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## Paléorient

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From a Damaged Grave of Mahtoutabad (Konar Sandal South, Kerman, Iran)

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# The Ceramic Context of a "Jiroft" Style Chlorite Vessel

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# Introduction

In the last decade, our knowledge about the Halil Rud or "Jiroft" civilization (fig. 1) has expanded and transformed from the recovery of beautiful but unprovenanced collections of artifacts (Madjidzadeh 2003a, 2003c; Perrot and Madjidzadeh 2005, 2006; Piran and Hesari 2005; Muscarella 2012; Piran and Madjidzadeh 2013) to a betterarticulated framework in the course of becoming more coherent and solid (Madjidzadeh 2003b; Madjidzadeh and Pittman 2008).<sup>1</sup>

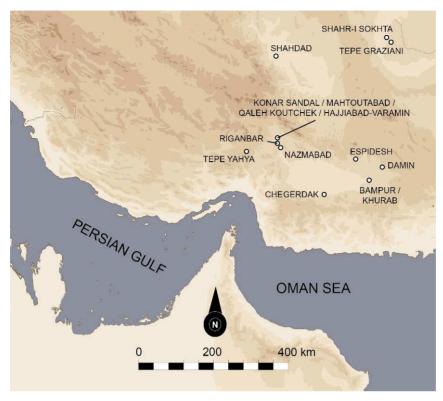


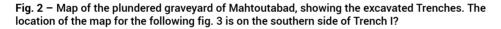
Fig. 1 - Map of the study area including the most relevant protohistoric sites mentioned in the text.

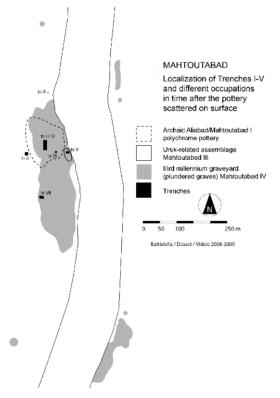
F. Desset.

- New evidence, for example, has provided important perspectives on the reconstruction 2 of the long archaeological sequence of the region which, at present, stretches from the late Neolithic periods (Soleimani 2016a, 2016b; Soleimani and Fazeli 2019) to the 4th and 3rd millennium (Desset et al. 2013, 2017; Vidale and Desset 2013; Eskandari et al. 2018, n.d.a, n.d.b; Pfälzner et al. 2017 and 2019; Vidale 2018, 2020; Eskandari 2019; see also previous background information in Potts D. T. 2002, 2005). Similar breakthroughs have also been made in the discovery and study of the two different systems of ancient writing from this region (Madjidzadeh 2011; Desset 2012, 2014). Furthermore, information related to the ecological and geomorphological setting of the Halil river valley (Fouache et al. 2005; Fouache 2008; Gurjazkaite 2017) as well as its bioarchaeological evidence is also available (Mashkour et al. 2013). Recently, some attempts have even been made at identifying and sourcing local base materials (Emami et al. 2017; Emami 2020). At the same time, P. Steinkeller (1982, 2012, 2013, 2014) was able to identify and link the discovered settlements of the Halil Rud valley with ancient MarHaši of the cuneiform sources, which is a proposition that has gained more acceptance among scholars in recent years (Guichard 2021: 74; contra Francfort and Tremblay 2010).
- <sup>3</sup> Of course, these investigations directly consider the study of the artifacts-symbols associated with the Halil Rud civilization, the carved chlorite materials of the "Jiroft" tradition, and the long-lasting debate on their chronology, trade, and cultural implications (Lamberg-Karlovsky 1970, 1988, 1993, 2001; Miroschedji 1973; Kohl 1975, 1978, 1979, 2004; Hakemi 1977; Potts T. F. 1994; Marchesi 2016; Eskandari *et al.* n.d.a.; see an assemblage of crucial relevance found at Bismaya, in Wilson 2012; for the same artifacts in the Persian Gulf, Zarins 1978 and Hilton 2014). At present, the dating of

these carved vessels is well established in relative and absolute terms (i.e., Early Dynastic III/Early Akkadian, Yahya early IVB, ca. 2650-2350 BCE, or thereabout).

- <sup>4</sup> Despite having achieved progress at multiple fronts, we are currently not in the position to define the types of ceramic materials (ceramic horizons), which are associated and coeval with the recovered carved chlorite artifacts. There are various reasons that can be cited to explain this major gap in our knowledge: detailed reports on the excavation of concerned settlement contexts at Konar Sandal South, for instance, remain unpublished to this day. In addition, although various types of carved chlorite objects were recovered from Mahtoutabad, they are broken, small, few in numbers, and are scattered in various secondary dumps (Vidale 2015). The only intact grave so far excavated in the same graveyard (Grave 2; Desset *et al.* 2017) has revealed a banded calcite vessel, beads made from jasper and carnelian, a copper vase; but unfortunately no chlorite goods came to light.
- <sup>5</sup> In this paper, we present a context that was recorded in January 2007 on the surface of Trench I at Mahtoutabad as Lot 5 (figs. 2 and 3). At the time, it was still possible to note several groups of pots placed in a few areas of the looted cemetery, but they were broken into large fragments by the pillaging thieves and abandoned in heaps of dirt alongside the robbing pits, together with small fragments of human teeth and bones (Vidale 2015: pl. 1A). Among these, we gathered, excavated, and sieved Lot 5, obtained from a pile of excavation earth abandoned aside its looting pit. In our judgement, Lot 5, as a whole, was discarded after the looting of a nearby, single grave (see details in the next section).





F. Desset, M. Vidale and E. Battistella.

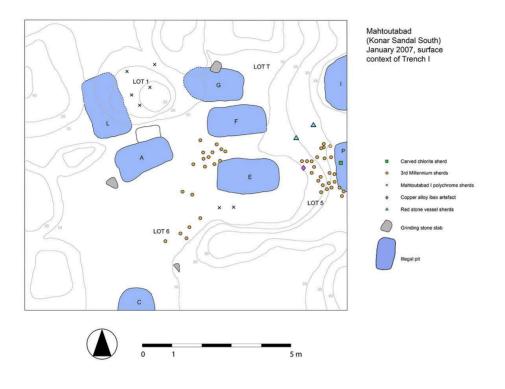


Fig. 3 – Map of the surface of Trench I (see also fig. 2) before excavation, reporting the position of Lot 5 among the heaps of dirt, and of the artefacts published in this article.

