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ON THE TRACK OF UNCOVERING A CIVILIZATION

A volume in honor of the 80th-anniversary of Victor Sarianidi

Transactions of the Margiana
archaeological
expedition

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В издание включены результаты новейших археологических раскопок и изучения музейных коллекций, анализа процессов миграции эпохи бронзы и раннего железного века, антропологические и фаунистические разработки материалов как с территории Средней Азии, так и Евразии в целом. Уделено внимание истории архитектуры, ковроделия, металлургии, а также проблемам охраны, консервации и реставрации памятников.

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Results of the recent archaeological excavations and studying of museum collections are included in the edition as well as analysis of Bronze and Early Iron Ages migrations, anthropological and faunal researches on the territory of Central Asia, and Eurasia as a whole. The attention on history of architecture, carpets making, metallurgy, and also on problems of protection, preservation and restoration of mud bricks monuments is paid.

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S. Salvatori

THINKING AROUND GRAVE 3245 IN THE “ROYAL GRAVEYARD” OF GONUR (MURGHAB DELTA, TURKMENISTAN)

Excavations carried out by V. I. Sarianidi at North Gonur since 1992 provided the most impressive evidence of a complex proto-urban phenomenon. Sarianidi's involvement in Central Asia archaeology is well known to western scholars since its beginnings in the fifties of the last century. Among the many places where he worked are Northern Afghanistan, the Meana-Chaacha area and the Murghab delta (Turkmenistan). His work has disclosed the important role played by Southern Central Asia in the political, economic and ideological complexity of third and second millennium BC societies, states and chiefdoms, from the Mediterranean shores to the Indus Valley and the Persian/Arabian Gulf. Even if we are still far from a reasonable knowledge of that Sarianidi labelled as the Bactria-Margiana Archaeological Complex (BMAC) or, according to others, the Oxus Civilisation, our understanding of cultural processes in the area is developing from the first syntheses provided by Hiebert and Lamberg-Karlovsky (*Hiebert*, 1994a, 1994b; *Hiebert, Lamberg-Karlovsky*, 1992) to a more complex picture (*Kohl*, 2007, p. 184–213; *Salvatori*, 2008a) which better fits archaeological and historical data from Mesopotamia, the Iranian plateau, the Indus Valley and the Gulf.

Many problems are still pending, but Sarianidi's discoveries in the Murghab delta are encouraging a number of scholars to consider Central Asia as a main actor in cultural interactions across the Near and Middle East of the third and second millennium BC (*Potts*, 2008a, 2008b; *Francfort*, 2007; *Lamberg-Karlovsky*, 2007). Studies in cultural and political geography of the Middle East have been able to more precisely define a number of political/cultural territories within the area and the complex mechanisms of non-linear interactions among them (*Possehl*, 2007, fig. at p. 41 right).

This paper which is presented for the eightieth birthday of Victor Sarianidi, the man who opened to me the Murghab delta doors in 1991, aims to question some historical and chronological points that seem to extend across the entire Middle Eastern archaeology and perhaps affect our understanding of a period marked by an astonishing intensification of international contacts. International interaction at that time is made complicated by a number of different and not necessarily contrastive facets like military conquest and raids¹, interdynastic marriage (Potts, 1999, p. 136–139) both as a mean of alliance and/or control, and intensive and patterned commercial enterprises on the long distances.

The chance is once again provided by the unselfishness of Victor Sarianidi and Nadezhda Dubova who sent me photos and information about Grave 3245 from the so-called “Royal Cemetery” of Gonur.

This group of graves seem to be segregated from the larger Gonur graveyard I started excavating in 1992 to the west of the ancient town (Salvatori, 1993, 1994a, 1994b, 1995). In fact, it lays inside the city-wall (Sarianidi, 2005, fig. at p. 31; fig. 68) and consists of at least of eleven graves: ## 3200, 3205, 3206, 3210, 3220, 3225, 3230, 3235, 3240, 3245 and 3250.

As far as we can understand from the published literature (Sarianidi, 2005, 2007; Dubova, 2004)² the graves are regular-in-shape pits of different size lined with unbaked bricks all around and brick midriffs to partition the inner space. The most complex and elaborate layouts are shown by Graves 3200, 3230, 3235 and 3220 (Sarianidi, 2005; figs. 68, 69, 107).

