

Deutsches Archäologisches Institut • Eurasien-Abteilung
Außenstelle Teheran

Sonderdruck aus:

Archäologische Mitteilungen aus Iran und Turan

BAND 46 • 2014



DIETRICH REIMER VERLAG • BERLIN

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Band 46 • 2014



DIETRICH REIMER VERLAG • BERLIN

IV + 342 Seiten mit 201 Abbildungen, 39 Tabellen und 5 Karten

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ISSN 1434-2758

Redaktion: Deutsches Archäologisches Institut, Eurasien-Abteilung, Im Dol 2–6, D-14195 Berlin
Satz, Druck und Bindung: Beltz Bad Langensalza GmbH, Neustädter Straße 1–4, D-99947 Bad Langensalza
Kommissionsvertrieb: Dietrich Reimer Verlag GmbH, Berliner Straße 53, D-10713 Berlin

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Contacts across the Hindu Kush in the Bronze Age. Additional insights from Sarazm – Soundings 11–11A (Tajikistan)

By Benjamin Mutin and Abdurauf Razzokov

Keywords: Tajikistan, Hindu Kush, Indo-Iranian Borderlands, Bronze Age, Ceramics, Contacts
Ключевые слова: Таджикистан, Гиндукуш, индо-иранская зона, бронзовый век, керамика, контакты

Introduction

Sarazm is a proto-urban site located in northwestern Tajikistan in the Zeravshan Valley which was occupied during the fourth and third millennia BCE. The occupation of this site was divided into four main chronological periods – Periods I to IV from the oldest to the most recent – although the dating and definition of these periods are still the topic of discussion. Sarazm is well-known because the material assemblage recovered at the site contains items that have stylistic relationships with distant cultural spheres located in Uzbekistan, Turkmenistan, and northeastern Iran to the west; the Steppe of Eurasia to the north; and Afghanistan and Pakistan to the south. This is particularly evident in the ceramic assemblage.¹ Sarazm is for this reason a unique site that seems to be isolated in the Zeravshan Valley and yet greatly connected to the rest of Middle and Central Asia. The nature of these various interactions is however not clarified. It is, for example, still debated whether the Turkmen-related and Afghan/Pakistani-related ceramics found at Sarazm reflect contacts, exchanges, colonization, or evidence of greater and more anchored settlements at the site related to the western and southern cultural spheres.²

Sarazm was added to the World Heritage List of UNESCO in July 2010. The UNESCO property covers 16 hectares, but the archaeological vestiges expand beyond this area, below the modern village located around the property. The present article pertains to ceramics that were found outside of the UNESCO property, approximately 400 meters to the northeast in the garden of a villager (**Fig. 1**). These ceramics were collected by one of us (Abdurauf Razzokov) in 1987 and 2001 and were studied recently by one of us (Benjamin Mutin). A first series of ceramics was saved while the owner of the garden was digging a hole in 1987; excavations were conducted at the placement of this hole, which was labeled Sounding 11, over a surface measuring

1.5 × 1 m. Previous agricultural activities and building constructions had significantly destroyed the archaeological deposits in this garden so that the cultural layers at the placement of Sounding 11 were preserved to a depth of c. 0.80 m only. Bones and broken stones were found with the ceramic fragments, but neither architecture nor specific features were detected in this sounding. Additional material was collected in 2001, in a sounding that was placed approximately four meters from Sounding 11; this sounding was labeled Sounding 11A. Sounding 11A was 1 × 1 m in surface and c. 0.90 m deep. This excavation revealed that dirt, including archaeological deposits, had been dug out at the placement of the sounding for the construction of modern buildings. The area was then filled with modern construction debris mixed with archaeological soil that contained ceramics similar to those found in Sounding 11. The archaeological contexts of Soundings 11–11A are not entirely clear since they had been partly destroyed in the past and were studied on limited surfaces and depth. Nevertheless, the ceramics from these areas inform us on the chrono-cultural context of these deposits as they show clear stylistic links with Bronze Age materials excavated in southern Afghanistan and Pakistan. This is not the first time that such ceramic types are identified at Sarazm, however, the assemblage from Soundings 11–11A is particularly abundant and provides substantial additional data for discussing the relationship of this site to the regions located beyond the Hindu Kush.

The study of this assemblage was conducted as part of the French-Tajik cooperation between the French Archaeological Mission in Central Asia (MAFAC – CNRS-UMR 7041) directed by H.-P. Francfort, the Department of Archaeology in the Institute of History, Archaeology and Ethnology (Academy of Sciences of Tajikistan) directed by R. Massov, and the archaeological base of Penjikent-Zeravshan directed by A. Razzokov.

The ceramics from Soundings 11–11A

The ceramic assemblage from Soundings 11–11A consists of 537 fragments including 390 fragments from Sounding 11 and 147 from the nearby Sound-

¹ See Isakov et al. 1987; Isakov/Lyonnet 1988; Besenval/Isakov 1989; Исаков 1991; Lyonnet 1996; А. Раззоков 2008.

² See Lyonnet 1981; Isakov/Lyonnet 1988; Besenval/Isakov 1989; Lyonnet 1996; Lyonnet 1997.

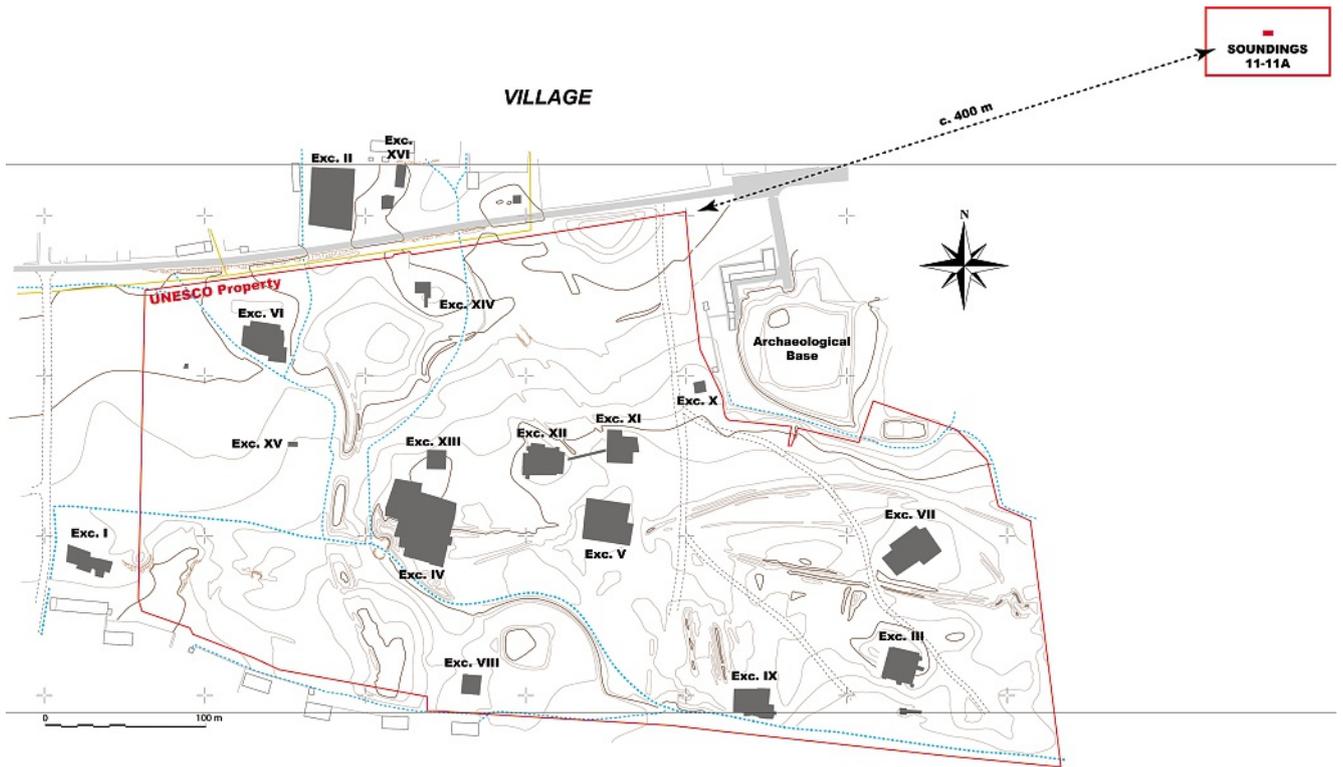


Figure 1
Map of Sarazm with location of the excavations and Soundings 11–11A. Basemap by J. Suire and R. Schwerdtner, modified by B. Mutin.

ing 11A. Most of the diagnostic fragments come from Sounding 11, while Sounding 11A’s assemblage comprises 17 rim sherds within a total of 26 clear diagnostic sherds. Several rim sherds turned out to be part of the same vessels. In these cases, the rim sherds were counted as a single rim sherd in order to get an estimate of the minimum number of ceramic vessels. In the end the ceramic assemblage from Soundings 11–11A was detailed on the basis of 369 sherds including 216 rim fragments/individuals and 20 base fragments.

Figure 2
Number of sherds from Sarazm – Soundings 11–11A

This corpus was classified in three main groups of ceramics: painted ceramics, plain ceramics, and local ceramics (Figs. 2–3). The base fragments were left apart from this classification be-

cause we could not determine in each case whether they belonged to painted or plain ceramics. The corpus is chiefly composed of painted fragments. They represent approximately 84%, while the plain ceramics represent around 8%, the local ceramics almost 2.5%, and the bases almost 5.5% (Fig. 2).

Painted ceramics

The painted ceramics have fine to sandy fabrics, that is to say fabrics with no visible or rare small mineral inclusions to fabrics with more frequent mineral inclusions usually measuring up to 1 mm at maximum. These vessels have cream, yellow, buff, light-brown to red, and grey colors (Fig. 3,1–28). Their forms include closed shapes (jars and necked-jars: Figs. 4–5) and open shapes (shallow bowls, bowls, and goblets: Fig. 6). These ceramics are in majority painted red with hues varying from light-red to dark-red/burgundy and purple colors, while black and brown motifs are present to a lesser extent. The painted decoration is sometimes partially wiped off, and vessels with no decoration but the

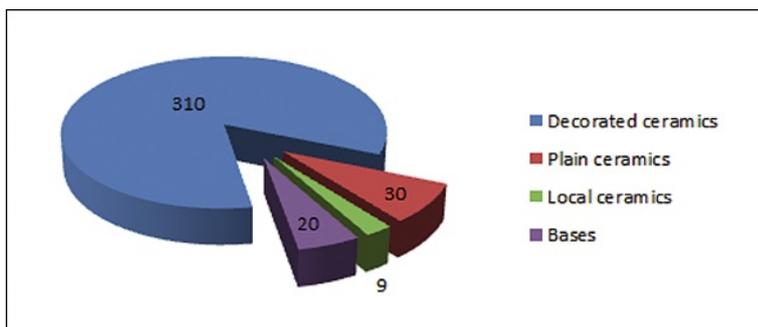


Figure 3
Ceramics from Sarazm – Soundings 11–11A



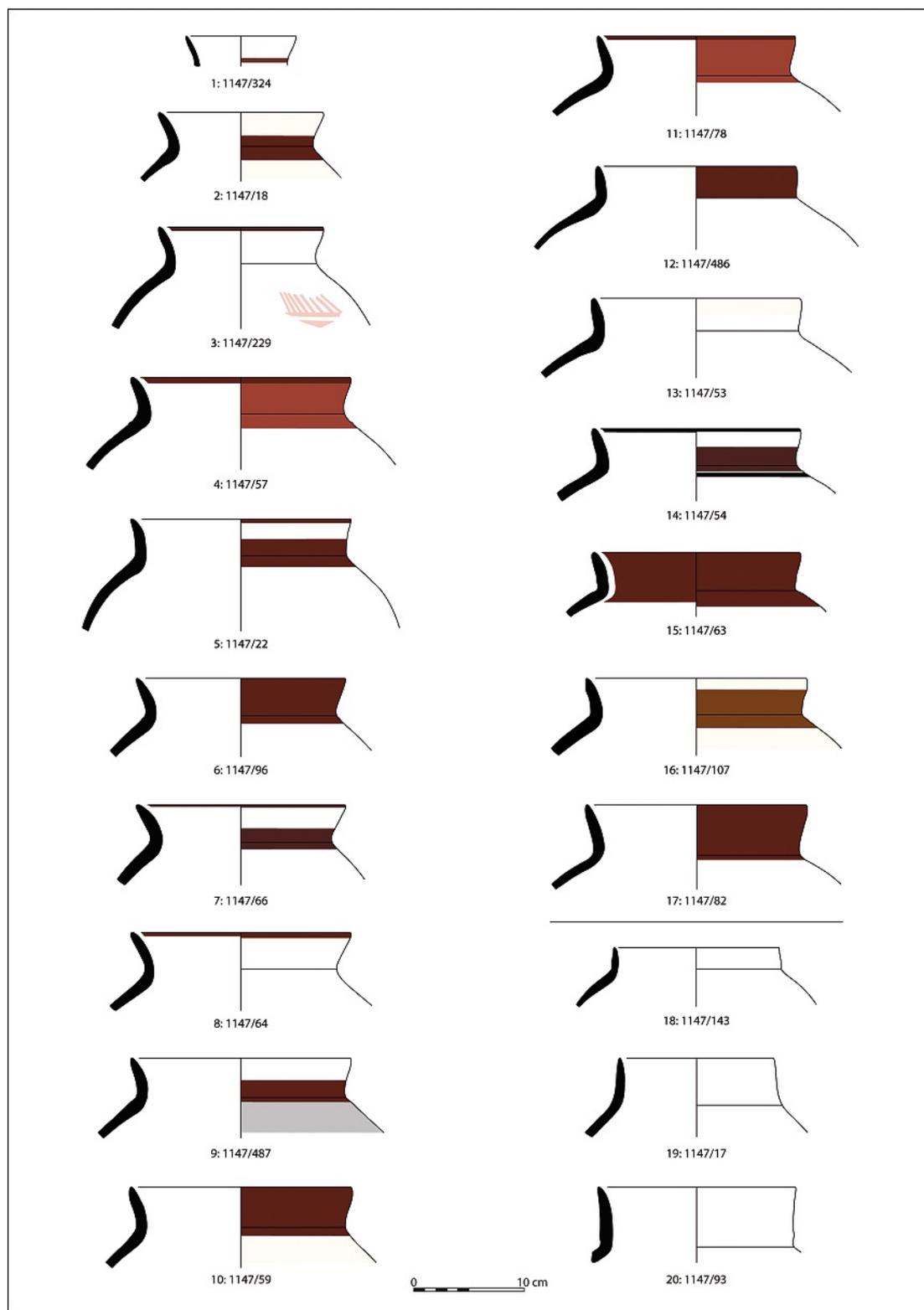


Figure 4
Ceramics from Sarazm
– Sounding 11: deco-
rated, closed shapes

same types of forms, colors, and textures as the decorated examples are present. Therefore, we may assume that the latter were originally painted but that their decorations disintegrated. In addition to painting, traces of slips, usually of red, light grey, or cream colors, were observed on a few sherds.

