Tepe Sialk, Tepe Ozbaki (Majidzadeh n.d: table 17, figs. 12, 15, 18), Tepe Ghabrestan (Majidzadeh 1978: fig.2:33, pl.3:8), from the archaeological survey of Qazvin Plain (Fazeli Nashli and Abbas Nezhad Seresti 2006: 262, photos 6-9) and from many other Chalcolithic sites in the central plateau. However, these samples have similarities with Chalcolithic pottery from the central Zagros, such as Godin VI and Seh Gabi (Cuyler Young and Levine 1974: 75, pl. 14, figs.7, 2:12). Due to the small number of these sherds and the obvious differences with the pottery collection of Chackmaqloukh, and also the homogeneity with pottery of the same time horizon in the central



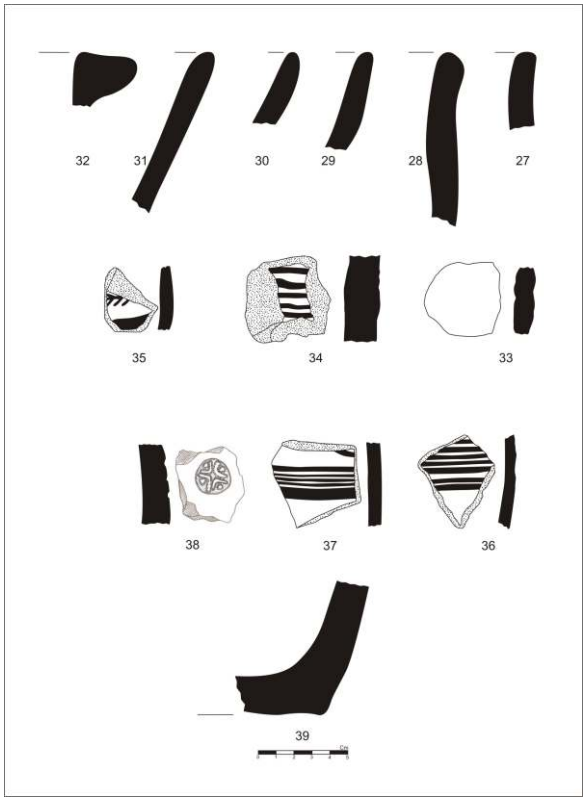
A



B



C



D

***Figs. 4a-d**: Sketch the Chalcolihic pottery from Chakhmaqlokh (Drawing: Z. Ghaffari)*

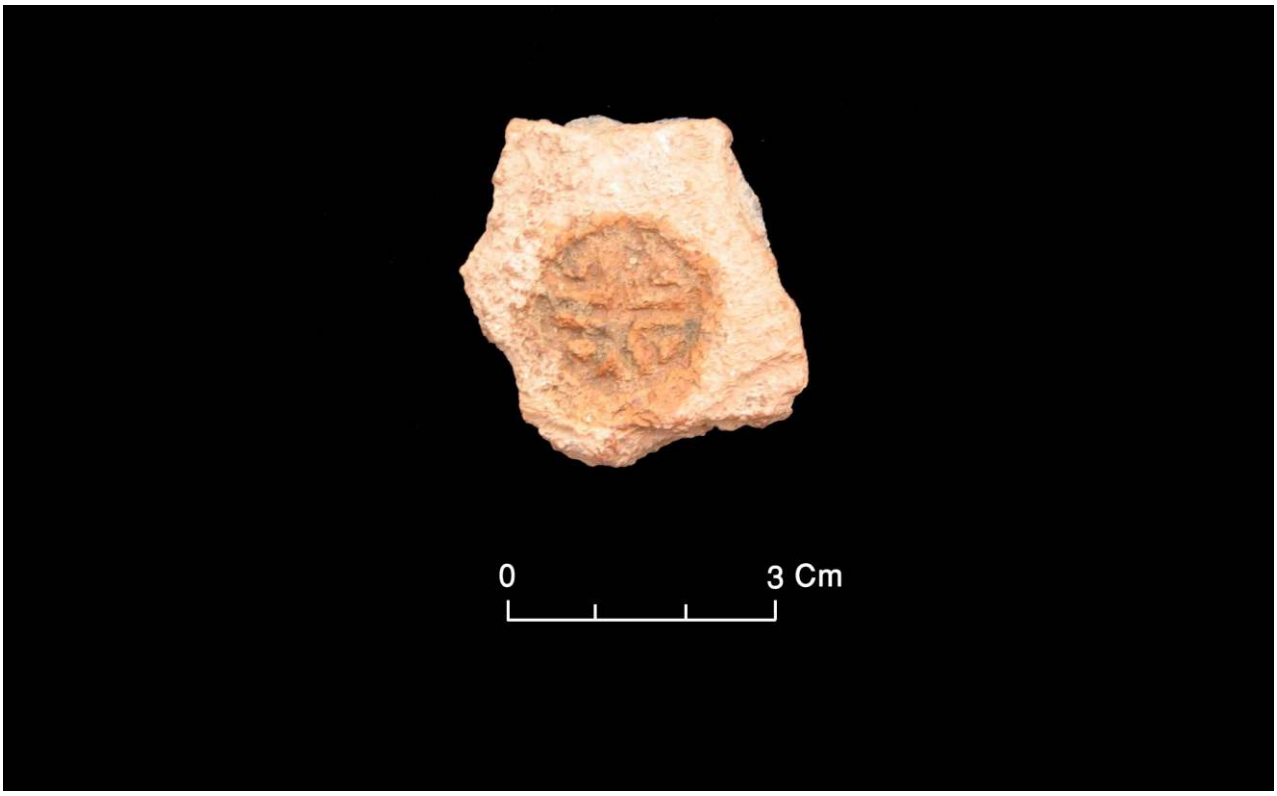


Fig. 5a: *The Chalcolithic potsherd with Stamp seal Impressed from Chakhmaqloukh. (photo: S. Alibaigi)*

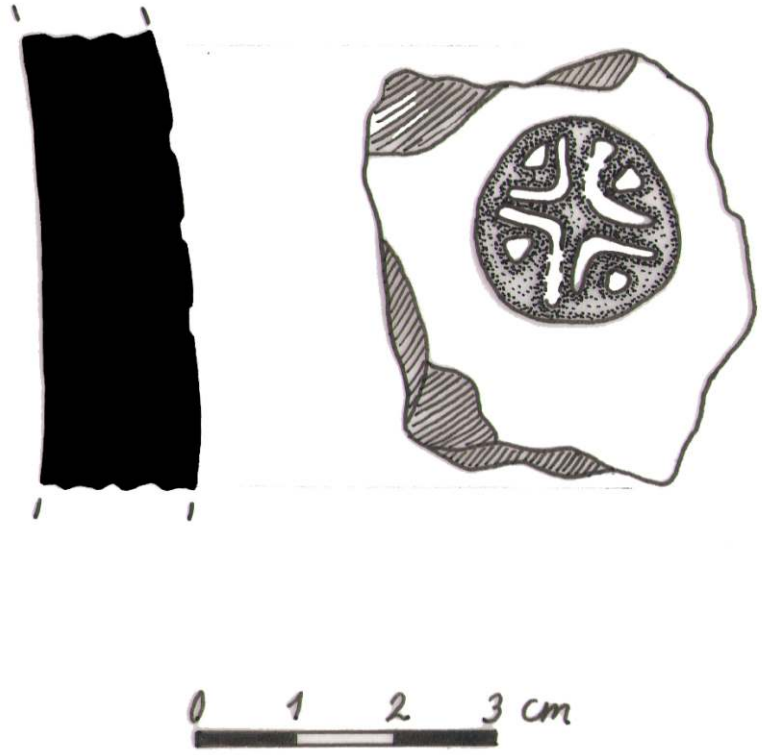


Fig. 5b: *The Chalcolithic potsherd with Stamp seal Impressed from Chakhmaqloukh. (Drawing: I. Mostafapour)*

plateau, it is possible that this pottery was not produced locally but rather entered the area through other mechanism, like regional relationships.