In spite of an ancient intensive plundering activity which has damaged this segregated cemetery as well as the large graveyard to the west of the town (Salvatori, 1995; Sarianidi 2001, 2005, 2007), the extant grave furniture is astonishingly rich and meaningful. It suffices here to mention the presence in Graves 3200, 3225 and 3240 of four-wheeled charts (Sarianidi, 2005, p. 214, figs. 69, 72) of a type well known in the ED IIIb Ur “Royal graves” (Woolley, 1934, II, pls. 33a-b, 34a, 62a) as well as at Kish (Field, 1929, pls. V–VI). Similar four-wheeled charts, just to mention some occurrences, are portrayed on the famous Standard of Ur from Grave PG/779 (Woolley, 1934, II, pl. 92), on an alabaster tablet fragment from Khafaje, on a limestone tablet fragment from Ur (Moortgat, 1969, fig. 42; 43 respectively) and on the «**Stele of Vultures**» from Tello (Moortgat, 1969, fig. 118). The same type of chart, together with the two-wheeled variant³ is portrayed on a silver vase in the Louvre Museum and said to come from Bactria (Amiet, 1988, fig. 6)⁴. Actual four-wheeled charts or wagons have been found in the Central Asia kurgans dating from the second half of the third millennium BC onwards (Kohl, 2007).

The articulated grave structures, the richness of graves furniture⁵ and the apparent spatial segregation of these graves were properly referred by Sarianidi to the ruling class of Gonur, a site which has to be considered, on the base of the available data, the central place of the Middle Bronze Age settlement pattern of the Murghab delta (Salvatori, 2008c).

In this context Grave 3245 is not in the number of the most prestigious graves, but being in the same cluster the individual there buried was evidently linked by rank to the people buried in the surrounding graves. The grave is rectangular in shape (fig. 1 – see color insert.), divided

¹ E.g. the well known Sumerian and Akkadian military expeditions to the east and west of Sumer and Akkad.

² No detailed report has been yet published.

³ A variant which is attested in Mesopotamia by the copper/bronze model from Tell Agrab (Frankfort, 1943, pls. 58–59).

⁴ The use of this kind of chart in Bactria is also testified by the presence among the materials from pillaged graves of northern Afghanistan of copper/bronze «**bandages de rue**» (Pottier, 1986, fig. 44.326) of the same type of those from Gonur Graves 3200, 3225 and 3240.

⁵ See the photographic documentation in: Sarianidi, 2005.



Fig. 2. Bronze vessel from the tomb 3245.



Fig. 3. Bronze plate from the tomb 3245.



Fig. 6. Faience bracelets from the tomb 3245.



Fig. 8. A mould for metal compartmented stamp seals from the metallurgical workshop at Gonur Depe.

in two by a partition wall. The two rooms were connected by a decentralised door. Most of the grave goods were assembled in the smaller room, while in the larger one a female was buried in a flexed position on her right side. Orientation (north-south) and mode of deposition follow the same rules ascertained in the main cemetery of Gonur (*Salvatori*, 1993, 1994a, 1994b, 1995, 2000a; *Sarianidi*, 2001, 2005, 2007; *Дубова*, 2004).

The grave furniture is of interest even if not rich as, for example, Gave 3200 or 3220 (*Sarianidi*, 2005, p. 214–218, 250–254) were beautiful golden, silver and bronze vessels, panels of gypsum and faience inlays, imported pottery vessels, golden objects and jewels made from semiprecious stones and gold have been found despite the graves have been robbed in antiquity (*Sarianidi*, 2005).

However, Grave 3245 inventory includes two bronze vessels (figs. 2–3), a copper/bronze circular mirror, ivory objects (four bent segments decorated with dotted double circles¹; a spatula with engraved handle; two more fragmentary spatulas and a segment from an elephant

¹ They are quite similar to objects described as chart ornaments from Susa and there dated to the early second millennium BC (*Amiet*, 1986, p. 152, fig. 87). *Amiet* is also pointing out the similarity of the Susa objects with a bone or ivory small plate of the Kaftari period from Tal-e Malyan (*Amiet*, 1986, p. 152, note 6).

tusk) (fig. 4 – see color insert); two small calcite pots (a sub-cylindrical beaker¹ and a small vertically fluted jar²), four long stone awls³, three chlorite objects (a plain cylindrical beaker, a two-compartmented box with dotted double circles decoration and a four-compartmented box with his lid decorated with five enclosed squares and a high-relief coiled snake or a kneeling human figure (fig. 5 – see color insert)⁴, three pottery vessels (two truncated conical bowls and an hemispherical bowl with slightly averted rim). Above the inhumed's chest a third, possibly truncated conical, bowl was placed. The lady was wearing two fanence bracelets (fig. 6) and a necklace made from different semiprecious stones (carnelian, quartz, lapis lazuli) and gold beads with a conical end (fig. 7 – see color insert).