These ceramics are well manufactured; their rims and walls are regularized, their surfaces are usually well-smoothed, and they are well fired. Their forming technique was not clearly determined. However, we suspect that they were not made from a lump of clay thrown on a fast wheel but that they were first hand built, then shaped, regularized, and smoothed with a tool on a rotating device. The use of a rotating device in the final steps of the *chaîne opératoire* is evidenced on the interior surfaces of both closed and open shapes by a series of thin and shallow grooves parallel to the rim (**Fig. 7,4**) and on the exterior surfaces of some vessels by a series of more interspersed and wider strokes perpendicular to the rim (**Fig. 7,1 top**). The interior marks result from smoothing the surface of the vessels with the hand or a cloth while the paste was wet. Red, black, or brown paint was sometimes used in this step, which produced some lines of color on the upper part of the body and the rim (**Fig. 7,1 below.2–3**). The exterior marks result from shaping and regularizing the vessels with a tool such as a spatula. They correspond to intermittent contacts of this tool with the surface while the paste had a leather-hard texture and the vessel was rotating. These marks are commonly observed on protohistoric ceramics from southern Afghanistan, Pakistan, and Iran as well as in Oman.³

These ceramics are comparable to ceramic styles identified essentially in southern Afghanistan and in northern Pakistan, styles that are often referred to as “Baloch”⁴ and which we are referring to more broadly here as “southern” as most of the parallels for these vessels are located south of the Hindu Kush but not limited to the Balochistan province. Comparisons for these vessels were also made with ceramics found in the Taluqan Plain, around 350 km south of Sarazm in northeastern Afghanistan. Southern ceramics were found at other locations at Sarazm (**Fig. 8**), but not in the quantities of sherds recorded in Soundings 11–11A (see below). A large number of such materials was recovered from Excavation VII,⁵ which is located in the southeastern portion of the UNESCO property.

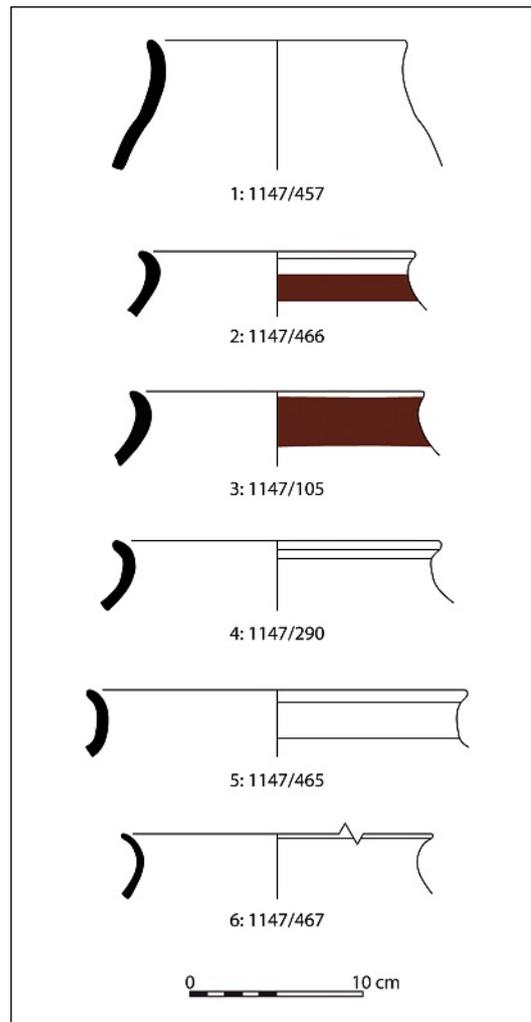


Figure 5
Ceramics from Sarazm
– Sounding 11: decorated, closed shapes

Ceramics with same styles were found in Excavation I immediately west of the UNESCO property, in Excavation II immediately north of it, and in Excavations III, IV, and VI within the property (**Fig. 1**).⁶ Southern ceramics appear at Sarazm during Period III and are characteristic of Period IV.⁷

Closed shapes

The painted, closed shapes are represented by 200 fragments including 118 rim sherds and 82 body sherds. The rim sherds consist of a majority of necked-jars (**Fig. 4**) and a group of eleven jars with profiles different than those of the necked-jars (**Fig. 5**).

³ See Méry 2000, 55–57; Tosi 1969, 315, Fig. 111–114.

⁴ See Besenval/Isakov 1989; Lyonnet 1996.

⁵ See Besenval/Isakov 1989. These ceramics are provisionally estimated to amount to over a hundred rim sherds and include a few complete vessels (ongoing study of the collection of Excavation VII).

⁶ Collection of Penjikent; see Lyonnet 1996; Исakov 1991.

⁷ Lyonnet 1996, 59–61.

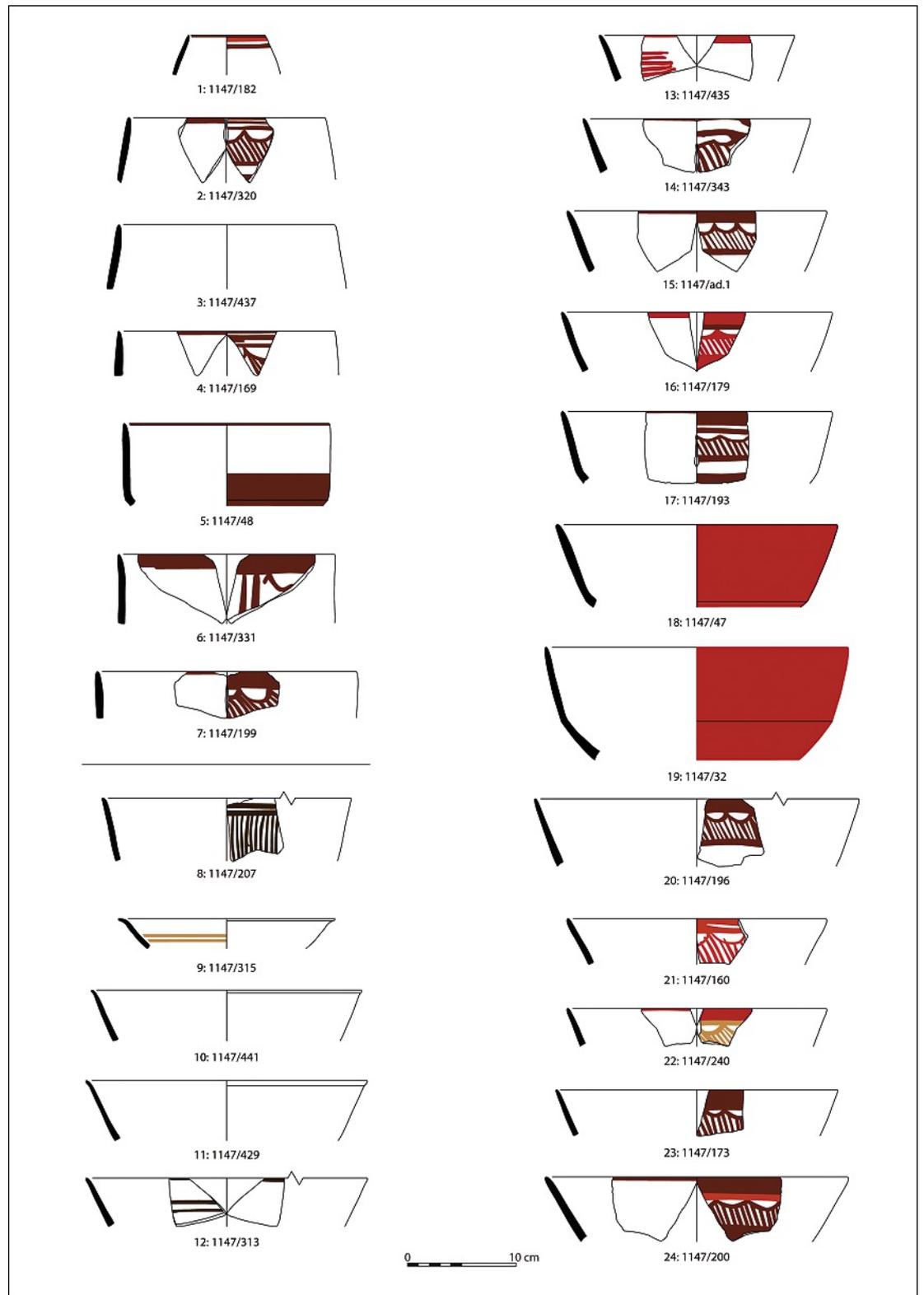


Figure 6
 Ceramics from Sarazm
 – Soundings 11–11A:
 decorated, open
 shapes

The necked-jars represent a homogeneous group of production; they are quite similar in their textures, colors, profiles, sizes, and decorative compositions, although some variations are noted. The most common form is a necked-jar with everted rim and neck (Fig. 4,1–17). This group includes ceramics being slightly more open (such as Fig. 4,3) than the others (such as Fig. 4,12). Two rim sherds (Fig. 4,19–20) can be distinguished because their necks are vertical and narrower than those of the rest of the closed shapes. An additional sherd is also different in that it is thinner and has vertical rim and neck (Fig. 4,18). The rim diameters of the necked-jars usually measure 18 to 20 cm (70% of the rim diameters recorded), while smaller (10 and 14 to 17 cm) and larger (22 cm) diameters are represented by a few examples. The necks generally measure between 2.9 and 3.6 cm in height. There are few exceptions: shorter (Fig. 4,18: 1.9 cm) and higher (Fig. 4,17,19–20: 4.3, 4.7, 5.4 cm) necks as well as a shorter neck measuring 2.4 cm which belonged to a smaller jar (Fig. 4,1). The thicknesses of the rims and walls of these vessels normally vary from 0.5 to 1 cm.

The other closed shapes (Fig. 5) are different in that they include: jars with no or shorter and less marked necks; jars with flaring rims and with upper parts of the bodies and necks inverted or vertical; and jars with profiles seemingly less closed than those of the necked-jars. The diameters of these vessels range from 15 to 22 cm. These jars include materials with rims and walls thinner than those of the necked-jars described above.

No closed shape with a complete profile has been found in the assemblage of Soundings 11–11A. We nonetheless assume that the bases of these vessels were flat because all the bases recorded in this assemblage are flat and the analogies for these jars from other excavations at Sarazm have flat bases.

The closed shapes are in majority painted red with motif colors varying from light-red to dark-red/burgundy and purple colors and are more rarely painted black or brown. Some of these vessels also have slips of red, light grey or cream colors on their surfaces. The decoration typically consists of a horizontal band painted on the neck on the exterior surface of the vessel. The band covers the totality of the neck, the totality of the neck and the upper part of the body, or the lower half of the neck and the upper part of the body (Fig. 3,16–20). It is usually associated with a painted line covering the lip and a few millimeters down onto the exterior surface of the rim and is sometimes associated with a line painted below on the upper part of the body (Fig. 4,14). The line that is often present on the lip also frequently covers the interior surface of the rim

over a few millimeters. Lines of paint resulting from the smoothing are observed on the interior surface of the rim and neck (Fig. 7,2–3). A band is sometimes also painted at this placement as an alternative (Fig. 4,15). Parallels for these jars from other excavations at Sarazm show that the band painted on the exterior surface of the neck was frequently associated with an additional one painted below, on the maximum diameter of the vessel. The space between the two bands is left blank or is filled with additional motifs (Fig. 8,12–14). These parallels (Fig. 8,12) in addition to 42 body sherds from Soundings 11–11A indicate that the main motif painted between the two bands, when present, is a stylized vegetal one: a vertical stem with horizontal, parallel leaves or two joint curved stems with leaves (Fig. 3,24–28). Festooned hatched bands (Fig. 3,21–22; 4,3) and a decoration composed of horizontal, wavy lines alternating with horizontal, straight lines (Fig. 3,23) are also observed but are rare on closed shapes and are usually present on open shapes.

The closest parallels for the necked-jars with bands painted on their exterior surfaces and for the vegetal motif present on sherds of this type of form are in southern Afghanistan at Mundigak Periods III–IV.2 and in Pakistan at Mehrgarh Period VII, in the Quetta Valley (Quetta Ware), and at Anjira Periods III–IV. A parallel for the jars with bands is noted by Lyonnet in Mundigak Period IV.1.⁸ This author writes that such jars were found from Period III.5 to Period IV.2.⁹ The vegetal motif is observed at Mundigak on ceramics from Period III¹⁰ and Period IV.1,¹¹ as well as on additional sherds of Period IV.2,¹² although it is not designed the same way as at Sarazm. A jar from Mundigak with a frieze filled with a wavy line¹³ is reminiscent of the decoration observed on a sherd from Sarazm (Fig. 3,23). In the Quetta Valley, jars with painted bands are observed among the ceramic group termed Mian Ghundai Dark Rim,¹⁴ although the shapes of this type and the layout and colors of the decorations are not exactly similar to those of the jars from Sarazm. The vegetal motif is observed in the same valley on sherds of Quetta Ware,¹⁵ in the Loralai Valley at Dabar Kot on sherds of Kechi Beg Polychrome,¹⁶ and in the Zhob Valley at Periano Ghundai on a black-

⁸ Casal 1961, Fig. 75,249.