Third group of Chackmaqloukh pottery includes eight pieces with grey or dark grey slip. The temper is a combination of comminute chaff, sand and limestone particle. The pottery generally has a mean structure and is not well levigated. All are handmade and fired at a low temperature, so the core color is smoky. With one exception, the sherds are simple and without decoration. The surface of one is decorated with engraved parallel lines; the others are only slightly polished. Based on this small corpus, only open mouth bowls with plain edges are recognizable. Attention to the technological features and similarity in form with the grey pottery of Chackmaqloukh and the grey pottery of Tepe Ghabrestan (Majidzadeh 1977: fig. 94: 2-3; Fazeli Nashli and Azizi Kharanaqi 2006: 144, figs. 4-15; 195: 76-77) and Esmaeil Abad (Fazeli Nashli and Ajorloo 2006: 163 figs. 4-5A; 165 figs. 5-6:b; catalogue 1-5:15; 187: fig. 29; 191: fig. 120; 203: figs.348,359) shows that they are Comparable.So,



Fig.6. *some Chalcolithic potsherd from Chakhmaqloukh(Photo: S. Alibaigi).*

site. They also provide preliminary information about the prehistoric settlements in the highlands of the Abharroud River Basin.

Chackmaqloukh, based on the study of the surface collection, probably belongs to the Late Chalcolithic period, as shown by our study of the three groups of Chackmaqloukh pottery and our investigation of comparable data from other sites. In addition, the remains of an Iron Age III cemetery are also visible.

This aim of this paper is to introduce the impressed potsherd and discuss its importance for the prehistory of this region. This sherd, based on its technological features, is similar to the first group of Chalcolithic pottery. In addition, the impression on the sherd is important. It is similar to the well-known flat seals of the Chalcolithic, which have been found at some other Chalcolithic sites. Comparable examples come from Giyan (Herzfeld 1940: catalogue 16; Countenau and Ghirshman 1935: pl. 38: 41; Herzfeld 1932/33: 88 abb. 15: 2385, 89 abb. 16: 216, 2684), Hissar (Schmidt 1937: pl. XCI: H 33), Sialk(Ghirshman 1938: Pl.8, no: 1),Susa (Herzfeld 1940: pl. 23; Amiet 1972: pl 1:157), Lurestan (Schmidt et al. 1989 pl. 77: IX), Seh Gab i(Henrickson 1988: figs. 3-73, 54; pl. 2A), and recently, Dezh-e Rashkan in Rey (personal communication with Qadir Afround, excavator of site) (see this article, figs. 7a-m).

Due to the lack of comparable material between this sherd and those dating later than the Chalcolithic period, the close similarity between this sherd and the Chalcolithic pottery of the site, and the similarity between its impression and other Chalcolithic flat seals, this sherd can be dated to the Chalcolithic. This is helpful for dating other Chalcolithic collections of Chackmaqloukh. Prior to this, many pots or potsherds with flat seal impressions were found at prehistoric sites such as Susa (Amiet 1972: pl. 110: 1023; 1985: fig. 1) and Malyan (Sumner 1976: 109, fig. 5e) and Shahdad (Hakemi 1997: 66; Hakemi 2006: 167, 169). Other third millennium potsherds with different images, whether carved, painted or incised, are reported in eastern Iran, at Shahdad (Hakemi 1997: 167), Tepe Yahya (Lamberg-Karlovsky 1970), Bampour (De Cardi 1970) and Shahr-i Sokhte (Seyed Sajjadi 2003a; 2003b).

All examples known until now belong to the Bronze Age and the following periods. The importance of this example is its age, which dates to the chalcolithic period. Before the Bronze Age, no example has been reported in the Central Plateau or in any other part of Iran. If our preliminary understanding is correct, the impressed pottery of Chackmaqloukh is one of the oldest impressed so far detected from central plateau and northwest Iran. At present, due to small number, the fact that this piece is not from a stratified context, and the lack of basic and reliable evidence concerning the prehistoric period in the region (and even at the site), it is impossible to propose a function. It may contain a broad set of functions from administrative and economic to decorative. The presence of Sialk III and Godin VI potteries, including lathed pottery (if lathed in the Chalcolithic period) can be controversial. However, for a better understanding, we must await for further excavations.