The grave is also important because we have a radiocarbon determination said to be obtained from the inhumed bones⁵: UBA-7888: 3691 ± 42 1σ cal. 2141–2024 (67,3%) – 1988–1986 (0,9%) BC; 2σ cal. 2200–1956 (95,4%) BC.

We will be here focusing above all on the two chlorite boxes because, together with the ivory objects and the jadeite awls, they are clear imports. They can also contribute to address chronological and possibly historical problems.

The two-compartmented chlorite box with a dotted double circle decoration has been recently studied by Daniel Potts (2008a). The American scholar has drawn the distribution of this kind of objects produced along the southern shore of the Persian/Arabian Gulf (*David*, 1996, 2002a, 2002b) and convincingly defines it as an Umm an-Nar type to be associated with other different types like chlorite hemispherical bowls and sub-cylindrical beakers decorated with the usual dotted double circle decoration⁶.

The other chlorite box from Grave 3245 is equally interesting. The object, indeed, pertains to a group of similar boxes from the Shahdad graveyard and from other provenance: from Susa to the Indus Valley (tab. 1).

The Shahdad series seem to be linked for the decoration technique to the examples from Mohenjodaro (*Durrani*, 1964, p. 52, pl. I.1)⁷, Mehi (*Piggot*, 1950, fig. 11: *bottom left*) and Susa (*Miroschedji*, 1973, pl. VIII: *m, n, o*).

The four-compartmented box type is actually known only at Gonur and Bactria (from looted graves) in the 'Oxus Civilisation' area; at Susa, Shahdad, Yahya, and possibly Jiroft, in Iran; and at Mehi and Mohenjodaro, in the Indus Valley. We can join to the same category of objects a

¹ Of type IVa or b of Casanova, 1991.

² A similar object, but in silver, comes from Grave 1999 of the Gonur cemetery (*Sarianidi*, 2007, fig. 82) while a calcite small vessel with vertical fluting is known from Grave PG/169 from Ur (*Woolley*, 1934, II, pl. 177, U. 8239).

³ Judging from the photos the stone seems to be a kind of jadeite.

⁴ It is actually impossible to judge from the available photos.

⁵ Dubova, personal communication. See: *Зайцева и др.*, 2008, с. 168 – *Ref. of Eds.*

⁶ To the Umm an-Nar chlorite production pertains the largest part of the *sûrie rûcente* chlorite production found at Susa (*Miroschedji*, 1973).

⁷ A second chlorite fragmented hemispherical bowl from Mohenjodaro (*Potts*, 2008a, fig. 26) is also a *sûrie rûcente* or better Umm an-Nar type vessel. A third fragment from the same site (*Durrani*, 1964, pl. I.2), on the contrary, is an Intercultural Style product to compare also for the possible vessel shape with a chlorite small jar from Jiroft (*Madjidzadeh*, 2003, p. 140, fig. 44.d); the same type of vessel is possibly behind the similarly decorated fragment from Kish (*Durrani*, 1964, fig. I.14). The decorative motif was largely used in the Intercultural Style production also on different vessel shapes at Jiroft (*Pittman*, 2003, fig. at p. 85 *bottom row centre*), Susa (*Amiet*, 1986, fig. 70), Shahdad (Grave 39: *Hakemi*, 1997, fig. at p. 200), Umm an-Nar island Grave IX (*Potts*, 2005, fig. 6) and Sharm Grave I (*Ziolkowski*, 2001, fig. 1) just to mention only few of the many examples. It could be interesting to note that in the Shahdad Grave 39 the beaker decorated with the "mat-weave" motive is associated with a small calcite bowl of Casanova (1991) Type I which at Susa and in Mesopotamia dates between the ED III and the Old Akkadian period.

Table 1

Distribution of chlorite four-compartmented boxes and lids

Site	Lid	Box + lid	Box
Bactria ¹			X
Gonur G. 3245		X	
Shahdad G. 35 ²	X		
Shahdad G. 165	X		
Shahdad G. 116		X	X
Shahdad G. 166		X	
Shahdad G. 309		X	
Shahdad G. 120			X
Tepe Yahya ³	X		
Jiroft ⁴		X?	X?
Susa ⁵	X		
Mohenjodaro ⁶			X
Mehi ⁷			X

cylindrical variant also provided of four compartments which is known from Bactria (*Salvatori*, 1988, fig. 1 with dotted double circle decoration) and from Mehi (*Durrani*, 1964, pl. I.3–4 with incised decoration).

It seems reasonable to consider the two chlorite boxes from Grave 3245 of Gonur pertaining to different, though contemporary, traditions: the first one (two-compartmented) produced in the Gulf area and the other produced somewhere in Central-Southern Iran where we have direct evidence of chlorite production centres and raw material outcrops (*Kohl*, 1979, p. 69).