I. Caldana.

<sup>6</sup> At present, Mahtoutabad Lot 5 is the only identified context that includes both wellpreserved ceramics and a typologically important fragment of a carved chlorite vessel. In total, the inventory of Lot 5 includes five fragments of stone vessels (one in chlorite) and six fragments of bronze objects, as well as pieces from no less than 25 different, individual vessels. This is the first ceramic assemblage that (although disturbed and removed from its original location) can be scientifically linked, as a whole, to one or more of the so-defined chlorite artefacts.

## **Context of recovery**

In the winter of 2007, M. Vidale was entrusted by Y. Madjidzadeh with a project to carry out a proper rescue operation and excavation of the plundered graveyard at Mahtoutabad, which lies about 800 m north-east of the citadel of Konar Sandal South. These salvage investigations, which also included soundings for mapping purposes, lasted for three field seasons (2007, 2008, 2009). Considering the almost complete destruction of the ancient deposits at the site, the final results, however, turned out to be quite rewarding and meaningful, leading to the discovery of an early 4th millennium semi-subterranean large hut (Vidale and Desset 2013; Mahtoutabad I period) accompanied by a new, distinctive class of polychrome pottery. We were also able to document a chronologically later, thick layer of highly fragmented Aliabad pottery (Mahtoutabad II period), followed by the identification of an important Uruk-related occupation phase (Desset et al. 2013; Mahtoutabad II period) as well as a single,

undisturbed grave of the mid-3rd millennium (Grave 2), which had narrowly escaped the attention of the looting mob (Desset et al. 2017; Mahtoutabad IV period).

- At the start of the excavation, it was possible to see the infilled pits on the surface of Trench I (fig. 3) randomly dug by the looters (Pits A, E, F, G, I, L, P), which were surrounded by low mounds of excavation rubble piled immediately next to them (mapped as 10 cm-distant elevation contour lines). On the same map, inserted crosses mark the location of the findspots and, in this case, of the Middle Chalcolithic Mahtoutabad I polychrome pottery (<sup>14</sup>C cal. dated 4200-3700),<sup>2</sup> which was found where the pit intercepted the earliest layers, around 4 m deep from the modern trampling surface. Ceramic sherds, which come from the graves and are dated to the 3rd millennium, are depicted as circles on the map. Some of them were scattered between Pits A and E while a second cluster, identified as Lot 6, is excluded from the discussions in the present study.
- In contrast, the recovered sherds from Lot 5 formed a dense, but limited cluster between Pits E and P, which were accompanied by various other types of material culture items including a carved chlorite vessel sherd, pieces of different stone vases, and a few copper finds, as already mentioned above. The almost complete preservation of some pottery forms, the morphology and homogeneity of the sediments of the piled debris, the identification of these disturbed sediments and those still contained in the nearby pit, the soil micro-topography and the relative elevation context, encourage us to propose with almost certainty that all the recovered objects must have derived from the nearby Pit E. Moreover, the discovery of three grinding stones slabs, respectively abandoned at the outer edges of Pits G and A and not far from Pit C, appears to verify the accounts recorded in local reports that the bodies of the deceased must have been put to rest in the grave chambers with their heads resting on such domestic lithic tools.

## Description of the finds

10 The collection of finds from Lot 5 can be described as follows.

**Fig. 4** – Mahtoutabad, January 2007, at the beginning of the rescue dig. General view of Trench I; the arrow pinpoints the location of the looters' debris pile labelled Lot 5.



Photo M. Vidale.

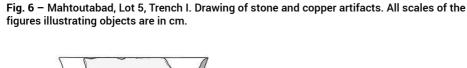
Figs. 5 and 6, no. 1. A neck fragment of a chlorite flask-like vessel with a flat everted 11 rim, decorated with a set of parallel tree branches with "leaves" represented as rows of straight parallel segments in opposed oblique settings. Two preserved stems end in a drop-like leaf or fruit motif. Highly stylized bushes or trees with branches arranged in a similar symmetric way are well-known examples that can found in the chlorite Halil Rud repertory (Madjidzadeh 2003: 40-43), although in these cases, individual leaves are pointed and sinuous, and their artistic rendering as straight segments would rather point towards a depiction of date palms (but palm leaves do not end in similar "fruits"). We are probably dealing with a fragment from the top of a flask carved with a specific, rare scene (see, for example, Madjidzadeh 2003: 65-66) or a scavenging scene (Madjidzadeh 2003: 40-41; Madjidzadeh and Piran 2013: 108-109; Inagaki 2020: figs. 2c, 2f, see also Vidale et al. 2021). Under similar branched trees, we can sometimes see a number of symmetric lions taking a heraldic position above the upturned body of a dead ungulate (see examples in Madjidzadeh 2003: 40-43). In such images, it is interesting to note that the body of the dead herbivore is always placed behind the tree trunk, and not in front of it. This kind of tree, which is depicted with different types of leaves in the current case-study, is also represented on other artistic scenes (Madjidzadeh 2003: 65-66). Rim diam. 11.5 cm (see also figs. 5 and 6, no 1).

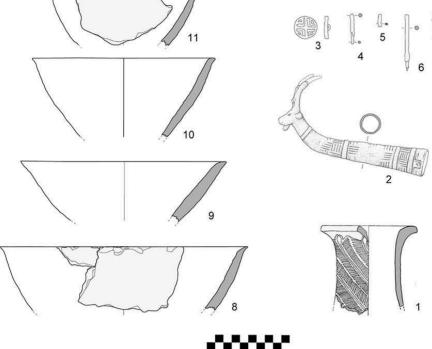
Fig. 5 – Top: Mahtoutabad, January 2007, two images of the moment of discovery of the fragment of a carved chlorite flask on the graveyard's disturbed surface. Below, a picture of the chlorite sherd.