⁹ See Lyonnet 1996, 46.

¹⁰ Casal 1961, Fig. 53,52; 56,83.

¹¹ Casal 1961, Fig. 65,185; 69,209.

¹² Casal 1961, Fig. 93,413.417.

¹³ Casal 1961, Fig. 89,380.

¹⁴ Fairservis 1956, Fig. 57.

¹⁵ Fairservis 1956, 306, no. 414–415; 307 no. 422.

¹⁶ Fairservis 1959, Fig. 57,l.

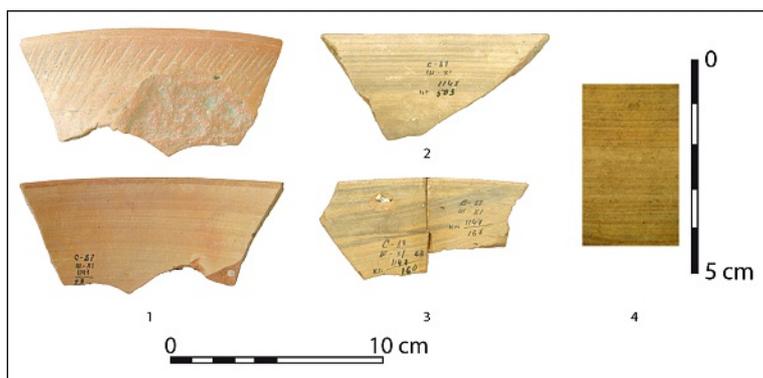


Figure 7
Ceramics from Sarazm
– Sounding 11: details
of decorated, open
shapes

on-brown ware.¹⁷ It is however not designed the same way as it is at Sarazm. The same remark applies to the vegetal motif painted on a canister found at Shahr-i Sokhta Period I in the Seistan province of southeastern Iran.¹⁸ The jars with painted bands were also compared to the jars of the early Harappan Kot Diji Period, named after the site located in the Indus Valley.¹⁹ Kot Diji-type jars are reported from Kot Diji I, Mehrgarh VII, Nausharo I, Mundigak IV, and Harappa I–II,²⁰ and one example of related jar was reported from Shahr-i Sokhta II.²¹ Such jars were also found in the northern valleys of Pakistan at Ghalagai in the Swat Valley, Sarai Khola IA–II in the Taxila Valley, and Rehman Dheri and Gumla further to the south.²² Nevertheless, although the painted bands of the jars from Sarazm bond these vessels to the Kot Diji-type jars, their forms and decorations are usually not exactly the same as those of the southern vessels. Some profiles are comparable to some of the Kot Diji-type jars, but not to all of them, and, most importantly, the surface treatments and decorations of the latter are in most cases different and not represented at Sarazm. For example, the closest comparanda at Sarai Khola are mostly red-slipped and black painted while the other Kot Dijian jars from this site include features (profiles, painted designs, slips, and mud-coating)²³ not observed at Sarazm. There are however examples of jars at Lewan in the Banu Basin, with red bands and no slip, that tend to better resemble those from Sarazm,²⁴ although we have not seen the sherds in original. According to the investigators of the site, the contexts of these

materials are connected to the second period at Rehman Dheri.²⁵

Open shapes

The painted, open shapes are represented by 110 fragments including 76 rim sherds and 34 body sherds. Most of them are shallow bowls with everted walls and rims, while the rest consists of bowls and goblets with vertical or inverted walls and rims. These vessels can be divided into two groups.

One group – the majority of the open shapes in the corpus (60 rim sherds) – comprises shallow bowls (**Fig. 6,13–24**), bowls, and goblets (nine rim sherds; **Fig. 6,1–7**) with similar textures, comparable ranges of fabric colors, and same types of decorations. They also have comparable rim and wall thicknesses (0.3 to 0.6 cm in rim thickness with a single measurement of 0.8 cm, and 0.4 to 0.7 cm in wall thickness with a single measurement at 0.3 and three at 0.8, 0.9, and 1 cm). The shallow bowls have rim diameters comprised between 18 and 36 cm, with a majority (more than 60% of the rim diameters recorded) ranging from 25 to 30 cm (the two measurements larger than 30 cm, one at 34 cm and one at 36 cm, are approximate). The rims are generally everted and straight; a few are very slightly concave or convex. Some vessels are more open (**Fig. 6,21–24**) than others (**Fig. 6,13–20**), and a few sherds with a carination are recorded (**Fig. 6,17–19**). It is possible that many of these vessels were in fact carinated as carinated vessels of the same style are well-attested at Sarazm, but the small size of most of the sherds does not allow us to tell whether or not this was the case in Soundings 11–11A. The other open shapes of this group – the bowls and goblets – comprise ceramics with inverted or vertical, straight rims and walls (**Fig. 6,1–7**). One vessel has a carination (**Fig. 6,5**). These ceramics have rim diameters measuring 18 to 24 cm, with the exception of a single much smaller ceramic, probably a goblet, measuring 7 cm at the rim (**Fig. 6,1**). Most of the shallow bowls, bowls, and goblets of this group are painted red on their exterior surfaces, on the rim and upper half of the body. A slip is sometimes present on the surface(s) of these vessels. The main decorative composition is a horizontal, festooned hatched band (**Fig. 3,1–7**). This motif is often sandwiched between two bands and is often associated with a line or a thinner band painted on the lip down onto the exterior surface and sometimes the interior surface of the rim. Painted decorations arranged with

¹⁷ Fairservis 1959, Fig. 41,n.

¹⁸ Cortesi et al. 2008, Fig. 4,4.

¹⁹ Lyonnet 1996, 46.

²⁰ See J.-F. Jarrige et al. 2011a, Fig. 9.

²¹ Salvatori/Tosi 2005, 285; Cortesi et al. 2008, 14–15.

²² Stacul 1969, 53; Mughal/Halim 1972, 38–39, 48, Fig. 18–22; Durrani et al. 1995, 83.

²³ Mughal/Halim 1972, Fig. 17–22; 84–88.

²⁴ Allchin et al. 1986, Sheet 1 no. 5; Sheet 12 no. 11.

²⁵ Allchin et al. 1986, 110; Durrani et al. 1995, 83.

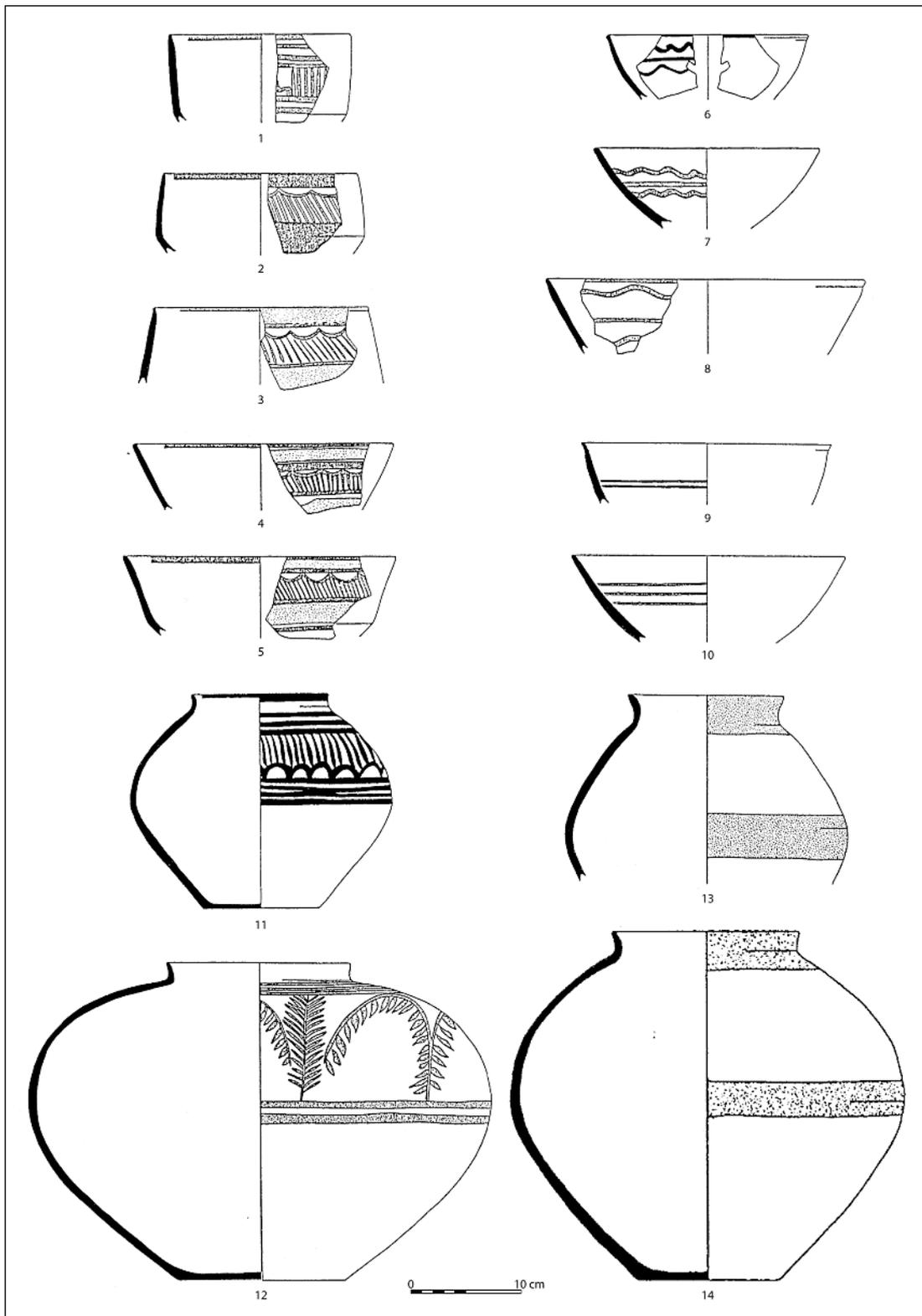


Figure 8
Ceramics from Sarazm
stylistically comparable
to Soundings 11–11A's
assemblage

metopes are observed too, although they appear less frequent. One example shows a metope filled with parallel vertical lines alternating with a metope filled with a diagonal wavy line (**Fig. 6,6**). Additionally, a few ceramics are entirely covered with paint (**Fig. 6,18–19**), and three vessels can be singled out because they have a decoration painted on their interior surfaces. One has a partially preserved decoration; it consists of parallel horizontal short lines which may correspond to the same type of vegetal motif as that observed on closed shapes (**Fig. 6,13**). The other two sherds have wavy lines painted on their interior surfaces (**Fig. 3,15**).

The second group of painted, open shapes is characterized by seven rim sherds with a fabric of cream/whitish color (**Fig. 3,8–14; 6,8–12**). These sherds belong to shallow bowls decorated with parallel lines painted on their interior surfaces (**Fig. 3,8; 6,9,12**) and bowls decorated with metopes painted on their exterior surfaces (**Fig. 3,9–14; 6,8**). The color of the paint is usually brown. The rim diameters of these ceramics measure 20 to 26 cm. The walls and rims of the shallow bowls are thinner than those of most of the vessels of the first group.

Parallels for the festooned hatched band motif observed on the open shapes from Soundings 11–11A are present at Mundigak Periods III and IV.1–2.²⁶ Nevertheless, the shapes of the vessels bearing this motif from this site are different from those from Sarazm. The motif itself is also usually slightly different and/or differently laid out within the decorative arrangement; the band is festooned both in its upper and lower parts. The festooned hatched band motif is observed in the same region and with the same differences as at Mundigak at Said Qala Tepe on ceramics termed Quetta Black-on-red Surface and Quetta Black-on-buff Surface²⁷ and at Deh Morasi Ghundai on ceramics termed Morasi Black-on-buff Surface.²⁸ This motif is present further to the southeast in the Quetta Valley on a black-on-red slip ware,²⁹ on Quetta Ware,³⁰ and on Kechi Beg Ware,³¹ although the shapes and the ways this motif is designed and combined with other motifs are different from the “standards” observed at Sarazm. Designs that somehow resemble this motif are present at Periano Ghundai in the Zhob Valley on a ceramic termed Periano Painted,³² further to the south at Togau on a creamed-slipped

red ware which was compared to Nal-type material of Anjira Period IV,³³ at Barra Kapoto on a cream-slipped red ware,³⁴ at Zari Damb on a cream-slipped ware assigned to Anjira Late Period III-early Period IV,³⁵ and at Singen Kalat on an orange-red slipped red ware assigned to Anjira Period III.³⁶ Further to the south, approximately 1,500 km from Sarazm, festooned hatched bands are observed at Amri,³⁷ although they are not exactly similar to those from Sarazm. In summary, the comparisons for the ceramics decorated with festooned hatched band motifs from Sarazm point to sites located south of the Hindu Kush in southern Afghanistan and Pakistan. Nevertheless, it is important to underline that no exact parallels for these vessels, both in form and decoration, are identified in the assemblages published from these areas.

Decorations made of parallel, straight and/or wavy, lines painted on the interior surface of shallow bowls have equivalents at Mundigak Periods II and III.³⁸ The profiles of vessels decorated with straight lines from Sarazm Soundings 11–11A are also comparable to those decorated with wavy lines illustrated from Mundigak,³⁹ with the exception that there is no annular bases in the assemblage from these soundings. One may add that a ceramic with straight lines from Sarazm (**Fig. 6,9**) has a profile apparently quite close to those of vessels assigned to Mundigak Period IV.3.⁴⁰ Parallels for the painted straight lines observed at Sarazm are also found in the Quetta Valley on ceramics of Kechi Beg Red Paint,⁴¹ Faiz Mohammad Grayware, and Quetta Red-Brown-on-Dark Slip⁴² as well as in the Loralai Valley on Kili Ghul Mohammad Black-on-Red Slip.⁴³ Combinations of wavy and straight lines such as recorded at Sarazm is a type of decoration used in the Quetta Valley on Quetta Ware,⁴⁴ at Dabar Kot in the Loralai Valley on Faiz Mohammed Ware,⁴⁵ and at Periano Ghundai in the Zhob Valley on Periano Painted ceramics.⁴⁶ Parallels for some decorations made with lines from Sarazm are also present at Shahr-i Sokhta, in the first period of the site.⁴⁷

²⁶ Casal 1961, Fig. 54,67; 58,111; 67,201–201a; 70,214; 74,246; 89,393.