Chronology

The date of both the objects is roughly suggested by the ¹⁴C date from the Gonur grave (2200–1986 2σ cal. BC or 2141–2024 1σ cal. BC), a date which fits well with the late Umm an-Nar chronology, a period when the bulk of the so called *sūrie rūcente* was produced. The late Umm-an-Nar period is dated 2400–2000 (according to *McSweeney et al.*, 2008) or 2300–1950 (according to *Görsdorf, Vogt*, 2001)¹. The date from the Gonur Grave 3245 forces us to pay attention to the absolute date of the Middle (Namazga V) and Late (Namazga VI) Bronze Age² of southern Central Asia based on the available radiometric determinations.

The lower limit of the Middle Bronze Age (the age of Gonur 1 North, its large graveyard and the ‘Royal Graves’) can now be fixed thank to a recent series of ¹⁴C dates from German-Uzbekistan excavations at the well known site of Dzarkutan (*Huff*, 1997). The radiocarbon dates from the site (*Görsdorf, Huff*, 2001) firmly support the data coming from Margiana excavations (*Cattani et al.*, 2003, tab. 1) fixing the chronology of the Late Bronze Age between 2000/1950 and 1500 BC.

¹ The Umm an-Nar Abraha grave ¹⁴C dates (*Potts*, 2003) give a combined date of 3741 ± 26 BP = 2200–2050 1σ cal. BC; 2280–2030 2σ cal. BC.

² The two periods are quite different from the point of view of the material culture and site architecture (*Salvatori*, 2008a). The picture drawn by Hiebert (1994a) about fifteen years ago is now to reject on the light of more recent excavations.

The few radiocarbon determinations available from sure LBA contexts in the Murghab delta¹, give a bracket of 1920–1680 BC² while the very few dates from the southern Turkmenistan piedmont give 1520–1435 BC³. All together the Murghab and piedmont conform with the Dzarkutan series and assure the chronological homogeneity between Margiana and Bactria cultural processes.

The upper limit of the Late Bronze Age (2000/1950 BC) fix at the same time the lower limit of the Middle Bronze Age. For this period radiocarbon dates from the piedmont point to a bracket of 2210–2040 BC and for the Murghab delta 2300–2000 BC⁴.

Summing up we can now date the MBA 2400/2300–1950 BC and the LBA 1950–1500 BC and to recognise a very strong chronological correlation between the southern Central Asia MBA and the late Umm an-Nar period.

Coming back to the later part of the Bactria-Margiana Middle Bronze Age a good connection on a chronological and possibly archaeological ground can be seen with the early Kaftari period (2200–1900 BC) in Iran (Potts, 1999, p. 151). More recently Daniel Potts (2008b), following the original idea of Pierre Amiet (1986, p. 200), has assumed a possible influence of Bactria-Margiana composite female figurines on the rendering of seated figures on Anšante cylinder seals. Such a hypothesis is supported by the growing archaeological evidence of strong and structured trade ties between southern Central Asia and the Iranian plateau (Salvatori, 2000a, 2008a; Salvatori, Tosi, 1997).

Interlude

If the absolute chronology from Central Asia and the southern shore of the Persian/Arabian Gulf are so strongly correlated, some elements of the material culture from the Murghab delta question the correlation with the Mesopotamian chronology.

In recent years we assisted to a reappraisal of the debate around the High, Middle and Low Mesopotamian chronology.⁵ The most used is the Middle one with some variants called Low-Middle (a slightly variation of about 20 to 50 years separates the Middle from the Low-Middle).

The problem is nevertheless raised by objects from the Murghab delta that suggest links with the Mesopotamian ED IIIb – Old Akkadian periods. The apparent, while limited discrepancy between the Middle Mesopotamian chronology and the absolute radiocarbon chronology of the

¹ The use of radiocarbon determinations from Margiana and the Southern Turkmenistan piedmont is still troublesome because the lack of information on sample collecting procedures and moreover on stratigraphic contexts. As we experienced reworking the many ¹⁴C dates from Shahr-i Sokhta (Salvatori, Tosi, 2005) only a critical re-examination of samples provenance and quality can help to separate contextually and qualitatively reliable samples from the unreliable ones. In the Shahr-i Sokhta case we were much helped by the highly detailed and accurate excavations records of Maurizio Tosi, a documentation we do not have in the case of the piedmont and Margiana excavations. We decided to use only those dates that when calibrated fall between 2500 and 1900 for the Middle Bronze Age and between 2000 and 1400 for the Late Bronze Age applying to the series the combine function of OxCal software.