Photo M. Vidale.





Drawings F. Desset and I. Caldana.

<sup>12</sup> Figs. 6, no. 2 and 7. A finely decorated copper object in the shape of a curved tapering tube, ending in a bearded ibex head. The tips of the arched and knobbed horns are missing. This object was heavily corroded, and layers of copper carbonates hid a substantial part of the intricated geometrical decoration of the tubular part, made from bands of alternating orthogonal segments and a basal meander. The function of these peculiar objects is currently unknown (finials? containers? handles?) but they were apparently quite common among the funerary offerings of the Halil Rud or Jiroft graves, as indicated by other related finds including an ibex or bull's head, which is stored at the Jiroft Museum in Iran. They also constantly feature in pictures broadcasted on the web of materials illegally excavated in the region.<sup>3</sup> The current find from Mahtoutabad seems to be the first specimen, which can be scientifically recorded and described. Length about 21 cm, base diam. 2.5 cm.<sup>4</sup>

Fig. 7 – Mahtoutabad, Lot 5, Trench I. A view of the copper tubular object in the shape of a bearded ibex, also shown in fig. 6, no. 2.



Photo M. Vidale.

- Fig. 6, no. 3 is a round around openwork stamp seal in copper with a semi-circular handle, bearing a simple cross-like pattern, which is one of the most common motifs that can be found on such types of stamps made from both stone and copper. Diam. 2,8 cm. The precise findspot of this seal was not recorded and does not appear in fig. 3, but it belongs to the same Lot 5.
- 14 Fig. 6, nos. 4-7 are four fragments of damaged copper pins or similar objects of an unknown type.
- Figs. 6, nos. 8-11 and fig. 8 are fragments of a set of four distinctive, thick-walled bowls made from a fine-grained, dull, red sandstone (rim diam.: 8, 30 cm; 9, 25 cm; 10, 22 cm; 11, 18 cm). The shape of the bowls vary from truncated-conical to hemispherical and appear to match those of similar fine chlorite bowls, although the rims tend to be thinned, rather than rounded. As fragments of the same description are also found on the surface of the Konar Sandal South settlement, it would not be incorrect to consider this type of a stone bowl as a common, local product.

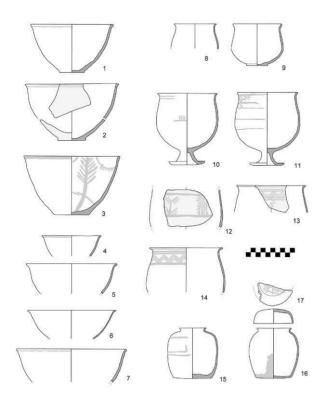
Fig. 8 – Mahtoutabad, Lot 5, Trench I. Four fragments of red sandstone vessels, also shown in fig. 6, nos. 8-11.



M. Vidale.

Fig. 9, no. 1 as well as nos. 2, 4-7 represent fragments of several ceramic hemispherical bowls, which are buff-orange, plain or red slipped, but are always found unpainted (rim diams.: 1, 16.8 cm; 2, 19 cm; 3, 19,5 cm; 4, 12 cm; 5, 18 cm; 6, 18,2 cm; 7, 22,5; 8, 8,5 cm; 9, 10 cm; 10, 12 cm; 11, 12,3 cm; 13, 14 cm; 14, 15 cm; 15, 5,3 cm; 16, 7 cm; 17, 8 cm). The rims are simple and slightly everted, which gives a slight S-shaped trend to their contour. These vessels were carefully produced and fashioned on the potter's wheel with very fine clay, without visible inclusions, and fired under homogeneous oxidizing conditions.

Fig. 9 – Mahtoutabad, Lot 5, Trench I. Drawing of ceramic artifacts. The dark stain on no. 16 came from the contact, in burial, of a lost large copper object.



Drawings F. Desset.

<sup>17</sup> Figs. 9, nos. 3 and 10, in contrast, depict a Gray Ware bowl with an unusual inner motif; parallels can be identified through the study of the pottery assemblages of Tepe Yahya IVB5 to IVB6, (Lamberg-Karlovsky and Potts 2001) internally painted with vegetal patterns and festoons combined with appended vertical brush strokes (not a common design on this ceramic class).<sup>5</sup> Figure 10 shows again two small pots (nos. 8, 9) in very fine red wares, produced and fashioned on the potter's wheel in a very competent way.



Fig. 10 - Mahtoutabad, Lot 5, Trench I. Fragments of the Grey Ware bowl also shown in fig. 9, no. 3.

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Fig. 9, nos. 10 to 1 represent specimens of globular footed cups, also made in the same fine, wheel-made buff-orange ware,<sup>6</sup> which were originally painted with a fugitive, largely vanished dark red pigment (cf. Madjidzadeh 2003a: 159, lower right; Madjidzadeh and Pittman 2008: fig. 22, lower left; at Tepe Yahya, see Lamberg-Karlovsky and Tosi 1973: fig. 107, lower left).<sup>7</sup> Possibly applied after the firing process, this pigment vanished almost entirely—a condition less common in vessels of the same form that were found in the settlement area of Konar Sandal South. Therefore, we are potentially dealing with a specialized kind of funerary production material. The actual conditions of the surface of these fragments are illustrated in fig. 11. These elegant cups were originally painted with much care in intricate, albeit unimaginative, patterns. **Fig. 11** – Mahtoutabad, Lot 5, Trench I. Fragments of fine footed bowls, also shown as drawings in fig. 9, nos. 12-14. Note the vanishing state of the dark red pigment, suggesting a post-firing painting process.