²⁷ Shaffer 1978, Fig. 24,2–3; 25,3.

²⁸ Dupree 1963, 91 nos. 91–92.

²⁹ Fairservis 1956, 314 no. 508.

³⁰ Fairservis 1956, 283 nos. 134–138; 301 no. 350.

³¹ Fairservis 1956, 275 no. 46.

³² Fairservis 1959, Fig. 43 b; 410 no. 281.

³³ De Cardi 1983, Fig. 13,17.

³⁴ De Cardi 1983, Fig. 15,6.

³⁵ De Cardi 1983, Fig. 18,21.

³⁶ De Cardi 1983, Fig. 22,12.

³⁷ Casal 1964, Fig. 55,149; 56,156; 61,179; 65,225.

³⁸ Casal 1961, Fig. 51,37; 52,43,47.

³⁹ Casal 1961, Fig. 51,37; 52,43,47.

⁴⁰ Casal 1961, Fig. 94,426–428.

⁴¹ Fairservis 1956, Fig. 54B.

⁴² Fairservis 1956, Fig. 55A–B.

⁴³ Fairservis 1959, Fig. 64a; 287 no. 19; 408 nos. 254–258.

⁴⁴ Fairservis 1956, 281 and particularly 284 no. 145.

⁴⁵ Fairservis 1959, Fig. 20k.

⁴⁶ Fairservis 1959, Fig. 45.

⁴⁷ Amiet/Tosi 1978, Fig. 13; Biscione 1984, Fig. 10,14.

Generally speaking, the decorations arranged with metopes from Sarazm are reminiscent of decorations on ceramics from Mundigak Periods III–IV,⁴⁸ on Quetta Ware from the Quetta Valley,⁴⁹ Periano Painted from Periano Ghundai in the Zhob Valley,⁵⁰ a Red-on-Red Slip ceramic from Rana Ghundai in the Loralai Valley,⁵¹ and a goblet from Amri Period ID.⁵²

Summary of comparisons

In summary, most of the parallels for the painted ceramics from Soundings 11–11A are located south of the Hindu Kush,⁵³ from Shahr-i Sokhta to the Loralai and Zhob Valleys including Mundigak and Mehrgarh.⁵⁴ With the exception of the general relationships between the jars from these soundings and the Kot Diji-type jars, there are apparently no evident parallels specifically for these ceramics in the northern regions of Pakistan, although other types of materials from these areas exhibit similarities with the material culture from Sarazm.⁵⁵ There are also less or more vague parallels in southern Pakistan, although elements are mentioned at Amri. In fact, ceramic relationships with the ceramics from Soundings 11–11A beyond the area circumscribed by Shahr-i Sokhta, Mundigak, Mehrgarh, and the Zhob Valley are essentially represented by Kot Diji-type jars present from Amri to Sarai Khola including the sites of Kot Diji, Mehrgarh, Kalibangan, Jalilpur, Harappa, Lewan, and Gumla during the first half of the third millennium BCE.⁵⁶ Nevertheless, these relationships are limited; the jars from Sarazm are not exactly the same. They can be considered as part of the same general horizon style but cannot be considered indicative of tight connections. Furthermore, the assemblage from Soundings 11–11A is lacking many ceramic types that are observed at these sites, and the open shapes from these soundings do not resemble those present at these sites.

Plain ceramics

Plain ceramics (**Fig. 3,29–33**) are represented by 15 rim sherds and 15 body sherds. These ceramics

have sandy to medium fabrics containing mineral inclusions frequently measuring more than 1 mm. The colors of these vessels are cream, buff, and red. The shapes include open vessels (13 rim sherds) and closed vessels (two rim sherds). The former are essentially characterized by very large bowls measuring 36 to 41 cm at the rim diameter, with club, exterior overlapping, or flat rims (**Fig. 9,1–5.8–11**; the reconstructions illustrated on **Fig. 9,3–4.10–11** are hypothetical). Smaller open shapes are also present; they include vessels with tapering and grooved rims (**Fig. 9,6–7**). The closed shapes consist of two rim fragments of jars with rim diameters measuring 21 and 24 cm (**Fig. 9,12–13**).

A part of these ceramics has parallels at other places at Sarazm.⁵⁷ These parallels were compared to ceramics from Turkmenistan (Kara Depe), Iran (Tureng Tepe), and southern Afghanistan (Mundigak and Said Qala Tepe) as well as from the Taluqan region in northeastern Afghanistan.⁵⁸ Another part of the plain ceramics from Soundings 11–11A such as the club-rim bowls, bowls with flat rims, and jars (**Fig. 9,2–5.8–12**) is not reported from any other places at Sarazm. These ceramics are comparable in shape to vessels from Shahr-i Sokhta Phases 6 to 4.⁵⁹

Local ceramics

Local ceramics are detailed here on the basis of seven rim sherds and two body sherds (**Fig. 3,34–39**). These ceramics include two groups. The first one consists of ceramics with sandy fabrics of brown, grey, or black color, with mineral inclusions generally smaller than 1 mm. Their surfaces are often burnished. The forms are open containers with rim diameters measuring 14 to 28 cm (**Fig. 10,1–5**). The second group corresponds to materials considered as kitchen ware. They have a coarser fabric of grey and black color containing more numerous and usually bigger inclusions than in the first group. They are represented by one open vessel and a necked-jar measuring respectively 28 cm and 26 cm at the rim diameter (**Fig. 10,6–7**).

These ceramics are the most common ceramic products found at Sarazm.⁶⁰ They are present in all the excavations that have been opened at the site; it is thus not surprising to find them in Soundings 11–11A. Parallels at Sarazm for the forms reported

⁴⁸ Casal 1961, Fig. 53,59; 56,89; 58,108.113; 60,133; 66,192; 67,198–198a; 89,383–383a.

⁴⁹ Fairservis 1956, 283 no. 142; 303 no. 371; 315 nos. 515, 523; Fig. 48.

⁵⁰ Fairservis 1959, Fig. 43 g, j–l, n.

⁵¹ Fairservis 1959, 401 nos. 398–410.

⁵² Casal 1964, Fig. 62,206.

⁵³ See also Исаков 1991, pl. 13–14.

⁵⁴ Parallels are more evident at Mundigak than at Shahr-i Sokhta.

⁵⁵ See Petrie 2010 regarding the Bannu Basin.

⁵⁶ See C. Jarrige et al. 1995; Mughal 1972; Morris 2005.

⁵⁷ See Lyonnet 1996, Fig. 35; the examples illustrated come from Excavation II and Sounding 7.

⁵⁸ See Lyonnet 1981; Lyonnet 1996, 47; see below.

⁵⁹ See Salvatori/Vidale 1997, Fig. 100–101; 120–121; 123; 139; 194.

⁶⁰ See Isakov/Lyonnet 1988.

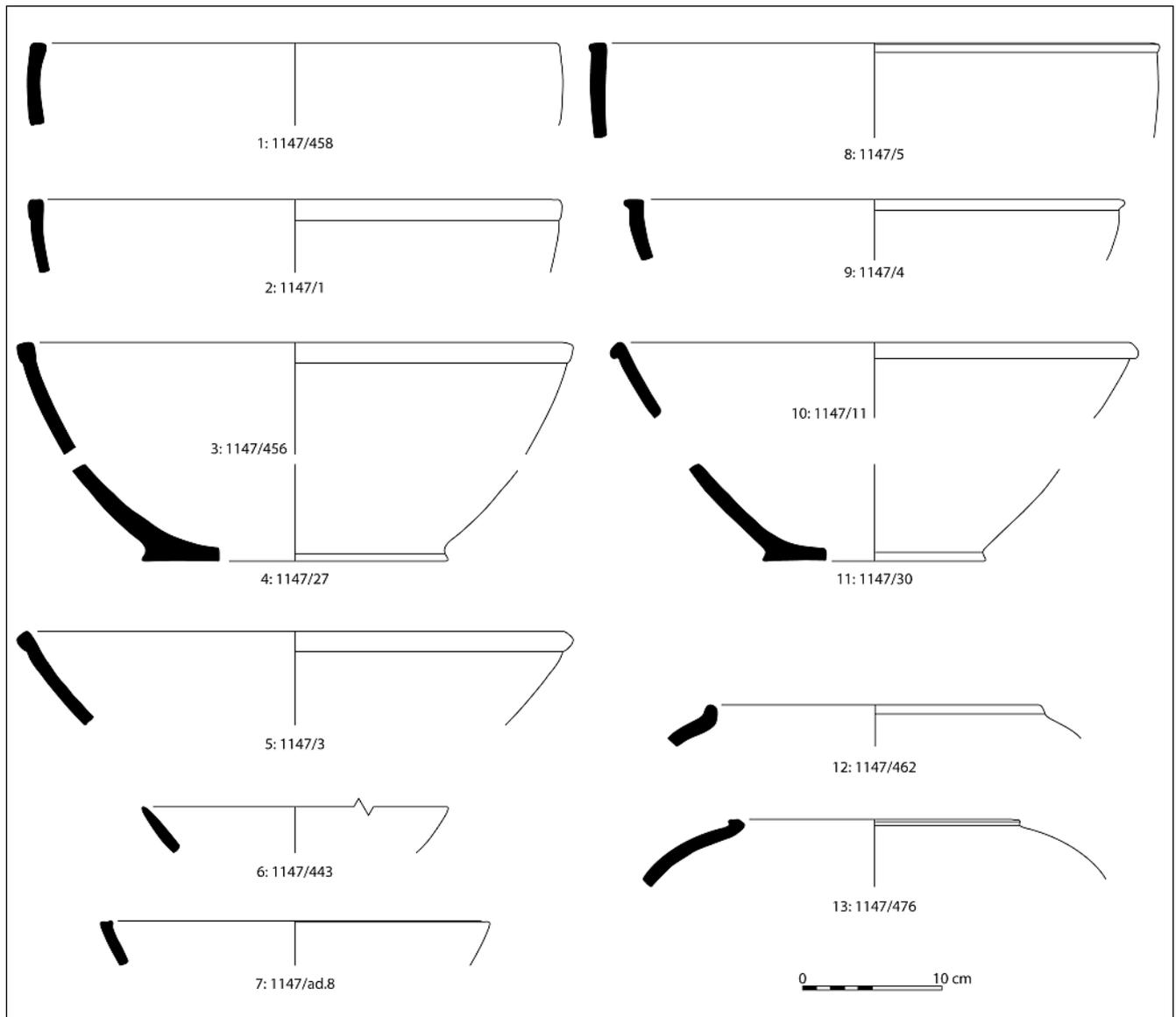


Figure 9
Ceramics from Sarazm
– Soundings 11–11A:
plain ceramics

from these soundings are illustrated in Lyonnet 1996.

The Taluqan Plain

We saw that the decorated ceramics and some of the plain ceramics described above share similarities with materials identified within the southern periphery of the Hindu Kush. They are also comparable to ceramics discovered by J.-C. Gardin, H.-P. Francfort, and B. Lyonnet in the northern periphery of the Hindu Kush, in the Taluqan Plain (northeastern

Afghanistan). Lyonnet studied about 60 sherds from six sites located in this plain.⁶¹ These ceramics are sand-tempered and of pink-orange color. None of them is painted. The technology of the ceramics from Taluqan is similar to that proposed for the decorated vessels detailed above. Nonetheless, the former are described as heavily tempered materials,⁶² while we noted above that the ceramics from Soundings 11–11A are usually fine- to medium-tempered. Lyonnet found some analogies between

⁶¹ Lyonnet 1981, 62; Lyonnet 1997, 41–48, 50–56.

⁶² Lyonnet 1981, 62; Lyonnet 1997, 41–42, pl. 1–2.

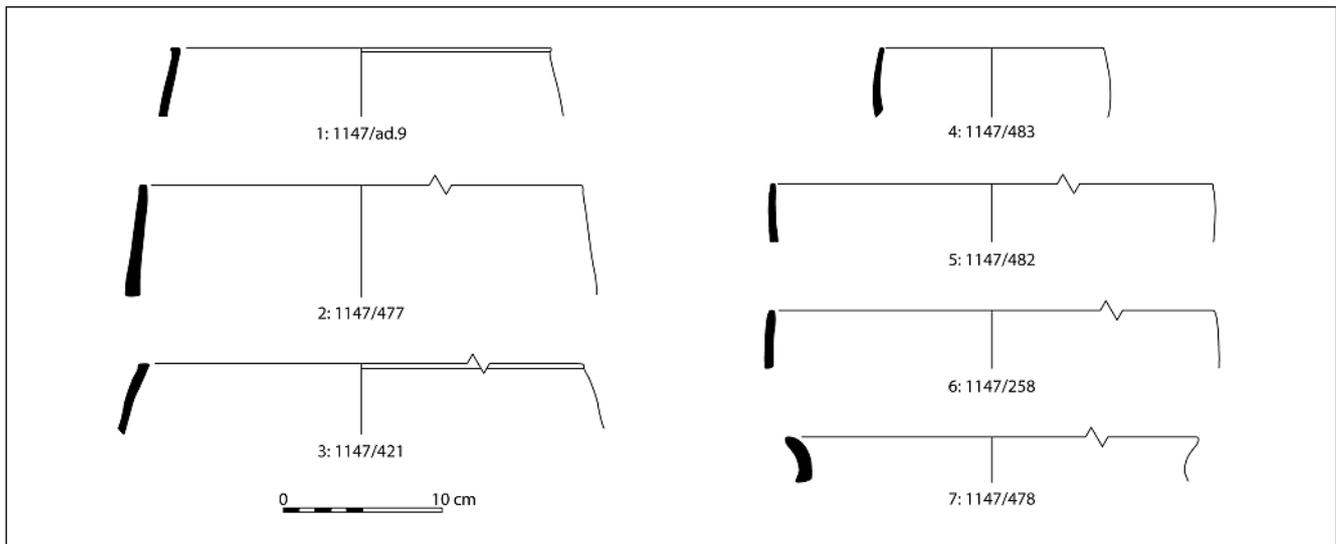


Figure 10
Ceramics from Sarazm
– Soundings 11–11A:
local ceramics

the forms and technological marks of the vessels from Taluqan and those from Mundigak, Said Qala Tepe, and Amri. She dated the vessels from Taluqan to between the mid-fourth and the mid-third millennia BCE.⁶³ Lyonnet also noted similarities in technology between these vessels and a group of ceramics from Sarazm that relate to the decorated and plain ceramics presented above,⁶⁴ and in form with several types observed at this site.⁶⁵ Her comparisons include analogies with plain ceramics⁶⁶ and necked-jars⁶⁷ from Sarazm, including forms found in Soundings 11–11A.

