

THE ACHAEMENID PERIOD IN THE SAMARKAND AREA (SOGDIANA):

Trial Trenches at Koj tepa 2009 Campaign¹

Alexej Gricina (Institute of Archaeology of the Academy of Sciences of Uzbekistan) (IAASU) and Bruno Genito (Università degli Studi di Napoli, l'Orientale) (UNO)

with contributions by:

Rahimov Kamill and Luciano Rendina

The Joint Uzbek-Italian project

The archaeological project in the Samarkand region aimed at detecting and investigating the Achaemenid horizon in Sogdiana after the first short campaign of May-June 2008 continued in summer 2009² through

¹ My deepest thanks are due to the Director of IAASU Dr A. Berdymuradov for his participation, and for having paid a visit to the excavations at the end of the work. The realization of the work has been possible for to the particular availability of the Rector of UNO Prof. Lida Viganoni and her staff, in particular Mrs Marina Guidetti and Nicoletta De Dominicis. The financial support has been granted by the *Centro Interdipartimentale di Servizi per l'Archeologia* (CISA), UNO and heartfelt are due to the President Prof. Rodolfo Fattovich, to Prof. Irene Bragantini, Dr Andrea D'Andrea and Mr Roberto Bocchino. The local support was possible thanks to the I.A.M. in Uzbekistan of Bologna University and, in particular, special gratitude are due to the Director Prof. M. Tosi, the deputy Director Prof. D. Giorgetti, to Dr Simone Mantellini, Dr Rita Di Martino. A particular thank is also due to Dr Dmitry Khosthuskhin for his help as translator and for any other organizational type of support.

² For the scientific work thanks are due to Dr Alexej Gricina, both for his suggestion and operational qualitative and friendly participation to the work, to Rahmanov Kamill both excellent and precious helper in the field work; last but not least gratitude is also due to MA students: Fabiana Raiano, Francesco Spinelli and Giulia Ciucci (UNO), who devoted most part of the time, to the pottery analyses and drawings. Very special thanks are also due to

more extensive trial-trenches at Koj tepa (Fig. 1)³. This tepa is a rather important settlement, constituted by a citadel encircled by walls, inside strongly destroyed, cut through by a modern activity of bulldozers, which, according to the topographic results achieved by the IAM of the Bologna University, presented partial remains of the city walls; though not still clearly identified this wall was most probably encircling a truncated-cone high citadel, according to a settlement pattern of a constructive urban system typical for sites in ancient Samarkand and Ustrushana areas (Fig. 2) (Inevatkina, 1995).

The joint Uzbek/Italian team spent c. 3 weeks in the area in July 2009, acting in a work inserted within the frame of an official agreement between IAASU and UNO, signed in October 2008 in Samarkand and April 2009 in Naples.

The premises of the project are mostly related to the rather great methodological and field work difficulties always encountered by scholars to precisely define an “Achaemenid” archaeological horizon, especially in an area such as Sogdiana, in the north-eastern periphery of the Empire; in this perspective at least, four different aspects and levels of interpretations should be basically considered: the dynastic, the ethnic, the political/imperial and the chronological (Genito, 1998, p. 157, fig. 1) to be, in time, correlated to the archaeological finds. What it is more, ancient Sogdiana has been always considered and it actually was a frontier zone, mainly with regard to the more northern steppes; an archaeological Achaemenid horizon can be, thus, measured on the basis of the distribution of macroscopic remains and not only to put in evidence an “Achaemenid” character, as an aspect of particular importance in the field of the Central Asian archaeology. Such considerations impose, however, methodological precautions that can shortly be summarized in a priority demand to know

Dr Luciano Rendina, archaeologist, topographer and draftsman of Lecce University, who with has given, as usual, a decisive contribution to the quality of the work and could offer an unique contribution for the final realization of the activities and to the success of the whole operation.

³ Koj Tepa area is 175 m long x 150 m wide (26.250 sq m = 2,62 ha.) and the difference in the level from the top and the bottom located on the section 1 opened in May 2008 is 9,94 m. The absolute quote located in the unexcavated section between Trench 2 1 (2009) is: 697,30 a.s.l. (Fig. 4).

both the places and chronology of the objects, architectonic remains and numismatic or sigillography items. If these data are not easily acquirable, it is evident that there some has to define ample zones of uncertainty in the historical-archaeological interpretations.

In particular the activities of the joint working group of IAASU and UNO in July 2009 were continued in an area west of Samarkand. The trial-trenches planned are aimed at singling out the cultural horizons related to the periods of the earliest occupation of the site and represent a second stage of a project in order to plan future extensive excavations there and elsewhere.