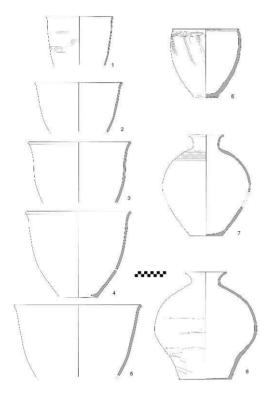
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- 19 Among the surviving designs, we can recognize a zig-zag band pattern below the rim on nos. 11, 13 and 14, vertical bands of multiple segments with toothed margins and a simplified "palm" on no. 12, and probably the "insect" motif on no. 13 (these two latter designs are also often encountered in the Grey Wares assemblage of the general region). We find similar types of cups defined as "hollow-footed chalices" at Tepe Yahya IVB6 (Lamberg-Karlovsky and Potts 2001: fig. 3.19, upper left). For the motifs see *ibidem*, fig. 3.10, J and K., and for IVB5, fig. 4.28 F. Footed cups of the same form were also made from chlorite and copper as evidenced from the study of the Jiroft collections (to be compared with several examples in Madjidzadeh 2003a).
- This ceramic type appears in a few rich graves of Shahr-I Sokhta Period III, such as G. 725 INF (Piperno and Salvatori 2007: figs. 637 and 638) and 731 (Piperno and Salvatori 2007: fig. 675), which is found, in both cases, together with small and very distinctive "scorpion bowls". The recovery of this distinct ceramic type from various sites provides strong evidence for some form of cross-cultural links between these anomalous, rich burials in the Helmand delta and the sites located in the Kerman-Halil Rud areas. Nos. 15 and 16 are two sub-cylindrical, small jars made on the potter's wheel and also painted with fugitive pigments. No. 16 was found close to no. 17, which was probably the lid of the former, as indicated by the decoration painted on the outer base (a chessboard-like grid whose lozenges are alternated, plain, and hatched). A possible analogue for such types of lid is provided by the evidence from Tepe Yahya, Period IVB (Lamberg-Karlovsky and Potts 2001: fig. 4.29, C). Nos. 15 and 16 can possibly be considered as canister jars (see Madjidzadeh 2003: 163, lower left; Desset *et al.* 2017:

pl. 17 and 18, and especially no. 38), even though the shoulder of such jars is less angular. For no. 17, cf. Hakemi 1997: 603, Er. 4.

Fig. 12, nos. 1-5 are bell-like, relatively tall bowls<sup>8</sup> that come in as a medium-fine buff ware probably made in large coils or strips of clay manufactured on the potter's wheel. Rim diam.: 1, 30,8 cm; 2, 32 cm; 3, 33,2 cm; 4, 40 cm; 5, 42 cm. The discovery of this bowl provides direct evidence of typological continuity with the bowls found from the Varamin period (late 4th- early 3rd millennium): see the tall beakers found in Hajjiabad-Varamin, Grave 1 (Eskandari *et al.* n.d.a, figs. 9 and 10).

Fig. 12 - Mahtoutabad, Lot 5, Trench I. Drawing of other ceramic artifacts.



Drawings F. Desset.

No. 6 (rim diam. 21 cm) is a peculiar, coarse buff ware pot, hand-made with coils. The 22 exterior part of the pot is characterized by oblique traces left behind by the use of a spatula-like tool. Its relatively rough surface, thickness and open contour may suggest that we are dealing with a cooking pot. Finally, the two buff ware necked jars (nos. 7 and 8) do not appear to be particularly distinctive in the assemblage. NO. 7 (rim diam. 11 cm) was produced with more care and effort, having been painted black on the shoulder with zig-zag bands over a bright red slip. Similar types of vessels were found found from the IVB1 context of Tepe Yahya,<sup>9</sup> although the carinated base of no. 8 (rim diam. 13 cm) is quite different. The form is related to the use of a truncated cone-like chuck, which was used for making the base of the vessel. Carination molding of the lower part of jars, in fact, represents a tradition that was widespread in the 3rd millennium, and hence, cannot be taken as a precise chronological or cultural marker. Such types of base forms also appear at the site of Mundigak in Kandahar (Casal 1961: figs. 50.14, 78.275); in Bronze Age Sistan (forms in Biscione 1979); at Tepe Yahya (Lamberg-Karlovsky and Potts 2001: figs. 4.7, 5.3 and 5.4) as well as in the Indus and Pre(Early)-Indus cultural areas, and Baluchistan (see, for example, Nindowari and Mehrgarh in Jarrige *et al.* 2011: figs. 8, 14, 15, 29, *passim*). This typological feature is, however, well-documented from the study of the Namazga V assemblages associated with the Oxus/BMAC sphere of southern Turkmenistan and the adjacent early urban cultures (among many possible examples, for Adzhi Kui, Rossi Osmida *et al.* 2020: fig. 7, no. 6; for Gonur, various specimens well illustrated in Salvatori 1995), southern Tadjikistan (Vinogradova and Winkelmann 2016: fig. 4, no. 11; Vinogradova 2021) and the Zeravshan valley (Avanesova 2021).