The southern ceramics in Soundings 11–11A and at Sarazm

Quantities

The ceramics from Soundings 11–11A with styles related to products of the southern sphere amount to 310 (when considering the decorated sherds only) to 360 fragments (when including the plain ceramics and bases). This comprises 209 rim fragments (194 rim fragments without the plain ceramics); in sum, a minimum number of individuals of around 200. Although an effort was made to locate sherds that belong to the same vessels within the assemblage, it is highly possible that they were not all noticed. Thus the minimum number of ceramic individuals from

Soundings 11–11A might need to be lowered to some extent. However, even in this case, this number would remain high in comparison with the quantities of southern ceramics found in the other excavations at Sarazm. Indeed, the volume of soil excavated in these soundings was limited, and only the quantities of southern materials recovered from Excavation VII, which was excavated over much greater surface and thickness during about ten years,⁶⁸ are comparable to, but are less than, those of Soundings 11–11A. Excavation VII produced over 5,000 sherds including around 550 rim fragments and ceramics with complete profiles, among which over a hundred rim sherds correspond to southern ceramics (provisional estimates). Additionally, Lyonnet noted that the southern ceramics represented around 15% of the ceramic corpus from Sarazm she studied in 1987, which amounted to 1,500 sherds including a part of the assemblage from Excavation VII and materials from all excavations conducted by then at the site with the exception of Soundings 11–11A,⁶⁹ that is approximately 225 sherds. Compared to the other assemblages from Sarazm, the collection of southern ceramic fragments from Soundings 11–11A thus appears as an unusual concentration of such materials.

Chronology

There is no radiocarbon determination for Soundings 11–11A. The ceramic assemblage from these soundings relates in style to Periods III and IV at Sarazm, however, the dating of these periods,

⁶³ Lyonnet 1981, 68–69.

⁶⁴ Lyonnet 1997, 42; Lyonnet 1996, 40, pl. 4,4–5.

⁶⁵ Lyonnet 1997, 43–48.

⁶⁶ Lyonnet 1981, Fig. 5,a,c; Lyonnet 1996: 47, Fig. 35.

⁶⁷ Lyonnet 1981, Fig. 4,e–g; Lyonnet 1997, 45, Fig. 9,5–7.

⁶⁸ See Besenval/Isakov 1989.

⁶⁹ Isakov/Lyonnet 1988, 35; Lyonnet 1996, 19.

especially that of Period IV – the last period at the site – is equivocal.

Broadly speaking, most of the radiocarbon dates from Sarazm range from the early fourth to the second half of the third millennia BCE, and some appear too recent to be acceptable.⁷⁰ The dates situated within the first half and around the middle of the fourth millennium BCE are compatible with a limited number of ceramics found at Sarazm and their parallels,⁷¹ in particular painted, vegetal-tempered sherds with relationship to the Namazga II period in Turkmenistan⁷² and fine, painted ceramics connected to Mehrgarh Period III.⁷³ A larger series of radiocarbon determinations is placed within the late fourth and early third millennia BCE (essentially between 3350 and 2900 cal. BCE) including dates from previous excavations⁷⁴ and dates obtained from samples freshly collected in Excavations IX, XI, and XII⁷⁵ and Excavations XV and XVI.⁷⁶ This rate of recurrence of dates around 3000 BCE at different placements at Sarazm is consistent with the fact that a large portion of the ceramic assemblage recovered thus far appears relatively uniform across the site. It seems to us that a substantial phase of occupation is to be situated around this date, which is the date provided for Period III.

The southern ceramics discussed here characterize Sarazm Periods III and IV. According to Lyonnet, Period III sees the appearance of this type of material while larger quantities are observed in Period IV. She places Period III within the late fourth and early third millennia BCE and Period IV around 2800–2600 BCE on the basis of most of the parallels observed in the regions located south of the Hindu Kush.⁷⁷ The stylistic correlations of Sarazm Periods III–IV overall correspond, in the south, to Mehrgarh VI–VII, Shahr-i Sokhta I–III, and Mundigak III–IV. Mehrgarh Periods VI–VII date to around the end of the fourth and the first half of the third millennia BCE.⁷⁸ The comparisons with Shahr-i Sokhta and Mundigak are situated within the same chronological bracket, between around the late fourth and the mid-third millennia BCE,⁷⁹ although the dating of Periods III and IV at Shahr-i Sokhta and Period IV at Mundigak are still debated (see

below). The pre-Indus Kot Dijian jars, characteristic of Kot Diji Period I and found at additional sites in the Indo-Iranian Borderlands, are, at Kot Diji, radiocarbon dated to the first half of the third millennium BCE.⁸⁰ One may add that the parallels for materials from Soundings 11–11A observed at Lewan are connected to the second period at Rehman Dheri dating to 2850–2500 BCE.⁸¹ At Sarazm, whereas the period around 3000 BCE is well-attested by radiocarbon dating, only a limited number of radiocarbon determinations that encompass the date of Period IV, estimated by Lyonnet to be around 2800–2600 BCE, are available at the site.⁸² Moreover, several analyses provided dates situated after 2500 BCE for contexts containing ceramics of Periods III–IV.⁸³

The dates situated in the second half of the third millennium BCE agree with A. Isakov's proposal who proposed 2300–1900 BCE for the date of Period IV.⁸⁴ These dates are nonetheless problematic as they do not fit with most of the parallels for the ceramic assemblages recovered from the corresponding contexts. Lyonnet stresses that the analogies for the ceramics of Sarazm Period IV in the regions located south of the Hindu Kush are overall older than the mid-third millennium BCE and the beginning of the Indus Civilization.⁸⁵ However, she hypothesizes that a later phase of Period IV existed at the site but is poorly observed. She dates this phase to around 2500 BCE and suggests including in it some of the plain ceramics from Soundings 11–11A.⁸⁶ Lyonnet compares these ceramics to the assemblages from Mundigak Period IV.3 or of the very beginning of the Indus Civilization. She also suggests including in this phase the necked-jars with the painted bands, jars that she

⁸⁰ Possehl 1993, 242.

⁸¹ Allchin et al. 1986, 110; Durrani et al. 1995, 83.

⁸² Two C14 dates are from Excavation VII, Levels II/1 and III/3 (Besenval/Isakov 1989, 17; respectively 2910–2494 cal. BCE and 2863–2330 cal. BCE). One date is from Excavation II, Horizon 1/? (see Ф. Раззоков 2013, 225; 3155–2670 cal. BCE). Two radiocarbon dates from Excavation IX, Horizon 1 may be consistent with a chronological bracket situated around 2800–2600 BCE; they range from 3030 to 2900 cal. BCE (Ф. Раззоков 2013, 226), and Horizon 1 is anterior to Horizon 2 (for which no date is available) for which southern ceramics are illustrated (Ф. Раззоков 2013, Fig. 51,7; 52,4; 53,18).

⁸³ These ceramics are reported from Excavations II and III (Lyonnet 1996, Fig. 8,2.4.6–7; 9,3–4; 10,3; 11,3; 27,3.7.11) in levels radiocarbon dated to 2415–2185 cal. BCE (Excavation II, Horizon 3) and 2410–2115 cal. BCE (Excavation III, Horizon 2) (Dates available in Ф. Раззоков 2013, 224). In Excavation VII, several southern open shapes and jars very similar to those from Soundings 11–11A were recovered from the uppermost level, Level IV/1 (Lyonnet 1996, Fig. 8,10; 10,4.9; 27,6.12; 28,2.4–6). The available dates for this level, which is assigned to Period IV, are as follows (Besenval/Isakov 1989, 17): 2470–2040 cal. BCE and 2580–2044 cal. BCE.

⁸⁴ Исаков 1991, 112–113.

⁸⁵ Lyonnet 1996, 60, note 63.

⁸⁶ Lyonnet 1996, 60–61.

⁷⁰ Isakov et al. 1987, Tab. 1; Besenval/Isakov 1989, 17; see also the dates available in Ф. Раззоков 2013, 224–226.

⁷¹ See Lyonnet 1996, 55–57.

⁷² See Ф. Раззоков 2013, 259–260, Fig. 28 below; 29.

⁷³ See J.-F. Jarrige 2013; J.-F. Jarrige et al. 2011a, 11.

⁷⁴ Besenval/Isakov 1989, 17; see also Ф. Раззоков 2013, 224–225.

⁷⁵ Ф. Раззоков 2013, 226.

⁷⁶ Mutin et al. in press.

⁷⁷ Lyonnet 1996, 58–60.

⁷⁸ J.-F. Jarrige et al. 2011a, 11. J.-F. Jarrige (2013) also places these periods between 3500 and 2600 BCE.

⁷⁹ See Salvatori/Tosi 2005; J.-F. Jarrige et al. 2011a, 17.

compares to the Kot Diji-type ones, and the unique sherd found at Sarazm that is assigned to the Namazga IV period.⁸⁷ There are indeed some ceramics from Soundings 11–11A – some of the plain wares – that are not reported from any other places at Sarazm and that tend to be better comparable to vessels existing until around the mid-third millennium BCE such as those from Shahr-i Sokhta Phases 6–4. Nevertheless, the majority of the assemblage from Soundings 11–11A, particularly the decorated bowls and jars detailed above, is similar to the types of southern materials characteristic of Periods III–IV and usually observed at Sarazm. Nothing contradicts the possibility that several chronological phases existed at the placement of Soundings 11–11A; however, for now, we can only say that these soundings contain a majority of ceramics readily comparable in Sarazm Periods III–IV, while only a few different vessels have the potential to characterizing a more recent phase of Period IV.

In summary, the style of the ceramic assemblage from Soundings 11–11A is consistent with a chronological bracket extending from the last centuries of the fourth millennium BCE to around the mid-third millennium BCE, that is before the Indus Civilization. As the southern ceramics are more frequent in Period IV than in Period III at Sarazm, we assume that those from Soundings 11–11A relate to the former and date to the first half of the third millennium BCE. The problem of the discrepancy between the radiocarbon determinations placed in the second half of the third millennium BCE and the dates of the ceramic parallels cannot be solved until more numerous and more secure ¹⁴C analyses are conducted. On this topic, it is also important to recall the disagreements that concern precisely the date of a number of ceramics and other types of artifacts in the southern sphere, beyond the Hindu Kush. An example is the debate regarding the dating of Shahr-i Sokhta Periods III–IV and related sites such as Mundigak. A group of authors considers that these periods date to the first half of the third millennium BCE, while others stretch these periods well after the mid-third millennium BCE.⁸⁸ This debate indirectly affects the question of the dating of some materials from Sarazm and, by extension, the reconstruction of the overall historical frame of the eastern portion of Middle-Asia during the Bronze Age period.

Regardless of these uncertainties, we can reasonably consider that the southern ceramic styles

did not emerge and decline simultaneously in all the regions where they are found. In the present case, that short time-lapses existed to some extent between the emergences and declines of these styles in the regions located south and north of the Hindu Kush is possible. Conversely, considering that they were present in the south during the first half of the third millennium BCE, it does not seem to us plausible that the styles, or elements of the styles, related to the southern sphere were present at Sarazm as late as the late third and early second millennia BCE as suggested by A. Isakov and a series of radiocarbon dates. This would imply scenarios inconsistent with data from both Sarazm and the southern sphere, i.e. either 1) that all the southern ceramics appeared at Sarazm several centuries after these styles disappeared with the emergence of the Indus Civilization in the regions located south of the Hindu Kush, or, 2) considering that they appeared at Sarazm in the first half of the third millennium BCE and continued to be present at the site into the second half of this millennium, that a long time-lapse occurred between the moment these styles became less popular in the southern regions and the moment of their decline at Sarazm. The first scenario does not seem plausible, although it should be remembered that the southern ceramics from Sarazm are not exactly similar to their parallels in the south and could also be interpreted, to some extent, as a more recent revival or re-interpretation of the southern style. The second one implies that Sarazm endured a protracted occupation in the third millennium BCE, overlapping with the first and second halves of this millennium. Yet, there is no evidence for stylistic variations in the group of southern ceramics from Sarazm Periods III–IV that could indicate a long period of time; this group is quite homogeneous and limited in types. It rather indicates a relatively short episode. Alternatively, in this context of chronological uncertainty, one should keep in mind also the view mentioned above that sees some of the southern ceramics which parallel the Sarazm Periods III–IV southern materials dating to the second half of the third millennium BCE, a view that also agrees with the above mentioned series of most recent radiocarbon dates.

Nature of the relationship

The southern style ceramics from Sarazm Periods III–IV are viewed as the result of a diffusion from the regions located south of the Hindu Kush. This postulate can hardly be disputed at present as most of available parallels for these ceramics, including types with precursors of the late fourth and third millennia BCE pottery, are observed in the

⁸⁷ Lyonnet 1996, 61.