Field Activity (Summer 2009)

Located very close in the outskirts of the Chandyr village, Koj Tepe (Kendyktepe), is a rather important site, which, on the basis of the materials collected from the surface, from the sections 1 and 2 opened in 2008, and on the basis of some architectural and topographic considerations, most probably belongs to the Late Iron Age and to the Achaemenid and post Achaemenid period as well (Fig. 5)⁴.

The second season of excavation at Koj Tepe had two main objectives, both aimed at investigating the area in the presumed area of the eastern city-wall of the site: to find some architectural evidence of the wall (length, width, height) and to collect as much dating material culture as possible, in order to achieve a typological and possibly chronological stratigraphic differentiation.

The four trenches (1, 2, 3, 4) are progressively less wide according to the orientation of the line already present of those sections; Trench 1 (3 m wide x 4 m long) (Fig. 6), Trench 2 (3 m wide x 4 m long) (Fig. 7), Trench 3 (2,10 (E)/1,40 (W) wide x 6,50 m long) (Fig. 8) and Trench 4 (3 m wide x 6 m. long) (Fig. 9). The procedures of excavation have allowed one to recognize different 32 SU (stratigraphic units) (see appendices 1 and 2) in order to link the materials collected and to read and interpret the different alignments of the architectural remains and walls come to the light.

⁴ The geographic coordinates of the site are 42 S 300099.77 m E, 4386573.90 m N (UTM).

The process of excavation according to the sloping east-west profile of the area where the trenches are located, has determined, differing cutting approaches.

Trench 1

Trench 1 is opened more or less in the middle of the long area where sections 1 and 2 were worked out. In the eastern part (the highest part of the profile) where the clay-soil seemed more compact (and where wall remains were supposed to have been located), it was decided to go down very cautiously, with different kind of trowels; in the western part, instead, a spade with acute corner was used in order to cut more deeply the soil. The procedure adopted has always implied to cut from the top to the lower side of the trench, removing part of the clay soil for c. 10 and 15 cm. in time; this was made in order to reach the layers one by one, first recognized in the easternmost part of the trench, where the soil appeared more hard and consistent. The identification of SU (1) allowed one to yield pottery fragments together with some mill stones (mostly in granite) specially in the western part of the trench: the SU is constituted by a very hard and compact clay with inner small and medium size roots, grey colored.

Just in correspondence of the different spots marked with pottery fragments, a line (south-north c. oriented) of alternating pottery and stone fragments horizontally located comes to the light there (Fig. 10); this horizontal location most probably represents the end of SU (2), and it was probably related to a secondary occupation of the area, when the primary use of the presumed wall was already abandoned. In the south-western part of the trench traces of possibly mud bricks seemingly horizontally and by cut located come up also to the light; these bricks or mud segments (some of them in size 32, 35, or 40 cm) look like those found in different other possibly contemporary sites, as Kok tepa; generally the size of these mud bricks, in the local tradition of studies, are chronologically attributable to the late Achaemenid or to the early Hellenistic period (4th-2nd century BC).

Almost in the middle part of the section 2 (1998 season) at c. 5 m. from the western initial point, above the line of a fragmentary floor, already identified last year (Fig. 11), new cleaning operations allowed one to recognize more extensively part of the same floor, which is accurately identified and photographed (Figs. 12, 13). Above the floor which seems to

be constituted by at least three different very thin layers of burnt soils mixed up with ash, a very thin and small black painted pottery wall fragment (Inv. 143) has been found (Fig. 14), and a fragment of a mud brick as well, whose thickness is 12 cm. This small southern part of Trench no.1 is separated from the rest by a small N-W/S-E wall c. 45 cm wide.

In the western part it is still removed the SU (2) and according to the sloping profile of the terrain (east-west oriented) 4 large stones named E, F, G and H which previously came to the light (Fig. 15, 16) are also removed there. Most probably the location of these 4 stones (one of which, F was also surrounded by two big pottery's fragments vertically located), are most probably connected and chronologically related to the set of alternating stones and pottery's fragments found in the eastern part. This level clearly signs the end of SU (2) here. In the eastern higher part, the work is mostly devoted to a cleaning operation and to a slight removal small quantity of soil in order to identify a possibly mud bricks distribution. After the removal of the stone fragments identified in the western part it is possible to define a SU (3), because from here a particularly different hard and compact soil occurs; this new layer seems to be the consequence of the shifting of structural materials coming from the eastern top part where the remaining parts of the walls seemingly still stand up. Above and all around this part, the operation is continuing in order to exactly identify the eventual lines of mud bricks, which are still not precise. The content of SU (3) is made of not a very large amount of pottery fragments and stones.

Also the removal of SU (3) located above and inside large structural remains did not make clear eventual wall alignments. Some remains seem to be constituted by bricks, other by large blocks of clay and possibly connected to the cultural levels already observed on the section 1 last year, whose end is more or less correspondent to the fragmentary floor (Fig. 17), already seen. Within this level are still present pottery fragments.