## Conclusions

- It is, of course, difficult to provide an accurate reconstruction of the original architecture of the destroyed grave at Mahtoutabad. The other grave that was excavated at Mahtoutabad (Grave 2) belonged to the so-called "catacomb" type (i.e., made of a vertical shaft and a lateral chamber, the two separated by a screen of stakes and a mat). The idea that the deceased were placed in the graves with their head resting on a grinding stone slab seems plausible, but more research is required to confirm this argument.
- <sup>24</sup> The composition of the surviving assemblage is, in part, comparable to the two earlier excavated graves of the Halil Rud valley (Grave 1 in Hajjiabad-Varamin, ca. 3000 and Grave 2 in Mahtoutabad, just nearby, ca. 2400-2300, described in Desset *et al.* 2017). The assemblages of both sites are characterized, for example, by the regularly decreasing size of bell-like bowls (fig. 12, nos. 1-5) and hemispherical bowls (fig. 9, nos. 4-7). The evidence, hence, suggests that the vessels recovered from the grave of Lot 5 were deposited in one another as part of a continuous series - a tradition, which is already well-documented from the study of the large graves of the earlier Varamin period (late 4th-early 3rd millennium). The latter have been recently excavated at the nearby site of Hajjiabad-Varamin (Eskandari *et al.* NDa).
- The typological variation observed in the pot assemblage is also noteworthy, as it partially reflects the typological characteristics of the aforementioned, possibly coeval (?) Grave 2. Various types of grave goods have been found including a series of fine, serving pottery (painted footed cups possibly for filling liquids whereas fine wheelthrown bowls for serving solid food?), storage vessels, and a possible cooking pot, which recalls a single cooking pot found near the feet of the deceased in Grave 2. The identified pottery forms from the two contexts (Grave 2 and Lot 5) are quite different; for the time being, we cannot determine precisely for what reasons.
- <sup>26</sup> In terms of chronology, we had proposed a date between 2400-2200 for Grave 2, mainly based on the similarity of its pots with the ceramic types recovered from Shahr-I Sokhta Period III, and, by extension, with the complex network of links and matching comparisons that this similarity brought about (see Salvatori and Tosi 2005). Recently, however, another series of radiocarbon dates was obtained from Tepe Graziani (a suburban site of Shahr-i Sokhta), placing both Periods III and IV of Bronze age Sistan before 2400-2350 (Kavosh *et al.* 2019).
- 27 While this is not the occasion to deal with the details of such a complex and multifacetted discussion (see Cortesi *et al.* 2008; Jarrige *et al.* 2011; Vidale 2015; Mutin *et al.* 2017; Mutin and Lamberg-Karlovsky 2021), the potential correlation noted between the

studied material from Mahtoutabad and Shahr-I Sokhta III suggests a somewhat earlier date for Lot 5, which is, at any rate, included within the time range now widely accepted for the production and use of Jiroft carved vessels of the *série ancienne* (i.e., Early Dynastic III/Early Akkadian and Yahya early IVB, i.e. ca. 2600-2350). Unfortunately, the fragments of human bones collected around the destroyed graves of Mahtoutabad and tested for collagen and <sup>14</sup>C dating, turned out mineralized and not usable for our research purposes.

### BIBLIOGRAPHY

Avanesova N. A. 2021 – The Zeravshan regional variant of the Bactria-Margiana Archaeological complex: interaction between two cultural worlds. In: Lyonnet B. and Dubova N. (eds.), *The World of the Oxus Civilization*: 665-697. London-New York: Routledge.

Biscione R. 1979 – The Burnt Building of Period Shahr-i Sokhta IV. An Attempt of Functional Analysis from the Distribution of Pottery Types. In: Gnoli G. and Rossi A. V. (eds.), *Iranica*: 291-306. Naples: Istituto Universitario Orientale.

Casal J.-M. 1961 - Fouilles de Mundigak. Paris: Librairie C. Klincksiek.

Cortesi M., Tosi M., Lazzari A. and Vidale M. 2008 – Cultural Relationships beyond the Iranian Plateau: The Helmand Civilization, Baluchistan and the Indus Valley in the 3rd Millennium. *Paléorient* 34,2: 5-35.

Desset F. 2012 – *Premières écritures iraniennes. Les systèmes proto-élamite et élamite linéaire.* Naples: Istituto Universitario Orientale (Minor 76).

Desset F. 2014 – A New Writing System Discovered in 3rd Millennium Iran, the Konar Sandal 'Geometric' Tablets. *Iranica Antiqua* 49: 83-109.

Desset F., Vidale M. and Alidadi Soleimani N. 2013 – Mahtoutabad III (Province of Kerman, Iran): An "Uruk-Related" Material Assemblage in Eastern Iran. *Iran* 51: 17-54.

Desset F., Vidale M., Alidadi Soleimani N., Battistella E. and Daneshi A. 2017 – A Grave of the Halil Rud Valley (Jiroft, Iran, ca. 2400-2200): Stratigraphy, Taphonomy, Funerary Practices. *Iranica Antiqua* 52: 25-60.

Emami M. 2020 – Production of Pottery from Esfandaghe and Jiroft, Iran, late 7th-early 3rd Millennium. *Materials and Manufacturing Processes* 35,13: 1446-1454.

Emami M., Razanib M., Alidadi Soleimani N. and Madjidzadeh Y. 2017 – New insights into the characterization and provenance of chlorite objects from the Jiroft civilization in Iran. *Journal of Archaeological Science: Reports* 16: 194-204.

Eskandari N. 2019 – Regional patterns of Early Bronze Age urbanization in the southeastern Iran. New discoveries on the western fringe of Dasht-e Lut. In: Meyer J.-W., Vila E., Mashkour M., Casanova M. and Vallet R. (eds.), *The Iranian Plateau During the Bronze Age. Development of Urbanisation, Production and Trade*: 201-216. Lyon: Maison de l'Orient et de la Méditerranée Jean Pouilloux. Eskandari N., Desset F., Maritan L., Cherubini A. and Vidale M. 2018 – Sequential Casting Using Multiple Materials: A Bronze Age "Royal Sceptre" from the Halil Rud Valley (Kerman, Iran). *Iran* 58,2: 1-13.

Eskandari N., Desset F., Vidale M., Hessari M. and Shahsavari M. n.d. a – A late 4th to early 3rd millennium grave in Hajjiabad-Varamin (Jiroft, south-eastern Iran): defining a new Period of the Halil Rud valley protohistoric sequence. *Iranica Antiqua*.

Eskandari N., Pfälzner P. and Alidadi Soleinami N. n.d. b – The formation of the Early Bronze Age Jiroft Culture, Halilrud Basin, SE Iran: Excavations at Varamin Jiroft 2017. Zeitschrift für Assyriologie und Vorderasiatische Archäologie.

Fouache E., Garçon D., Rousset D., Sénéchal G. and Madjidzadeh Y. 2005 – Dynamiques géomorphologique dans la vallée de l'Halil Roud (Iran, région de Jiroft): Perspectives géoarchéologiques. *Paléorient* 31,2: 107-122.