⁸⁸ See Salvatori/Tosi 2005, Fig. 13; Cortesi et al. 2008; J.-F. Jarrige et al. 2011a. Also compare the date of Mehrgarh VII recently provided by J.-F. Jarrige et al. (2011b, 208, between 2900 and 2600 BCE) with that of Petrie (2010, Tab. 2.1, beginning at 2500 BCE).

south,⁸⁹ whereas only a few sherds with southern affiliation are present at Sarazm in the previous periods. However, in addition to the chronological problems indicated above, the nature of the human relationship across the Hindu Kush seen through the ceramics⁹⁰ needs clarification. It is common and legitimate practice to express caution when discussing a matter related to the topic of the relationship between “Pots and Peoples”, although this caution is often somehow moderated, such as by P. Kohl who writes regarding the spread of the Kura-Araxes material culture: “It is an archaeological truism today to note that pottery styles do not equate with peoples, and the temptation to do so must be resisted. Nevertheless, the very frequency of distinctive, seemingly intrusive ceramics and other items of material culture . . . suggest that this phenomenon, however shortlived, must have been reasonably substantial”.⁹¹ Keeping this caution in mind, we would argue that, still, “a concentration of similar artifacts in the same area has the potential to reflect strong relationships within this area while an analysis of the distribution of the ceramic styles narrows our research toward the definition of a group’s boundaries and/or polities of interaction”.⁹² We are conscious that any attempt to approach human interaction through ceramic similarities and differences in aspect is incomplete and that we should also broaden the present discussion beyond the simple dichotomy “local vs. foreign”.⁹³ A comprehensive reconsideration of the topic of human interaction across the Hindu Kush in the Bronze Age would require incorporation of many other types of data, which is beyond the scope of this article. Although the data treated in the present article is limited to one aspect of this interaction, we believe that it is not negligible in that it adds relatively important substance to this more general research question.

It is still debated whether the ceramic connections observed between Sarazm, the sites of the Taluqan Plain, and the areas south of the Hindu Kush reflect contacts, exchanges, colonization, or evidence of greater and more anchored settlements related to the south in the north. The views proposed on this topic are not incompatible,⁹⁴ they can be combined or be seen as consequences of one another. One interpretation envisions that the

settlements at Sarazm⁹⁵ and in the Taluqan Plain⁹⁶ were motivated by the proximities of these places in access to raw materials including gold, silver, copper, and lead in the Zeravshan Valley and to the lapis lazuli sources of Sar-i Sang⁹⁷ close by to the region of Taluqan. A second interpretation envisages that the evidence from Taluqan and Sarazm reflects the existence of a larger peopling related to the southern sphere in the regions north of the Hindu Kush.⁹⁸

The ceramics with southern traits from Sarazm are often considered imports chiefly because they are not numerous and have no or little antecedent at the site and in the context of Central Asia.⁹⁹ R. Besenval and A. Isakov write that a small number of exogenous ceramics was found at Sarazm,¹⁰⁰ whereas Lyonnet describes a “massive” increase in southern ceramics in Period IV.¹⁰¹ The fact that the southern ceramics are not present in excessively large numbers at Sarazm strengthens the hypothesis that sees these vessels as episodic imports. Nevertheless, it is important to recall that the quantities of ceramics recovered from excavations at Sarazm are small in comparison with those usually found at Afghan and Pakistani Chalcolithic-Bronze Age sites (and in Turkmenistan to the west), where ceramic abounds. In fact, compared to the total amount of ceramics recovered at Sarazm, the quantities of southern ceramics reported from this site are not so minimal. Furthermore, the assemblage from Soundings 11–11A considerably augments the available corpus of such material and indicates that there are perhaps additional concentrations at the site. Lastly, the analogies observed in the Taluqan Plain show that Sarazm was not the only site north of the Hindu Kush with links to the regions located south of this mountain range.

The southern ceramics from Sarazm Periods III–IV are limited to a restricted range of forms and decorations; the same types are repeated across the site, and the assemblage from Soundings 11–11A confirms this fact. The southern relationship is mostly limited to a selection and does not include the totality of the iconographic package observed south of the Hindu Kush. We noted above that the southern ceramics from Sarazm, including those of Soundings 11–11A, share stylistic traits, in particu-

⁸⁹ See C. Jarrige et al. 1995.

⁹⁰ And through additional aspects of the material culture of Sarazm which are not discussed here.

⁹¹ Kohl 2009, 254.

⁹² Mutin 2013b, 44.

⁹³ See Pollock 2013, 380–382.

⁹⁴ See Isakov/Lyonnet 1988, 44–45; Lyonnet 1997, 52, 54–56; Besenval/Isakov 1989, 18.

⁹⁵ Besenval/Isakov 1989, 18; see also Anthony 2007 on Sarazm.

⁹⁶ Lyonnet 1981, 71–72.

⁹⁷ Hermann 1968.

⁹⁸ Isakov/Lyonnet 1988, 45; Lyonnet 1997, 54–56.

⁹⁹ Besenval/Isakov 1989, 18–19, note 68. Additionally, there is no evidence for local production of the southern ceramics at the site such as wastes of such products, or vestiges of workshops and pottery kilns containing these ceramics.

¹⁰⁰ Besenval/Isakov 1989, 18–19, note 68.

¹⁰¹ Isakov/Lyonnet 1988, 45; Lyonnet 1996, 59.

lar motifs of the same decorative repertoire, with a part of the ceramic assemblages essentially identified in the sphere circumscribed by Shahr-i Sokhta, Mundigak, Mehrgarh, and the Quetta, Loralai and Zhob Valleys (in addition to elements further to the northeast in Pakistan). Parallels are noted beyond this sphere but the bulk of the comparisons for the southern style of Sarazm Periods III–IV are situated in this area. At the same time, review of evidence at hand shows that there are differences between Sarazm Periods III–IV southern ceramics and their southern parallels in the way the motifs are designed and organized and in the forms and textures of the vessels. The southern ceramics from Sarazm Periods III–IV thus appear as a variation with its specific selection of traits of a larger stylistic sphere; in other words, a sphere within a sphere that extended to southern Afghanistan and northern Pakistan.

At present state of knowledge, it cannot be decided whether the southern ceramics recovered at Sarazm should be seen as meager evidence of a larger settlement placed across the Hindu Kush and including the regions located *immediately* south of this mountain range, or evidence of isolated contacts or colonies. We can, however, say that, although their quantities are often not impressive, southern materials were identified in different areas at the site including in Excavation VII Level IV/1, where a small collection of complete vessels was recovered.¹⁰² Additionally, this type of material was found in association with the other styles defined at the site, including local, Turkmen-related, and Iranian-related materials. In sum, the southern ceramics appear to be, after all, a constant component integrated to the local life at Sarazm starting essentially in Periods III–IV. In this context, the ceramic assemblage from Soundings 11–11A considerably substantiates in a different manner – in the shape of a unique concentration – the southern presence at Sarazm. It also confirms the fact that the southern style present at that time at the site is specific in that it is based on limited preferences for certain elements – the northern ones in particular – of the greater southern – Pakistani/Afghan – repertoire.

It should be remembered that the increase in southern ceramics seen in Period IV at Sarazm is coincident with a broader phenomenon observed in Middle and Central Asia particularly from the period around 3000 BCE: archaeological cultures, or elements of them, tend to expand, and this is illustrated by the Proto-Elamite on the Iranian Plateau¹⁰³ and additional cultures in the Indo-Iranian Borderlands.¹⁰⁴ The reasons for these expansions

and movements are not always clarified. Phenomena such as the growth in settlement observed in Pakistan and the increasing search and exchange of raw, worked, and finished materials observed during the third millennium BCE in the Indo-Iranian Borderlands, on the Iranian Plateau, and in Mesopotamia¹⁰⁵ should probably be taken into consideration in the analysis of these expansions, although, as suggested by C. C. Lamberg-Karlovsky regarding the expansionist tendencies observed in the early complex and urban societies of the Middle East and Central Asia, “[r]ather than relying exclusively upon economic determinants as the primary motivation for these expansionist tendencies, it is more than likely that political behavior was the motivating concern. The political subordination of a neighboring region was the paramount concern, while interest in their resources would have been a secondary and subsequent concern”.¹⁰⁶ Meanwhile, beside these external and broader dynamics, the ceramic assemblage from Soundings 11–11A, in addition to the other southern ceramics found at Sarazm, demonstrates the existence of local specificities of such material at the site, specificities that are seen in the limited selection of the types present, the region they stylistically relate to, and the way these types are embodied at the site. Now that connections – material similarities – across the Hindu Kush have been established, instead of seeing the southern materials from Sarazm solely through their relationship to the south, it seems to us that an emphasis should be precisely given to these specificities. An approach that combines both local and external dynamics seems to be better prepared to understand the nature of the cultural sphere that tends to be delineated, but that is not yet clearly demonstrated, from Sarazm to southern Afghanistan and northern Pakistan in the Bronze Age.¹⁰⁷

Conclusion

The ceramic assemblage from Soundings 11–11A relates to Sarazm Periods III–IV and, keeping in

¹⁰⁵ See Lamberg-Karlovsky/Tosi 1973; Tosi/Piperno 1973; Tosi 1974.

¹⁰⁶ Lamberg-Karlovsky 1996, 214.

¹⁰⁷ The question as to whether the southern ceramics found at Sarazm represent imports, imitations, or technological transfers is currently investigated through fabric analyses of ceramics from this site, Mundigak, and additional sites located in Pakistan and Middle Asia as part of the ROXIANA project (Archaeological research on the metallic and pottery assemblages from the Oxus Basin to the Indus Valley during Protohistory), a project funded by the French National Research Agency (ANR) and the Deutsche Forschungsgemeinschaft (DFG) and directed by H.-P. Francfort (CNRS-UMR 7041) and N. Boroffka (Deutsches Archäologisches Institut).

¹⁰² Besenval/Isakov 1989, Fig. 25–26.

¹⁰³ See Lamberg-Karlovsky 1996, 100–127.

¹⁰⁴ See Mutin 2013a.

mind the problem of chronological contradictions, is currently dated to the first half of the third millennium BCE. This assemblage adds substantial evidence of relationship between this site and the regions located south of the Hindu Kush at that time. It also adds to the fact that the southern ceramics present at Sarazm in Periods III-IV have a specific and quite uniform style, which indicates that ties were established across the Hindu Kush but that distinctive, local aspects of this relationship also developed at the site. With the discovery of this assemblage, it seems increasingly evident that the definition of the cultural relationship observed at that time across the Hindu Kush can be better assessed with a view primarily focused on Sarazm and its own local dynamics and specificities than with a view focused only on the links to southern materials.

Although the nature of the ceramic assemblage from Soundings 11–11A led us to discuss specifically Sarazm and its relationships to the regions located south of the Hindu Kush, it is important to bear in mind that the cultural interaction at this site is not limited to these southern contacts. Questions remain regarding the nature and chronology of the other types of connections observed at the site and the way these connections were articulated. More generally speaking, questions similar to those posed in the present paper are posed for the other contacts observed at Sarazm. Beside the southern style-related ceramics, relationships with the Steppe are present at this site in the shape of one tomb and a few ceramics, and the significant Turkmen-related ceramic component identified at the site should also be remembered. Turkmen-related Namazga III ceramics were found at Sarazm in Periods II and III, and Turkmen-related material is observed at Shahr-i Sokhta and Mundigak¹⁰⁸ around 3000 BCE. The following Namazga IV period is on the other hand almost absent at Sarazm as well as in Margiana and Bactria in southeastern Turkmenistan and northern Afghanistan.¹⁰⁹ By the middle of the third millennium BCE the Indus Civilization emerged in Pakistan and included distant sites interpreted as colonies such as in Kech-Makran in southwestern Pakistan¹¹⁰ and Shortughai in north-eastern Afghanistan which was founded around 2200 BCE.¹¹¹ These new dynamics overlap with the development of a new civilization in the regions extending from southeastern Turkmenistan to north-eastern Afghanistan: the Oxus Civilization also known as Bactrian-Margiana Archaeological Complex

(BMAC) dated to around 2300–1700 BCE. Elements of this civilization were found in Iran, particularly in its eastern half, Pakistan, Afghanistan, and Tajikistan,¹¹² and evidence of relationships between this civilization and the Indus Civilization to the south are recorded.¹¹³ The origin of the Oxus Civilization is still the topic of discussion; in summary, while some scholars believe that its roots are in southern Turkmenistan, other scholars tend to see its origin in eastern Iran, Afghanistan, and Pakistan.¹¹⁴ P. Kohl considers that the Oxus Civilization has diverse origins and points out the role in its development of both Turkmen and southern cultures as well as that of the “cattle herding pastoralists from farther north settling down on the watered plains of Bactria and Margiana”.¹¹⁵ Obviously, the question of the nature of the contacts observed across the Hindu Kush and with the Steppe is not limited to the site of Sarazm but is also importantly attached to the understanding of the first major urban civilizations in these areas. With regard to this, a logical question is how the multiple interactions observed from the mid-fourth millennium BCE on echoed, shaped, or contributed to the formation of the cultural interactions and urban civilizations observed from the second half of the third into the second millennia BCE. In the end, the discoveries made in Soundings 11–11A are an additional piece of information, significant for the understanding of Sarazm and its cultural relationships, and not negligible for the reconstruction of this much larger puzzle.

Acknowledgements

The study of Soundings 11–11A assemblage was conducted as part of the French-Tajik cooperation between the French Archaeological Mission in Central Asia (MAFAC – CNRS-UMR 7041) directed by H.-P. Francfort, the Department of Archaeology in the Institute of History, Archaeology and Ethnology (Academy of Sciences of Tajikistan) directed by R. Massov, and the archaeological base of Penjikent-Zeravshan directed by A. Razzokov. We would like to thank H.-P. Francfort, R. Massov and our Tajik and French colleagues at Sarazm, as well as H.-P. Francfort and the reviewers of AMIT for their very helpful comments on this article.

¹⁰⁸ Lyonnet 1996, 57–58; Biscione 1974, 1984.

¹⁰⁹ A unique sherd assigned to Namazga period IV was found at Sarazm: Lyonnet 1996, 61, 66, Fig. 38,3.

¹¹⁰ See Besenval 1997, 27.