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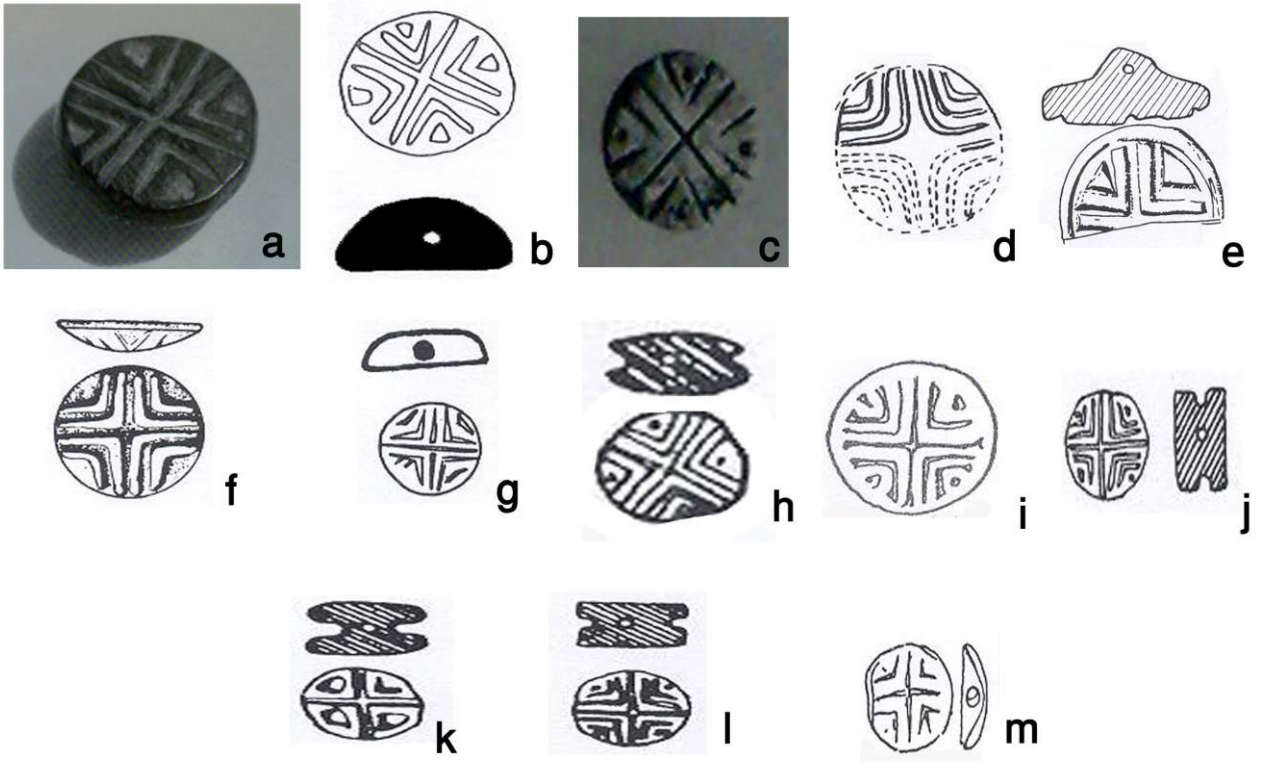


Fig. 7a-m: *The Chalcolithic Stamp seal and sealings from Iran*
a. Seh Gabi (After:Henrickson 1988:Fig 3-73. 54; Pl. 2. A), b. Seh Gabi (After: Henrickson 1988:Fig 3-73. 54; Pl. 2.A), c. Tapeh Hissar(After:Schmidt 1937 PL. XCI, H 1011), d. Susa(After: Amiet 1972: PL. 1. 157), e. Jafar Abad(After: Dollfus 1973: ,RA 67,5, Abb.2/1), f. Susa(After:Rashad 1990: 144: Abb 17. 1066), g. Tapeh Giyan(After:Countenau et Ghirshman 1935, PL. 38, no: 41), h. Tapeh Hissar(After:Schmidt 1937 PL. XCI, H 4443),i. Tapeh Giyan(After:Herzfeld 1932/33. p. 89. abb. 16:216), j. Tapeh Hissar(After:Schmidt 1937 PL. XV, H 4447), k. Tapeh Hissar(After:Schmidt 1937 PL. XV, H 4534), l. Tapeh Hissar (After:Schmidt 1937 PL. XV, H 4443), m. Tapeh Hissar (After:Herzfeld 1932/33. p. 88. abb. 15:2385).

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