² The OxCal 3.5 combine function provides for Gonur 1 South a date of 3520 ± 22 bp = 1920–1740 2σ cal. BC and for Togolok 21 a date of 3453 ± 23 bp = 1880–1680 2σ cal. BC. ¹⁴C dates published by Kohl, 1984; Hiebert, 1993; Kircho, Popov, 1999; Salvatori, 2002; Jungner, 2004 have been used to define the absolute chronology of the two periods.

³ Using dates from Ulug, Namazga and Tekkem we have obtained the date of 3214 ± 17 bp = 1520–1435 2σ cal. BC.

⁴ For the Piedmont we have a date of 3739 ± 16 bp = 2210–2040 2σ cal. BC; for Gonur 1 North 3520 ± 10 bp = 2280–2130 2σ cal. BC and for Adzhi Kui 3760 ± 10 bp = 2300–2030 2σ cal. BC.

⁵ See, for example, Reade, 2001.

Murghab Middle Bronze Age can be evaluated briefly surveying data from regions to the west and east of Sumer and Akkad.¹

The first important help comes from the revision of the Gordion dendrochronological data (*Manning et al.*, 2001) which has verified the agreement of both the Middle and the Low-Middle Mesopotamian chronology for the Šamši-Adad I reign.

A series of ¹⁴C dates from the Early Akkadian levels of Tell Leilan, in Syria (Iib3: 3845 ± 35 bp = 2348–2208 2σ cal. BC; Iib1: 3770 ± 30 bp = 2208–2140 2σ cal. BC; 3755 ± 18 bp = 2199–2141 2σ cal. BC²), as the Gordion's data, support both the Middle and the Low-Middle Mesopotamian chronology.

A somewhat different picture emerges from the ¹⁴C series from the site of Tell Mazyan, ancient Urkesh (*Buccellati, Kelly-Buccellati*, 2000, p. 154, fig. 6). Here the radiocarbon dates from levels contemporary with Maništusu or early Naram Sin reigns seem to fit better with a chronology in the middle between the Middle and the Low that is to say about 50 years lower than the Middle chronology.

The difference of ca. 50 years, can be considered, from an archaeological point of view, negligible while it could have some reverberations if transferred on a historical ground.

If we accept the Low-Middle Mesopotamian chronology we could understand better the presence at the beginning of the Bactria-Margiana Middle Bronze Age of materials which are at home in the Early Dynastic IIIb and in the Old Akkadian periods like a cylinder seal surely inspired to ED III prototypes (*Salvatori*, 2008b) or the ED III-Old Akkadian calcite small bowls with flaring rims (*Casanova*, 1991. Type I) from Gonur (*Sarianidi*, 2007, fig. 195) and Bactria (*Pottier*, 1984, pl. XXV: 193, 196; *Ligabue, Salvatori*, 1988, colour pl. 85).

The provenance problem

The brief chronological interlude drives us back to the Gonur Grave 3245 and to the chlorite boxes. As we said above the two objects have different provenance: the two-compartmented box, made from a grey-green chlorite was surely produced, together with other types of chlorite vessels (*David*, 1996, 2002a; *Potts*, 2008a) in the Gulf area where several outcrops of this kind of stone have been located (*David*, 2002b); the four-compartmented box, made from a dark green chlorite, is so closely linked with the Shahdad examples to suggest a provenance from somewhere in central-southern Iran. This is surely a production area as demonstrated by the Yahya workshop (*Kohl*, 1979, 2001)³ and by the presence of chlorite outcrops in the mountain around the Soghun valley (*Kohl*, 1979, p. 69).

If the four-compartmented box type is actually known at Shahdad,⁴ Susa,⁵ perhaps Jiroft,⁶

¹ The overall problem could be solved by the work of the international ARCANÉ project (<http://www.arcane.uni-tuebingen.de>). In the meanwhile we can refer to a limited, recent set of data from well controlled excavations.

² *Lillis Forrest, Milano, Mori*, 2007. Leilan Levels Iib3: p. 45; Iib1: p. 52; *Ristvet*, 2005, fig. 2.2 at p. 213 for Leilan Iib, Iib3, Iib1; *Ristvet, Gunderson, Weiss*, 2004. Leilan Iib1.

³ Different workshops were surely involved in chlorite object production as technological, physical and chemical analyses suggest also in the case of stylistically and typologically homogeneous decorative patterns (*Kohl*, 1979).

⁴ *Hakemi*, 1997. Graves 35, 113, 116, 120, 165, 166 and 309.

⁵ *Miroschedji*, 1973, fig. 11.14–16.