¹¹¹ Francfort 1989, 241–242.

¹¹² See Lamberg-Karlovsky 1996, 194–217; Francfort/Tremblay 2010, 104, 107–108.

¹¹³ Francfort/Tremblay 2010, 112–117; Lamberg-Karlovsky 1996, 197. No elements of these two civilizations have been found at Sarazm.

¹¹⁴ See Kohl 2002, 167; Frachetti/Rouse 2012, 694.

¹¹⁵ Kohl 2002, 167–168.

Descriptions and references for the illustrations of the ceramics

FIGURE 3									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/170	Buff-red	Red paint					Unpublished, photograph R. Besenval
2	11	1147/304	Buff-red	Red paint, cream slip?					Unpublished, photograph R. Besenval
3	11	1147/238	Red	Red paint, cream slip?					Unpublished, photograph R. Besenval
4	11	1147/214	Buff-red	Red paint					Unpublished, photograph R. Besenval
5	11	1147/48	Light brown-yellow	Red paint	19		0.3	0.6	Unpublished, photograph B. Mutin
6	11	1147/196	Grey	Red paint	30		0.5	0.6	Unpublished, photograph B. Mutin
7	11A	1147/ad.1	Light brown-yellow	Red paint	24		0.5	0.6	Unpublished, photograph B. Mutin
8	11	1147/313	Cream	Brown paint	26		0.5	0.6	Unpublished, photograph B. Mutin
9	11	1147/202	Cream	Brown paint					Unpublished, photograph R. Besenval
10	11	\	Cream	Red paint					Unpublished, photograph R. Besenval
11	11	1147/249	Cream-pinkish	Brown paint				0.4	Unpublished, photograph B. Mutin
12	11	1147/209	Cream	Brown paint				0.4	Unpublished, photograph B. Mutin
13	11	1147/154	Cream	Brown paint				0.5	Unpublished, photograph B. Mutin
14	11	1147/207	Cream	Brown paint	23		0.5	0.4	Unpublished, photograph B. Mutin
15	11	1147/471	Buff	Brown-red paint				0.7	Unpublished, photograph B. Mutin
16	11	1147/107	Light brown-yellow	Brown paint, cream slip	20		0.7	0.9	Unpublished, photograph B. Mutin
17	11	1147/66	Grey/Light brown-yellow	Red and black (inside) paint	19		1	0.9	Unpublished, photograph B. Mutin
18	11	1147/59	Red/Light brown	Red paint, cream slip	20		0.8	0.7	Unpublished, photograph B. Mutin
19	11	1147/57	Red	Red paint, cream-grey slip	20		0.8	0.9	Unpublished, photograph B. Mutin
20	11	1147/54	Grey	Burgundy and black paint	19		0.8	0.8	Unpublished, photograph B. Mutin
21	11	1147/229	Light brown-yellow	Red paint	15		0.5	0.7	Unpublished, photograph B. Mutin
22	11	1147/165	Cream	Red paint				0.7	Unpublished, photograph B. Mutin
23	11	1147/162	Light brown-yellow	Red paint				1	Unpublished, photograph B. Mutin
24	11	1147/338	Cream	Brown paint				0.8	Unpublished, photograph R. Besenval
25	11	\	Cream	Brown paint					Unpublished, photograph R. Besenval
26	11	1147/470	Light brown-yellow/ Brown-grey	Red paint				0.9	Unpublished, photograph B. Mutin
27	11	1147/206	Cream	Brown paint				0.7	Unpublished, photograph B. Mutin
28	11	1147/242	Light brown-yellow/ Red	Red paint				0.7	Unpublished, photograph B. Mutin
29	11	1147/476	Buff-creamish		21		0.8	1	Unpublished, photograph B. Mutin
30	11	1147/11	Cream		38		0.9	0.9	Unpublished, photograph B. Mutin
31	11	1147/456	Red		40		1.1	0.9	Unpublished, photograph B. Mutin
32	11	1147/5	Red		41		1.3	1.1	Unpublished, photograph B. Mutin

FIGURE 3									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
33	11	1147/3	Red		40		1.1	0.9	Unpublished, photograph B. Mutin
34	11	1147/477	Light brown		28		0.5	0.9	Unpublished, photograph B. Mutin
35	11A	1147/ad.9	Grey		24		0.5	0.5	Unpublished, photograph B. Mutin
36	11	1147/482	Brown-grey/Black		28		0.5	0.5	Unpublished, photograph B. Mutin
37	11	1147/421	Grey		28		0.5	0.4	Unpublished, photograph B. Mutin
38	11	1147/483	Light brown		14		0.4	0.6	Unpublished, photograph B. Mutin
39	11	1147/258	Black		28		0.6	0.6	Unpublished, photograph B. Mutin

FIGURE 4									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/324	Brown-red	Red paint	10		0.4	0.6	Unpublished, drawing B. Mutin
2	11	1147/18	Red	Red paint, cream slip	15		0.5	0.7	Unpublished, drawing B. Mutin
3	11	1147/229	Light brown-yellow	Red paint	15		0.5	0.7	Unpublished, drawing B. Mutin
4	11	1147/57	Red	Red paint, cream-grey slip	20		0.8	0.9	Unpublished, drawing B. Mutin
5	11	1147/22	Red/Buff	Red paint	20		0.6	0.9	Unpublished, drawing B. Mutin
6	11	1147/96	Grey	Red paint	19		0.7	0.8	Unpublished, drawing B. Mutin
7	11	1147/66	Grey/Light brown-yellow	Red and black (inside) paint	19		1	0.9	Unpublished, drawing B. Mutin
8	11	1147/64	Red	Red paint	20		0.8	0.7	Unpublished, drawing B. Mutin
9	11	1147/487	Light brown-yellow	Red and black (inside) paint, light grey slip	20		1	1	Unpublished, drawing B. Mutin
10	11	1147/59	Red/Light brown	Red paint, cream slip	20		0.8	0.7	Unpublished, drawing B. Mutin
11	11	1147/78	Yellow/Grey	Red paint	18		0.9	0.9	Unpublished, drawing B. Mutin
12	11	1147/486	Light brown-yellow	Red paint	18		0.9	0.5	Unpublished, drawing B. Mutin
13	11	1147/53	Light brown-yellow	Cream slip (wiped off)	19		1	0.6	Unpublished, drawing B. Mutin
14	11	1147/54	Grey	Burgundy and black paint	19		0.8	0.8	Unpublished, drawing B. Mutin
15	11	1147/63	Red	Red paint, cream-buff slip	19		1	0.8	Unpublished, drawing B. Mutin
16	11	1147/107	Light brown-yellow	Brown paint, cream slip	20		0.7	0.9	Unpublished, drawing B. Mutin
17	11	1147/82	Light brown-yellow	Red paint	20		0.8	0.7	Unpublished, drawing B. Mutin
18	11	1147/143	Red		15		0.5	0.6	Unpublished, drawing B. Mutin
19	11	1147/17	Red-light brown		14		0.5	0.75	Unpublished, drawing B. Mutin
20	11	1147/93	Red	Red paint (wiped off)	18		1		Unpublished, drawing B. Mutin

FIGURE 5									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/457	Red		15		0.8	0.75	Unpublished, drawing B. Mutin
2	11	1147/466	Cream	Red paint	16		0.7	0.7	Unpublished, drawing B. Mutin
3	11	1147/105	Light brown-yellow	Red paint	17		0.75	0.8	Unpublished, drawing B. Mutin
4	11	1147/290	Red		19		0.5	0.65	Unpublished, drawing B. Mutin
5	11	1147/465	Buff/Red	Black paint (inside)	22		0.5	0.65	Unpublished, drawing B. Mutin
6	11	1147/467	Light brown-yellow	Cream slip?	18		0.3	0.4	Unpublished, drawing B. Mutin

FIGURE 6									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/182	Cream	Red and brown paint	7		0.3	0.5	Unpublished, drawing B. Mutin
2	11	1147/320	Light brown-yellow	Red paint	18		0.4	0.6	Unpublished, drawing B. Mutin
3	11	1147/437	Red	Red paint	20		0.4	0.5	Unpublished, drawing B. Mutin
4	11	1147/169	Light brown-yellow	Red paint	20		0.5	0.8	Unpublished, drawing B. Mutin
5	11	1147/48	Light brown-yellow	Red paint	19		0.3	0.6	Unpublished, drawing B. Mutin
6	11	1147/331	Light brown-yellow	Red paint	20		0.5	0.6	Unpublished, drawing B. Mutin
7	11	1147/199	Light brown-yellow	Red paint	24		0.6	0.7	Unpublished, drawing B. Mutin
8	11	1147/207	Cream	Brown paint	23		0.5	0.4	Unpublished, drawing B. Mutin
9	11	1147/315	Light brown-yellow	Red paint	20		0.4	0.5	Unpublished, drawing B. Mutin
10	11	1147/441	Cream	Brown paint	25		0.3	0.5	Unpublished, drawing B. Mutin
11	11	1147/429	Cream		26		0.4	0.5	Unpublished, drawing B. Mutin
12	11	1147/313	Cream	Brown paint	26		0.5	0.6	Unpublished, drawing B. Mutin
13	11	1147/435	Red	Red paint	18		0.4	0.5	Unpublished, drawing B. Mutin
14	11	1147/343	Grey	Red paint	21		0.3	0.6	Unpublished, drawing B. Mutin
15	11A	1147/ad.1	Light brown-yellow	Red paint	24		0.5	0.6	Unpublished, drawing B. Mutin
16	11	1147/179	Red	Red paint	25		0.5	0.5	Unpublished, drawing B. Mutin
17	11	1147/193	Light brown-yellow	Red paint	25		0.5	0.7	Unpublished, drawing B. Mutin
18	11	1147/47	Red/Light brown-yellow	Red paint	26		0.6	0.7	Unpublished, drawing B. Mutin
19	11	1147/32	Red/Light brown-yellow	Red paint	28		0.5	0.9	Unpublished, drawing B. Mutin
20	11	1147/196	Grey	Red paint	30		0.5	0.6	Unpublished, drawing B. Mutin
21	11	1147/160	Red/Grey	Red and black (inside) paint	24		0.5	0.6	Unpublished, drawing B. Mutin
22	11	1147/240	Light brown-yellow	Red paint	24		0.5	0.6	Unpublished, drawing B. Mutin
23	11	1147/173	Red	Red paint	26		0.4	0.5	Unpublished, drawing B. Mutin
24	11	1147/200	Light brown-yellow	Red paint	28		0.4	0.6	Unpublished, drawing B. Mutin

FIGURE 7									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/43	Red	Red paint	26		0.5	0.6	Unpublished, photograph B. Mutin
2	11	1147/503	Buff-grey	Black paint (inside)	20		0.9		Unpublished, photograph B. Mutin
3	11	1147/160	Red/Grey	Red and black (inside) paint	24		0.5	0.6	Unpublished, photograph B. Mutin
4	11	1147/48	Light brown-yellow	Red paint	19		0.3	0.6	Unpublished, photograph B. Mutin

FIGURE 8									
N°	Exca-vation	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	IV	\	Whitish	Brown-black paint, white slip	16		0.6	0.6	Lyonnet 1996: Fig. 10 no. 7
2	II	\	Whitish	Red paint	17.5		0.3	0.4	Lyonnet 1996: Fig. 10 no. 1
3	I	\	Whitish/Brown	Red-brown and red paint	19.5		0.4	0.6	Lyonnet 1996: Fig. 11 no. 1
4	II	\	Buff-pinkish	Red-orange and red-brown paint	23.5		0.4	0.5	Lyonnet 1996: Fig. 9 no. 1
5	III	\	Buff-pinkish	Brown-black and red paint, white slip	25		0.5	0.6	Lyonnet 1996: Fig. 9 no. 3
6	VII	\	Buff-pinkish/Whitish	Brown paint	18		0.3	0.4	Lyonnet 1996: Fig. 8 no. 10
7	III	\	Buff-pinkish	Brown-red paint	20.5		0.6	0.8	Lyonnet 1996: Fig. 8 no. 8
8	III	\	Buff-pinkish	Brown-red paint	29		0.4	0.6	Lyonnet 1996: Fig. 8 no. 6
9	II	\	Whitish	Brown-black	22.5		0.3	0.6	Lyonnet 1996: Fig. 8 no. 3
10	III	\	Buff-pinkish	Brown-red paint	25		0.4	0.8	Lyonnet 1996: Fig. 8 no. 4
11	VII	\	Whitish	Brown paint	12	10.5	0.4	0.6	Lyonnet 1996: Fig. 28 no. 4
12	VII	\	Buff-pinkish	Red paint	17	15	0.4	0.8	Lyonnet 1996: Fig. 28 no. 6
13	VII	\	Whitish/Buff-pinkish	Brown-red paint	14		0.6	0.7	Lyonnet 1996: Fig. 27 no. 12
14	VII	\	Buff-pinkish	Red paint	17	13	0.5	0.8	Lyonnet 1996: Fig. 28 no. 2

FIGURE 9									
N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11	1147/458	Light brown-yellow		38		0.9	1	Unpublished, drawing B. Mutin
2	11	1147/1	Buff	Light wash/slip	38		1.1	0.75	Unpublished, drawing B. Mutin
3	11	1147/456	Red		40		1.1	0.9	Unpublished, drawing B. Mutin
4	11	1147/27	Red			22		1	Unpublished, drawing B. Mutin
5	11	1147/3	Red		40		1.1	0.9	Unpublished, drawing B. Mutin
6	11	1147/443	Cream		22		0.6	0.7	Unpublished, drawing B. Mutin
7	11A	1147/ad.8	Cream		28		0.9		Unpublished, drawing B. Mutin
8	11	1147/5	Red		41		1.3	1.1	Unpublished, drawing B. Mutin
9	11	1147/4	Red		36		1.4	1	Unpublished, drawing B. Mutin

FIGURE 9

N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
10	11	1147/11	Cream		38		0.9	0.9	Unpublished, drawing B. Mutin
11	11	1147/30	Cream			16		1.1	Unpublished, drawing B. Mutin
12	11	1147/462	Cream-pinkish		24		1	1.1	Unpublished, drawing B. Mutin
13	11	1147/476	Buff-creamish		21		0.8	1	Unpublished, drawing B. Mutin

FIGURE 10

N°	Sound-ing	Reg. #	Color	Decoration – Surface treatment	Rim D. (cm)	Base D. (cm)	Rim Thick. (cm)	Wall Thick. (cm)	Source
1	11A	1147/ad.9	Grey		24		0.5	0.5	Unpublished, drawing B. Mutin
2	11	1147/477	Light brown		28		0.5	0.9	Unpublished, drawing B. Mutin
3	11	1147/421	Grey		28		0.5	0.4	Unpublished, drawing B. Mutin
4	11	1147/483	Light brown		14		0.4	0.6	Unpublished, drawing B. Mutin
5	11	1147/482	Brown-grey/Black		28		0.5	0.5	Unpublished, drawing B. Mutin
6	11	1147/258	Black		28		0.6	0.6	Unpublished, drawing B. Mutin
7	11	1147/478	Grey-black		26		0.7		Unpublished, drawing B. Mutin

Bibliography

Allchin et al. 1986

F. R. Allchin/B. Allchin/F. A. Durrani/F. Khan, Lewan and the Bannu Basin. *British Archaeological Reports, International Series 310* (Oxford 1986).