Fouache E. 2008 – Jiroft II. Human geography and environment. *Encyclopaedia Iranica*, online http://www.iranicaonline.org/articles/jiroft-ii-human-geography-and-environment.

Francfort H.-P. and Tremblay X. 2010 – Marhaši et la civilisation de l'Oxus. *Iranica Antiqua* 45: 51-224.

Guichard M. 2021 – The Oxus Civilization and Mesopotamia: A Philologist's Point of View. In: Lyonnet B. and Dubova N. A. (eds.), *The World of the Oxus* Civilization: 66-81. London-New York: Routledge.

Gurjazkaite K. 2017 – Vegetation history and human-environment interactions through the late Holocene in Konar Sandal, Kerman, SE Iran. MSc Thesis, Department of Thematic Studies Environmental Change. Universitet Linköpings, 1.

Hakemi A. 1997 – Kerman: The Original Place of Production of Chlorite Stone Objects in the 3rd Millennium BC. *East and West* 47: 1-4, 11-40.

Hilton A. 2014 – The Stone Vessels: Failaka/Dilmun: The Second Millennium Settlements. Aarhus: Universitetsforlag Aarhus.

Inagaki H. 2020 – Sacred symbols from the West Asia and Western Central Asia 1, Sacred trees. Bulletin of Miho Museum 20: 1-18.

Jarrige J.-F., Didier A. and Quivron G. 2011 – Shahr-i Sokhta and the chronology of the Indo-Iranian regions. *Paléorient* 37,2: 7-34.

Kavosh H. A., Vidale M. and Fazeli Nashli H. 2019 – Tappeh Graziani, Sistan, Iran: stratigraphy, formation processes and chronology of a suburban site of Shahr-i Sokhta. Roma-Padua: Antilia-Università degli Studi di Padova (Serie Orientale Roma 18; Prehistoric Sistan 2).

Kohl P. 1975 – Carved Chlorite Vessels: A Trade in Finished Commodities in Mid-Third-Millennium. *Expedition* 18,1: 18-31.

Kohl P. 1978 – The Balance of Trade in Southwestern Asia in the Mid-Third Millennium B.C. *Current Anthropology* 19: 463-492.

Kohl P. 1979 – The "World Economy" of West Asia in the Third Millennium B.C. In: Taddei M. (ed.), *South Asian Archaeology 1977*: 55-86. Naples: Istituto Universitario Orientale.

Kohl P. 2004 – Chlorite and Other Stone Vessels and their Exchange on the Iranian Plateau and Beyond. *Persiens Antike Pracht: Katalog der Ausstellung des Deutschen Bergbau-Museum Bochum* 1: 282-289.

Lamberg-Karlovsky C. C. 1970 – *Excavations at Tepe Yahya, Iran, 1967-1969. Progress Report I.* Cambridge: Peabody Museum of Archaeology and Ethnology, Harvard University (American School of Prehistoric Research, Bulletin 27).

Lamberg-Karlovsky C. C. 1988 – The Intercultural Style Carved Vessels. Iranica Antiqua 23: 45-95.

Lamberg-Karlovsky C. C. 1993 – The Biography of an Object: The Intercultural Vessels of the Third Millennium BC. In: Lubar S. and Kingery W. D. (eds.), *History from Things: Essays on Material* Culture: 270-292. Washington D.C.: Smithsonian Institution Press.

Lamberg-Karlovsky C. C. and Potts D. T. 2001 – *Excavations at Tepe Yahya, Iran, 1967-1975. The Third Millennium.* Cambridge: Peabody Museum of Archaeology and Ethnology, Harvard University (American School of Prehistoric Research, Bulletin 27).

Lamberg-Karlovsky C. C. and Tosi M. 1973 – Shahr-i Sokhta and Tepe Yahya: Tracks of the Earliest History of the Iranian Plateau. *East and West* 23: 21-53.

Madjidzadeh Y. 2003a – *Jiroft: The Earliest Oriental Civilization*. Tehran: Ministry of Culture and Islamic Guidance, Printing and Publishing Organization, Cultural Heritage Organization.

Madjidzadeh Y. 2003b - La découverte de Jiroft. Dossiers d'Archéologie 287: 19-26.

Madjidzadeh Y. 2003c - La première campagne de fouilles à Jiroft. Dossiers d'Archéologie 287: 65-75.

Madjidzadeh Y. and Piran S. 2013 – Objects from the Jiroft Treasury. Soft Stone and Alabaster Objects (Recovered Collection) from the Halil River Basin in the National Museum of Iran. Tehran: Pasineh.

Madjidzadeh Y. and Pittman H. 2008 – Excavations at Konar Sandal in the Region of Jiroft in the Halil Basin: First Preliminary Report (2002-2008). *Iran* 46: 69-103.

Madjidzadeh Y. 2011 – Jiroft Tablets and the Origin of the Linear Elamite Writing System. In: Osada T. and Witzel M. (eds.), *Cultural Relations between the Indus and the Iranian Plateau during the Third Millennium*. Cambridge: Indus Project, Institute for Humanities and Nature (Harvard Oriental Series Opera Minora 7).

Marchesi G. 2016 – Object, Images, and Text: Remarks on Two "Intercultural Style" Vessels from Nippur. In: Balke T. E. and Tsouparopoulou C. (eds.), *Materiality of Writing in Early Mesopotamia*: 102. Berlin/Boston: Walter De Gruyter.

Mashkour M., Tengberg M., Shirazi Z. and Madjidzadeh Y. 2013 – Bio-archaeological Studies at Konar Sandal, Halil Rud Basin, Southeastern Iran. *Journal of Environmental Archaeology* 18: 222-246.

Miroschedji P. de 1973 – Vases et objets en stéatite susiens du musée du Louvre: 979. Tehran: Institut français de recherche en Iran (Cahiers de la Délégation Archéologique Française en Iran 3).