⁶ *Madjidzadeh*, 2003. It is impossible to determine from the published photo (P. 139 no. 142) if the box with a decoration that can be reconnected to the 'Intercultural Style' has one or more compartments.

Mehi¹ and Mohenjodaro,² in the Indus Valley, and finally in Margiana and Bactria,³ the two-compartmented type is known in many examples at sites distributed along the southern shore of the Gulf⁴ and in much less occurrences at Susa⁵ and a single example in Margiana. But, if we consider the distribution of the Umm an-Nar production as a whole a larger distribution can be presented including Mesopotamia⁶, other Iranian sites east of Susa like Yahya⁷, Tol-e Peytul⁸ and Shahdad⁹, the Indus Valley¹⁰, and Margiana. Such a distribution entails that during the last two or three centuries of the third millennium BC a number of trajectories are working from the southern coast of the Gulf and 1) ED III/Old Akkadian Mesopotamia (possibly a western Dilmunite trajectory to use the terms of Potts, 2008a); 2) the Iranian Khuzestan (Susa) (= the Dilmunite-Elamite trajectory: Potts, 2008a, p. 12); 3) Tol-e Peytul, in the Bushehr area in Iran (= the Anšanite trajectory: Potts, 2008a, p. 12–13); 4) Yahya, Jiroft and Shahdad in the Kerman area (= the Marhašian trajectory: Potts, 2008a, p. 12); 5) the Indus valley (Mohenjodaro) (= the Meluhhan trajectory: Potts, 2008a, p. 11–12). During that period and possibly sometime earlier all or almost all of the above quoted areas and sites show contacts with the Bactria-Margiana world. How to orient oneself in this web of multi-directional interconnections?¹¹

To disentangle that intricate web and determine, if possible, which of the several trajectories could be considered the most likely one we have to take into consideration other important elements presented by the archaeological record. First of all, as we have seen above, the distribution of the four-compartmented boxes seems to exclude both Mesopotamian and the Gulf – the last being the production area of the two-compartmented boxes. A second source of information is provided by the distribution of metal compartmented stamp seals outside their production area – Bactria and Margiana.¹² Up to now this peculiar type of metal stamp seals (Salvatori, 2000) is known at only four sites: Susa (Amiet, 1986, fig. 105), Shahdad (Hakemi, 1997, p. 284, 320, 324), Yahya(?) (Lamberg-Karlovsky, Tosi, 1973, fig. 124), and Mohenjodaro

¹ Piggot, 1950, fig. 11.

² Durrani, 1964, pl. I.1.

³ Pottier, 1984, fig. 31.226.

⁴ David, 2002a; Zarins, 1978, 1989.

⁵ Miroschedji, 1973, fig. 9.

⁶ Woolley, 1974, pl. 49.L

⁷ Lamberg-Karlovsky, 1988. Figs 4/cc and 4/dd; Potts, 2008a. Figs 27–28.

⁸ Potts, 2008a. Fig. 34.

⁹ Hakemi, 1997. Grave 36 Obj. No. 0292 at P. 195.

¹⁰ Cleuziou, Tosi, 2007. Fig. 189.

¹¹ The picture is somewhat complicated by the direct links between the Indus Valley and Mesopotamia attested not only by written documents but also by the archaeological record and particularly by the presence of Harappan seals in several Mesopotamian sites (Possehl, 1996); between the Indus Valley and Yahya (Pittman, 2001, fig. 10.63); the Indus Valley and Susa (Amiet, 1986, figs 93–94); the Indus Valley and the Gulf (Méry, 2000); the Indus Valley and Bactria-Margiana (Sarianidi, 1998, fig. 21; Capuanu, 2004, fig. 13) and the piedmont of southern Turkmenistan (Masson, 1988, pl. XXII.1a–1b); Mesopotamia and Iranian plateau (Kohl, 1979, 2001; Potts T. F., 1989, 1994); the Gulf (late Umm an-Nar) and the Elamite Anšan, at least during the early Kaftari period (Potts, 2003, figs. 13.2, 13.3), and the Kerman (Vogt, 1985); the Kerman area (Hakemi, 1997), the Khuzestan (Amiet, 1986, fig. 105), the Indus Valley (During Caspers, 1994a, 1994b) with the Bactria-Margiana area.

¹² Actual seals can be considered as the primary markers of trade terminals and trade agencies. They are by definition univocally linked to individuals or functions. Bactria-Margiana metal compartmented stamp seals represent a precious source of information because peculiar of those regions. Their occurrence in primary contexts in Margiana make sure their chronological attribution to the local Middle Bronze Age (Salvatori, 2000b). A recently excavated metal workshop at Gonur North has provided the first example of a mould for this kind of seals (fig. 8). I thank Victor Sarianidi to allow me to publish here a photo of the mould *in situ* that I took during the excavation of the Gonur metal workshop.