Amiet/Tosi 1978

P. Amiet/M. Tosi, Phase 10 at Shahr-i Sokhta. Excavations in square XDV and the late 4th Millennium B.C. assemblage of Sistan. *East and West* 28, 1978, 9–31.

Anthony 2007

D. W. Anthony, The horse, the wheel, and language. How Bronze-Age riders from the Eurasian steppes shaped the modern world (Princeton 2007).

Besenval 1997

R. Besenval, Entre le Sud-Est iranien et la plaine de l'Indus: le Kech-Makran. *Recherches archéologiques sur le peuplement ancien d'une marche des confins indo-iraniens. Arts Asiatiques* 52, 1997, 5–36.

Besenval/Isakov 1989

R. Besenval/A. I. Isakov, Sarazm et les débuts du peuplement agricole dans la région de Samarkand. *Arts Asiatiques* 44, 1989, 5–20.

Biscione 1974

R. Biscione, Relative chronology and pottery connections between Shahr-i Sokhta and Mundigak, Eastern Iran. In: *Studi di Paleontologia, Paleontologia e Geologia del Quaternario. Memorie dell'Istituto Italiano di Paleontologia Umana* 2 (Rome 1974) 131–145.

Biscione 1984

R. Biscione, Baluchistan presence in the ceramic assemblage of Period I at Shahr-i Sokhta. In: B. Allchin, with

assistance from Raymond Allchin and Miriam Sidell (ed.), *South Asian Archaeology 1981. Proceedings of the Sixth International Conference of the Association of South Asian Archaeologists in Western Europe. Held in Cambridge University, 5–10 July 1981* (Cambridge, London, New York, New Rochelle, Melbourne, Sydney 1984) 69–84.

Casal 1961

J.-M. Casal, *Fouilles de Mundigak. Mémoires de la Délégation Archéologique Française en Afghanistan* 17 (Paris 1961).

Casal 1964

J.-M. Casal, *Fouilles d'Amri. Publication de la Commission des fouilles archéologiques. Fouilles du Pakistan* (Paris 1964).

Cortesi et al. 2008

E. Cortesi/M. Tosi/A. Lazzari/M. Vidale, Cultural relationships beyond the Iranian Plateau: The Helmand Civilization, Baluchistan and the Indus Valley in the 3rd millennium BCE. *Paléorient* 34, 2008, H. 2, 5–35.

De Cardi 1983

B. De Cardi, *Archaeological Surveys in Baluchistan, 1948 and 1957. Institute of Archaeology, Occasional Publication* 8 (London 1983).

Dupree 1963

L. Dupree, Deh Morasi Ghundai: a Chalcolithic site in south-central Afghanistan. *Anthropological Papers of the American Museum of Natural History* 50 (New York 1963).

Durrani et al. 1995

F. A. Durrani/I. Ali/G. Erdosy, New perspectives on Indus Urbanism from Rehman Dheri. *East and West* 45 (1–4), 1995, 81–96.

- Fairservis 1956
W. A. Fairservis, Excavations in the Quetta Valley, West Pakistan. *Anthropological Papers of the American Museum of Natural History* 45 (New York 1956).
- Fairservis 1959
W. A. Fairservis, Archaeological surveys in the Zhob and Loralai Districts, West Pakistan. *Anthropological Papers of the American Museum of Natural History* 47 (New York 1959).
- Frachetti/Rouse. 2012
M. D. Frachetti/L. M. Rouse, Central Asia, the Steppe, and the Near East, 2500–1500 BC. In: D.T. Potts (ed.), *A Companion to the Archaeology of the Ancient Near East* (Oxford 2012) 687–705.
- Francfort 1989
H.-P. Francfort, Fouilles de Shortughai. *Recherches sur l'Asie centrale protohistorique. Mémoires de la Mission Archéologique Française en Asie Centrale* 2 (Paris 1989).
- Francfort/Tremblay 2010
H.-P. Francfort/X. Tremblay, Marhasi et la Civilisation de l'Oxus. *Iranica Antiqua* 45, 2010, 51–224.
- Hermann 1968
G. Hermann, Lapis-lazuli: The Early Phases of its Trade. *Iraq* 30, 1968, 21–57.
- Isakov et al. 1987
A. I. Isakov/P. L. Kohl/C. C. Lamberg-Karlovsky/R. Maddin, Metallurgical analysis from Sarazm, Tadjikistan SSR. *Archaeometry* 29, 1987, 90–102.
- Isakov/Lyonnet 1988
A. I. Isakov/B. Lyonnet, Céramiques de Sarazm (Tadjikistan, URSS): problèmes d'échanges et de peuplement à la fin du Chalcolithique et au début de l'Age du Bronze. *Paléorient* 14, 1988, H. 1, 31–47.
- C. Jarrige et al. 1995
C. Jarrige/J.-F. Jarrige/R. H. Meadow/G. Quivron, Mehrgarh. *Field Reports 1974–1985. From Neolithic times to the Indus Civilization. Department of Culture and Tourism of Sindh (Pakistan) in Collaboration with the French Ministry of Foreign Affairs* (Karachi 1995).
- Jarrige 2013
J.-F. Jarrige, Les relations archéologiques entre les régions au sud et au nord de l'Hindu Kush du Ve millénaire jusqu'au milieu du IIIe millénaire avant notre ère à la lumière des données fournies par les sites de la région de Kachi-Bolan au Balochistan pakistanais. In: J. Bende-zu-Sarmiento (ed.), *Archéologie française en Asie centrale post-soviétique. Un enjeu sociopolitique et culturel. Cahiers d'Asie centrale* 21–22, 2013, 41–68.
- J.-F. Jarrige et al. 2011a
J.-F. Jarrige/A. Didier/G. Quivron, Shahr-i Sokhta and the chronology of the Indo-Iranian regions. *Paléorient* 37, 2011, H. 2, 7–34.
- J.-F. Jarrige et al. 2011b
J.-F. Jarrige/G. Quivron/C. Jarrige, Nindowari. *Pakistan. The Kulli Culture. Its origins and its relations with the Indus Civilization* (Paris 2011).
- Kohl 2002
P. L. Kohl, Archaeological transformations: crossing the pastoral/agricultural bridge. *Iranica Antiqua* 37, 2002, 151–190.
- Kohl 2009
P. L. Kohl, Origins, Homelands and Migrations: Situating the Kura-Araxes Early Transcaucasian 'Culture' within the History of Bronze Age Eurasia. *Tel Aviv* 36, 2009, 241–265.
- Lamberg-Karlovsky 1996
C. C. Lamberg-Karlovsky, Beyond the Tigris and Euphrates. *Bronze Age Civilizations. Beer-Sheva Studies by the Department of Bible and Ancient Near East* 9 (Jerusalem 1996).
- Lamberg-Karlovsky/Tosi 1973
C. C. Lamberg-Karlovsky/M. Tosi, Shahr-i Sokhta and Tepe Yahya: Tracks on the earliest history of the Iranian Plateau. *East and West* 23, 1973, H. 1–2, 21–58.
- Lyonnet 1981
B. Lyonnet, Établissements chalcolithiques dans le Nord-Est de l'Afghanistan: leurs rapports avec les civilisations du bassin de l'Indus. *Paléorient* 7, 1981, H. 2, 57–74.
- Lyonnet 1996
B. Lyonnet, Sarazm (Tadjikistan) Céramiques (Chalcolithique et Bronze Ancien). *Mémoires de la Mission Archéologique Française en Asie Centrale* 7 (Paris 1996).
- Lyonnet 1997
B. Lyonnet, Étude de la céramique, essai sur l'histoire du peuplement (du Chalcolithique à la conquête arabe). J.-C. Gardin (ed.), *Prospection archéologiques de la Bactriane orientale (1974–78) vol. 2. Mémoires de la Mission Archéologique Française en Asie Centrale* 8 (Paris 1997).
- Méry 2000
S. Méry, Les céramiques d'Oman et l'Asie moyenne. Une archéologie des échanges à l'Âge du Bronze. *Collection de Recherches Archéologiques Monographies* 23 (Paris 2000).
- Morris 2005
J. C. Morris, Excavations at the later prehistoric site of Lewan, North-West Frontier Province, Pakistan. In: C. Jarrige/V. Lefèvre (ed.), *South Asian Archaeology 2001* (Paris 2005) 93–99.
- Mughal 1972
M. R. Mughal, A summary of excavations and explorations in Pakistan (1971 and 1972). *Pakistan Archaeology* 8, 1972, 114–158.
- Mughal/Halim 1972
M. R. Mughal/M. A. Halim, Excavations at Sarai Khola: The pottery. *Pakistan Archaeology* 8, 1972, 33–110.
- Mutin 2013a
B. Mutin, Ceramic traditions and interactions on the south-eastern Iranian Plateau during the fourth millennium BC. In: C. A. Petrie (ed.), *Ancient Iran and its neighbours. Local developments and long-range interactions in the fourth millennium BC. British Institute of Persian Studies Archaeological Monograph Series* 3 (Oxford 2013) 253–275.
- Mutin 2013b
B. Mutin, The Proto-Elamite settlement and its neighbors: Tepe Yahya IVC. *American School of Prehistoric Research (ASPR) Monograph Series* (Oxford, Oakville 2013).
- Mutin et al. in press
B. Mutin/A. Razzokov/R. Besenval/H.-P. Francfort, Resuming joint Tajik-French fieldwork at Sarazm, Tajikistan. Preliminary activity report on the 2011–2012 field sea-

- sons. In: V. Lefèvre/A. Didier/B. Mutin (ed.), *South Asian Archaeology 2012* (Paris).
- Petrie 2010
C. A. Petrie (ed.), *Sheri Khan Tarakai and early village life in the borderlands of north-west Pakistan* (Oxford and Oakville 2010).
- Pollock 2013
S. Pollock, Scales, difference, and mobility. In: C. A. Petrie (ed.), *Ancient Iran and its neighbours. Local developments and long-range interactions in the fourth millennium BC*. British Institute of Persian Studies Archaeological Monograph Series 3 (Oxford 2013) 379–383.
- Possehl 1993
G. L. Possehl, The date of Indus urbanization: A proposed chronology for the pre-urban and urban Harappan phases. In: A. J. Gail/G. J. R. Mevissen (ed.), *South Asian Archaeology 1991*. Proceedings of the Eleventh International Conference of the Association of South Asian Archaeologists in Western Europe held in Berlin 1–5 July 1991 (Stuttgart 1993) 231–249.
- Salvatori/Tosi 2005
S. Salvatori/M. Tosi, Shahr-i Sokhta revised sequence. In: C. Jarrige/V. Lefèvre (ed.), *South Asian Archaeology 2001* (Paris 2005) 281–292.
- Salvatori/Vidale 1997
S. Salvatori/M. Vidale, Shahr-i Sokhta 1975–1978: Central quarters excavations. Preliminary report. Istituto italiano per l’Africa e l’Oriente, Reports and Memoirs, Serie Minor 1 (Rome 1997).
- Shaffer 1978
J. G. Shaffer, *Prehistoric Baluchistan* (Delhi 1978).
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Summary

This article presents a ceramic assemblage recovered at Sarazm in Tajikistan. Sarazm is a site dating to the fourth and third millennia BCE, well-known for its connections to distant cultural spheres located in Uzbekistan, Turkmenistan, and northeastern Iran to the west; the Steppe of Eurasia to the north; and Afghanistan and Pakistan to the south. The ceramics that are discussed in this article come from Soundings 11–11A. They have evident stylistic links to ceramic assemblages found to the south in Afghanistan and Pakistan. Such materials have been reported from other areas at the site, however, the quantities recovered from Soundings 11–11A represent a relatively substantial new quantity of information. These ceramics provide us with the opportunity to discuss again the question of the cultural relationships to the Indo-Iranian Borderlands observed at Sarazm and the topic of the cultural contacts across the Hindu Kush during the Bronze Age period.

Резюме

Данная статья посвящена коллекции керамических находок, обнаруженные в поселение Саразм в Таджикистане. Поселение Саразм датируется IV–III тыс. до н.э., известной своими связями с отдаленными культурными памятниками, расположенных в Узбекистане, Туркменистане и северо-востоке Ирана на западе; Степной Евразии на севере; и Афганистан и Пакистан на юге. Керамики, упомянутые в этой статье происходят из Шурфа 11 и 11A. В целом у них есть очевидные стилистические аналогии с керамическими комплексами, найденные на юге в Афганистане и Пакистане. Такие материалы были зарегистрированы и в других раскопках, однако, выделенные находки из шурфов 11–11 А представляют собой относительно существенно новую порцию информации. Эти керамики предоставлять нам возможность обсудить еще раз вопрос о культурных отношениях в Индо-Иранских граница и культурных контактов через Гиндукуш в ранний период бронзового века.