Muscarella O. W. 2012 – Jiroft III. General Survey of Excavations. *Encyclopaedia Iranica*, online https://iranicaonline.org/articles/jiroft-iii-general-survey-of-excavations

Mutin B., Moradi H., Sarhaddi-Dadian H., Fazeli Nashli H. and Soltani M. 2017 – New Discoveries in the Bampur Valley (South-Eastern Iran) and their Implications for the Understanding of Settlement Pattern in the Indo-Iranian Borderlands During the Chalcolithic Period. *Iran* 55,2: 99-119.

Mutin B. and Lamberg-Karlovsky C. C. 2021 – The relationship between the Oxus Civilization and the Indo-Iranian Borderland. In: Lyonnet B. and Dubova N. A. (eds.), *The World of the Oxus Civilization*: 551-589. London-New York: Routledge.

Perrot J. and Madjidzadeh M. 2005 – L'iconographie des vases et objets en chlorite de Jiroft, Iran. *Paléorient* 31,2: 123-157.

Perrot J. and Madjidzadeh Y. 2006 – À travers l'ornementation des vases et objets en chlorite de Jiroft. *Paléorient* 32,1: 99-112.

Pfälzner P. and Alidadi Soleimani N. 2017 – The ICAR-University of Tübingen South-of-Jiroft Archaeological Survey (SOJAS). Results of the first season 2015. *Archäologische Mitteilungen aus Iran und Turan* 47: 105-141.

Pfälzner P., Soleimani N. A. and Karimi M. 2019 – SOJAS 2015-2018: A résumé of four seasons of archaeological survey south of Jiroft. *Archaeology*, *Journal of the Iranian Center for Archaeological Research* 2,2: 107-124.

Piperno M. and Salvatori S. 2007 – *The Shahr-i Sokhta graveyard (Sistan, Iran), excavation campaigns* 1972-1978. Roma: Associazione Internazionale di Studi sul Mediterraneo e l'Oriente (Reports and Memoirs 6).

Piran S. and Hesari M. 2005 – Cultural around Halil Roud and Jiroft. The catalogue of exhibition of select restituted objects. Teheran: National Museum of Iran, Pazineh Press.

Piran S. and Madjidzadeh Y. 2013 – Objects from the Jiroft treasury, soft stone and alabaster objects (recovered collection) from the Halil river basin. Tehran: National Museum of Iran, Pazineh Press.

Potts D. T. 2002 - Total Prestation in Marhashi-Ur Relations. Iranica Antiqua 37: 343-357.

Potts D. T. 2005 – In the Beginning: Marhashi and the Origins of Magan's Ceramic Industry in the Third Millennium. *Arabian Archaeology and Epigraphy* 16,1: 67-78.

Potts T. F. 1994 – Mesopotamia and the East. An Archaeological and Historical Study of Foreign Relations ca. 3400-2000. Oxford: Oxford University Press (Oxford University Committee for Archaeology Monographs 37).

Rossi-Osmida G., Cengia A. R. and Bonora G. L. 2020 – Grave ADJ1F from the Farmhouse of Adji Kui 1 (Margiana, Turkmenistan): Description and Preliminary Analysis of an Oxus Civilisation Funerary Context. In: Guboglo M. N. and Kufterin V. V. (eds.) 2020 – *Nature – Man – Society: From Past to Present. Collection of Papers in Honor of Nadezhda Dubova's jubilee*: 84-97. Moscow: Staryy Sad.

Salvatori S. 1995 – Gonur-Depe 1 (Margiana, Turkmenistan): The Middle Bronze Age. Graveyard. Preliminary Report on the 1994 Excavation Campaign. *Rivista di Archeologia* 19: 5-37.

Salvatori S. and Tosi M. 2005 – Shahr-i Sokhta Revised Sequence. In: Jarrige C. and Lefèvre V. (eds.), *South Asian Archaeology 2001*: 281-292. Paris: Éditions Recherche sur les Civilisations.

Soleimani N. A. 2016a – First Season of Excavation in Tape Gavkoshi, Esfandagheh Plain/Jiroft. In: A collection of Archaeological Finds 2014-2015. In: *14th Annual Symposium on the Iranian Archaeology*: 14-17. Tehran: Research Institute of Cultural Heritage and Tourism.

Soleimani N. A. 2016b – Tappeh Gāvkoshi Esfandagheh Jiroft, Esteghrāri az Doreh-ye Nosangi dar Jonub-e Shargh-e Irān (Tepe Gāvkoshi Esfandagheh, Jiroft; A Neolithic Occupation in Southeastern Iran). In: *14th Annual Symposium on the Iranian Archaeology*: 385-389. Tehran: Research Institute of Cultural Heritage and Tourism.

Soleimani N. A. and Fazeli Nashli H. 2019 – Gahnegariye dorehye no-sangiye Kerman bar asas kavoshhaye bastanshenakhtiye Tappeh Gav Koshi, Esfandagheh-Jiroft (The reevaluation of Kerman Neolithic chronology based on the excavation of Tepe Gav Koshi, Esfandagheh-Jiroft). *Journal of Research on Archaeometry* 42,2: 61-79.

Steinkeller P. 1982 – The Question of Marhaši: A Contribution to the Historical Geography of Iran in the Third Millennium B.C. *Zeitschrift für Assyriologie* 72: 237-265.

Steinkeller P. 2012 – New Light on Marhaši and Its Contacts with Makkan and Babylonia. In: Giraud J. and Gernez G. (eds.), *Aux marges de l'archéologie. Hommage à Serge Cleuziou*: 261-274. Paris: Éditions de Boccard (Travaux de la Maison Archéologie et Ethnologie, René-Ginouvès 16).

Steinkeller P. 2013a – Trade Routes and Commercial Networks in the Persian Gulf during the Third Millennium. In: Faizee C. (ed.), *Collection of Papers Presented to the Third International Biennial Conference of the Persian Gulf (History, Culture, and Civilization)*: 413-431. Tehran: Scientific Board of the Third International Conference of the Persian Gulf, Department of History, University of Tehran.