(*During Caspers*, 1994a, 1994b).¹ These stamp seals, considering the ascertained connection with the holders,² point to the presence of Bactria-Margiana trading agencies and merchants at least at three of the above mentioned sites.

A third element is provided by the distribution of a well known group of possibly Iranian cylinder seals. They have been found at Yahya (*Pittman*, 2001, fig. 10.46-52), Shahdad (*Hakemi*, 1997, graves 163, 166) and Bactria-Margiana (*Sarianidi*, 1998, fig. 27.3; 2001, p. 197, pl. 10.7; 2002, fig. on p. 278; *Winckelmann*, 1997, fig. 1a-c). If the Iranian origin of this group of seals would be confirmed, then the most plausible intermediaries for the Um an-Nar two-compartmented box as well as the four-compartmented one would be Shahdad or Susa. At both sites, indeed, "Um an-Nar" type vessels have been found even if only at Susa examples of the two-compartmented type with dotted double circle decoration are known.

At Shahdad two-compartmented boxes made from chlorite, other kind of stones and pottery are well attested (*Hakemi*, 1997, graves 33, 59, 95, 98, 139, 168, 193, 202, 271), but they are never decorated with the typical Um an-Nar pattern in spite of the contacts with the Gulf proved beyond any doubt by a number of pottery vessels found in the Shahdad graveyard. Moreover, during the same period (the last centuries of the 3rd millennium BC) contacts, possibly of trading nature, are proved by the typical Anšānite pots found in the Late Um an-Nar grave at Abraq (*Potts*, 2003).

Nevertheless, on the base of the presence at Susa of both the types of compartmented boxes and of both the types of seals mentioned above, we can provisionally consider Susa as the most likely intermediary between the Gulf and the Bactria-Margiana world, even if we cannot rule completely out the Marhašian trajectory.

New discoveries on the Iranian plateau, in the Indus Valley and southern Central Asia could change the above outlined picture, but it will never affect the archaeological and historical perception of the high level of complexity the «international» trade mechanism reached at least by mid third millennium BC. Many bilateral trading agencies are at work at different sites, orchestrating commercial/economical transactions between the Indus Valley and the Oxus civilisation; the Sumerian-Akkadian Mesopotamia and the Indus Valley; the Khuzestan and Kerman provinces, in Iran, and the Oxus; the Kerman area (Yahya) and the Khuzestan with the Indus Valley.

This peculiar and organised interrelationship is proved by items, like the actual seals, that can guarantee the presence of alloctonous individuals and agencies in each of the above mentioned centres.³ During the second half of the third millennium BC the only region which while participating to this comprehensive trading network, had apparently no direct contact with the Oxus civilisation is the southern Gulf area.

¹ Only one fragmentary metal compartmented stamp seal is up to now known from Mohenjodaro. Nevertheless this, together with a number of Indus Valley objects found at Altyn Depe and Gonur 1 North, among which some typical Harappan stamp seals, points to an active trade inter-exchange between the two regions in the second half of the third millennium BC.

² It is not by chance that at Shahdad compartmented stamp seals are often associated to other Central Asian objects like miniature stone columns, stone cylindrical long poles, calcite cups on tall stand etc. The same type of objects are well attested at Susa (*Amiet*, 1986).

³ We will only remind the presence, in the second half of the third millennium BC, of Indus Valley seals and seal impressions at Altyn Depe (*Masson*, 1988, pl. XXII.1a-1b), Gonur (*Сарианиди*, 2004, fig. 13), Yahya (*Pittman*, 2001, fig. 10.63), Susa (*Amiet*, 1986, fig. 94), Mesopotamia (*Collon*, 1996; *Possehl*, 1996); of Bactria-Margiana stamp seals at Susa (*Amiet*, 1986, fig. 105), Yahya (*Pittman*, 2001, figs 10.58, 10.59), Shahdad (*Hakemi*, 1997, graves 122, 163 and 166), Mohenjodaro (*During Caspers*, 1994a, 1994b); of central Iran seals at Yahya, Shahdad, Margiana and Southern Bactria.