Steinkeller P. 2014 – Marhaši and Beyond: The Jiroft Civilization in a Historical Perspective. In: Lamberg-Karlovsky C. C., Genito B. and Cerasetti B. (eds.), *My Life is like a Summer Rose. Maurizio Tosi e l'Archeologia come modo di vivere. Papers in Honour of Maurizio Tosi for His 70th Birthday*: 691-707. Oxford: BAR Publishing (International Series 2690).

Vidale M. and Desset F. 2013 – Mahtoutabad (Konar Sandal south, Jiroft), preliminary evidence of occupation of a Halil Rud site in the early 4th millennium. In: Petrie C. (ed.), *Ancient Iran and Its Neighbours: Local Developments and Long-range Interactions in the 4th millennium*: 233-251. Oxford: Oxbow Books (British Institute of Persian Studies, Archaeological Monographs Series).

Vidale M. 2015 – Searching for Mythological Themes on the "Jiroft" Chlorite Artefacts. *Iranica Antiqua* 50: 15-58.

Vidale M. 2018 – Great Domino Games. From Elam, looking eastwards. Chapter Fourteen. In: Álvarez-Mon J., Basello G. P. and Wicks Y. (eds.), *The Elamite World*: 275-303. London-New York: Taylor and Francis.

Vidale M. 2020 – Jiroft La civiltà che non c'era. Roma: ISMEO.

Vidale M., Eskandari N., Shafiee M., Caldana I. and Desset F. in press – Animal Scavenging as Social Metaphor: A Carved Chlorite Vessel of the Halil Rud Civilization, Kerman, Iran, Mid Third Millennium BC. Cambridge Archaeological Journal.

Vinogradova N. M. 2021 – The formation of the Oxus Civilization/BMAC in southwestern Tajikistan. In: Lyonnet B. and Dubova N. (eds.), *The World of the Oxus Civilization*: 635-664. London-New York: Routledge.

Vinogradova N. M. and Winkelmann S. 2016 – The Rich Grave in the Burial Ground of Gelot (South Tajikistan). In: Widorn V., Franke U. and Latschenberger P. (eds.), *Contextualizing Material Culture in South and Central Asia in Pre-Modern Times. Papers from the 20th Conference of the European Association for South Asian Archaeology and Art held in Vienna from 4th to 9th July* 2010: 361-377. Turnhout: Brepols.

Wilson K. 2012 – *Bismaya. Recovering the Lost City of* Adab: 129. Chicago: The Oriental Institute of the university of Chicago (Oriental Institute Publications 138).

Zarins J. 1978 – Typological Study in Saudi Arabian Archaeology. Steatite Vessels in the Riyadh Museum. *Atlal 2*: 65-93.

## NOTES

**1.** The work belongs in equal parts to the three authors. In detail, M. Vidale wrote the Introduction and the Conclusions. I. Caldana the section entitled "Context of recovery"

and part of that entitled "Description of the finds", for fig. 7. F. Desset wrote the rest of the same section, concerning all artifacts in figs. 10-13.

**2.** The range is suggested by four  ${}^{14}C$  published and discussed in detail in Vidale and Desset 2013.

**3.** It is believed that some bronze objects that were stolen from the Kerman region may have been, in some instances, attributed, without evidence, to traditionally famous Luristan collections of stray finds.

**4.** Rumors about this find are at the base of a web fake news reported by O. Muscarella (2012) as follows: "An Internet report recorded that the bronze head of a goat 'was found in the historical cemetery of Jiroft', a site that eludes us." Not all information, which appears on the web is worth repeating.

**5.** Already published in Vidale 2015: pl. III, upper right; together with a selection of other fine Gray Ware pots recovered from the looted graves, which give an idea about the presence and range of variation in this fine ceramic class from Mahtoutabad IV.

6. Body and foot being separately thrown and joined in a second step.

7. As stressed by an anonymous reviewer, besides representing one of the most recognizable ceramic types at Konar Sandal South, relatively fine, wheel-made Blackon-Red wares with fugitive slip and zig-zag painted designs are also well-documented from Yahya IVB.6-4 (or IVB.2, depending on the author), from the UAE and Oman (late Hafit and early Umm an-Nar periods).

**8.** Potentially comparable to some specimens reported in Lamberg-Karlovsky and Potts 2001 in figs. 4.33-36, despite the poor preservation of such bowls (from Tepe Yahya IVB5).

9. Lamberg-Karlovsky and Potts 2001: fig. 6.10, B and C.

#### ABSTRACTS

**Abstract.** The modern looting of a Bronze Age grave located at the site of Mahtoutabad (near Konar Sandal South, Jiroft) has, for the first time, revealed a range of ceramic materials that accompanied the carved chlorite artefacts of the Halil Rud or Jiroft style. In this paper we present and examine an assemblage of recovered finds including a carved chlorite shard and their archaeological context followed by a discussion specifically related to the original funerary deposit. Finally, by conducting a cross-comparative survey between the recovered objects and those from other Early Bronze age sites of the region, we provide a possible, preliminary chronology for the looted grave of Mahtoutabad.

**Résumé.** Le pillage moderne d'une tombe de l'âge du Bronze sur le site de Mahtoutabad (près de Konar Sandal Sud, Jiroft, Iran) a, pour la première fois, révélé un assemblage céramique qui accompagnait des objets en chlorite du style Halil Rud ou Jiroft. Dans cet article, nous présentons et étudions un ensemble d'artefacts découverts associé à un tesson gravé en chlorite ainsi que son contexte archéologique et discuterons plus spécifiquement du dépôt funéraire d'origine. Enfin, en menant une comapraison antre les objets découverts et eux des sites du Bronze ancien

de la région, nous proposerons une possible datation prélimianire de la tombe pillée de Mahtoutabad.

### INDEX

**Keywords:** Carved chlorite artefacts of the Jiroft style, Halil Rud civilization, Mahtoutabad, Konar Sandal South, Shahr-i Sokhta Period III **Mots-clés:** Vases en chlorite du style de Jiroft, civilisation de l'Halil Rud, Mahtoutabad, Konar

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