At the beginning of the second millennium BC the Bactria-Margiana civilisation went through a deep transformation. We can easily appreciate the change because it affected the material culture, territorial organisation and architectural planning (Salvatori, 2008a). The typical elements of the local MBA culture (2400/2300-2000/1950 BC) like the metal compartmented stamp seals, the stone miniature columns, the long stone cylindrical rods, and the calcite bowl production that, among others,¹ give the image of an affluent society, suddenly disappear from the archaeological record. The Gonur graveyard was then systematically plundered and there is the evidence (e.g. Togolok 21: Salvatori, 2008a) of recycling at LBA sites in Margiana. We have in other occasions underlined that also the Margiana settlement pattern, once centred on a central, directional site which emerges above the others sites of the region for its outstanding architectural characters and for the concentration of material richness, collapsed at the turn of the second millennium BC producing a deep cultural and possibly political change (Salvatori, 2008c). It is worth noting that we cannot, up to now, detect whatsoever link with the Iranian plateau in the Bactria-Margiana material assemblages of the first half of the second millennium BC. The only evidence of external contacts is provided by the presence of Oxus stepped edges lozenge-shaped bifacial stone stamp-seals in the Indus Valley (Mohenjodaro: *During Caspers*, 1994a, 1994b) and in the Persian/Arabian Gulf (Bahrain: Crawford, *Al Sindi*, 1995; Crawford, 1998, fig. 7/5).

The cause of the deep transformation of the Bactria-Margiana society at the very beginning of the second millennium BC is still difficult to determine. We actually do not know if it was the result of an internal political crisis (Salvatori, 2008c) or caused by external powers or/and events. New fortified settlements were built up aside the older, abandoned sites; the fortification walls formerly characterised by square towers at the corners and rectangular or square projecting bastions along the sides are now systematically and without exceptions provided with circular towers at the corners and semicircular bastions along the sides. Such an impressive transformation seems to have been occurred suddenly and simultaneously all over the area of the Oxus civilisation. In Margiana we actually know that the central place of North Gonur collapsed and, as stated above, its huge and rich graveyard was systematically plundered (Salvatori, 1995). Moreover, a number of hoards located outside the core region and containing typical objects – often in fragments – of the Margiana and Bactria MBA material culture can be dated to the beginning of the second millennium BC².

An interesting hypothesis that could link the Bactria-Margiana MBA political collapse to external events has been recently put forth by Daniel Potts (2008b). In short the hypothesis of the American colleague is based on the equation Šimaški³ = Bactria-Margiana. The external event would have been the successful campaign of the Ur III king Šu-Sin I (2037–2029 BC according to the Middle Chronology; 1987–1979 BC, according to the Low-Middle Chronology) against Šimaški and a number of allied kingdoms or chiefdoms.

Though suggestive, this hypothesis displays some difficulties starting from the geographic location of Šimaški (Steinkeller, 2007).⁴ Nevertheless, the above mentioned Šu-Sin's military

¹ E.g. the many different items like golden and silver bowls and beakers; jewels made from precious metals and a variety of semi-precious stones; composite chloritite and gypsum figurines, etc.

² We are referring to the hoards of the Treasure Hill of Tepe Hissar, in north western Iran (Schmidt, 1937), and Quetta, in south western Pakistan (Jarrige, 1987; Jarrige, Hassan, 1989) (cfr. Salvatori, 2008a).

³ See now: Steinkeller, 2007.

⁴ A second major difficulty can be found in the apparently well organised reasoning of Potts which starting from stylistic analogies between the famous Persepolis silver beaker and a silver vessel from the Gonur graveyard (Sarianidi, 2005, figs. 95–96) on which Bactrian camels are portrayed, refers to a Nippur tablet which mentions a gift of Bactrian camels presented by Ebarat, king of Šimaški, to Šulgi (2094–2047). Nevertheless, in the same

campaign could have been relevant to the Bactria-Margiana political and cultural transformation at the beginning of the second millennium BC producing a political turmoil in north-western and central Iran. As a consequence we cannot rule out possible side effects of the Šu-Sin's campaign which surely raised a period of great transformation in the political assets and in power relations both in the Iranian plateau and Mesopotamia as well (Potts, 2008b). The domino effect of the Šu-Sin military campaign could have also involved southern Central Asia regions explaining, in a way which need to be more deeply investigated, the drastic changes Bactria-Margiana society and its political structures experienced at the very beginning of the 2nd millennium BC.

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text a gift of camels offered to Šulgi by Hundah(i)sher, the man of Anšan, is also mentioned. The text, indeed, does not support the equation Šimaški=Bactria-Margiana, but only the possibility of direct contacts of trading nature between Šimaški and Anšan with the Bactria-Margiana region. To the same network of trading and possibly political relationships, based on the reciprocated presence of trading agencies, can be correlated the stylistic affinity between the female figures portrayed on the Anšanite cylinder seals of the Old Kaftari period and the Bactria-Margiana female composite statuettes.

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