The excavation in the southern part allows one to identify another portion of the trench to the south in a way separated from it by the alignment of a possibly small wall E-W oriented, 55 cm wide (Fig. 18); this allows to define a new SU (4) as well, whose location, as seen as from section 2, is about 1,10 m. above the basement reached last year. The topographic limits of this SU (4) are not yet clearly evidenced, even if it represents the content of an ambience cut off by the section 2. In the northern part of the trench it has been decided to clean out the area above a

very compact and hard terrain; going down in this part it is possible to define a new SU (5), since this layered part of soil also, most probably, belongs to the superior part of the inner deposit of an ambience correspondent to the one recognized in the SU (4). The content of this SU (5) is made of small fragments of “burnt clay”, mud plaster and some portion of grey colored soil. In the eastern part of the trench, finally, part of the wall starts to be defined much better, whilst in the western another possibly ambience is approximately defined, delimited to south and east by structural remains, still uncertain in character; the content of these remains is defined by SU (6); in the middle of the trench a particular circular shaped set of pottery and burnt clay looks like a fireplace (Fig. 19), where many pottery fragments and small fragments of burnt clay, ash and stones widespread. The content of this soil constitutes the SU (7).

In going down into this apparently circular-shaped pit (approximately 70-80 cm. wide), its precise limits are not clearly found. A very interesting painted stemmed base of small jar and not few burnt clay are coming from there too (Fig. 20). At - 15 cm the apparent pit presents a more hard soil E-W aligned. In the eastern part of the trench the situation is still more complicated. The N-S alignment of a wall is more visible, and it seems to be constituted by differing blocks of *paxa* (mud), whose readable dimension is about 62-63 cm. The western part of the trench is still not easily understandable as a whole; both the very hard block of soil, probably constituted by broken pieces of mud bricks and some also big fragments of pottery widespread everywhere. In this part is still present the SU (5), whilst in the southern the cleaning operation allows us to identify a new SU named (9), consisting of a different very hard compact clay. This SU also was seemingly used in a later period by a sporadic occupation, since some small functional holes are present (Fig. 21). Both the SU are, in any case, connected! It has been decided, thus, to remove them, and after that, a more clear cultural layer is coming up.

SU (5) and SU (9) are, in a sense, similar even if their respective topographic location is a little bit different; the first lies practically in the middle of the trench and the second closer to a presumed corner of the ambience, between the N-S blocks of *paxa* and the N-E/SW new alignment (Fig. 22). In order to better determine possible clear alignments both the areas are cutting with a spade and finally three possibly corners come to the light, defining thus a Room I, SU (11) (Fig. 23). Above the N-S blocks of

paxa one may assume that the constructive system can be organized and developed in the following way: an alternating course of mud bricks and sand (*pisok*) in the middle followed by another course of mud bricks. Room I is, however now more clear and its inner filling contains a rather large quantity of animal bones and pottery. It has been decided to go down again in the southern part of the trench defined as SU (4), where few pottery fragments come for the moment to the light, and also in the Room I, defining a new SU (14) (Fig. 24), containing not a very large amount of materials; at - 15 cm c. it was possible to find a kind of flat plane as well, widespread over the whole area. In the western part along the southern oblique wall there is evidence of a gray (possibly ash) colored soil. The Room I looks like almost rectangular in shape, even if the northern side is still not visible for the end of the trench; it has also been possibly to observe a kind of *sufa* (bench), alongside the eastern side. The inner structure of the wall at the eastern side is, unexpectedly, constituted by an alternating vertical line of large block of *paxa*, mud bricks, and *paxa*. On the southern side in the fragmentary ambience whose content has been defined as SU (4) one goes down for at least two different cuts defined by SU (15).

In Room I going further down the hard clay seals off the SU (14), and a new SU is identified (18). Its consistency is also very hard containing sand remains as well; the SU is rather poor of potsherds, and animal bones, a stone fragmentary of 4 legs animal figurine (Inv. 44) (Fig. 25) have been found. The main difficult task is to exactly measure and interpret the presumed wall remains, apparently running from E-S/N-W which is still elusive. In the meantime going down for a small part inside the southern part of the trench, already defined as SU (4), it is possible to define now a new layer SU (15), which more or less reaches the floor.

For at least 20 cm also it was decided to go down into another ambience, already defined as SU (6), where the soil is very hard.

The operations are still acting within the Room I on the SU (18), very hard brown colored, and above the small wall SE-NW oriented, where the SU (5) and SU (9) have not been yet removed. This wall, apparently dividing the area of SU (5), after more cleanings operations appears to present, maximum, two lines of mud bricks and looks like as finished. It means that the Room I was used later for a short time. The large amount of pottery up to now collected, suddenly decreases very much and at - 2,51 m (absolute quote) is also appearing a circular hole (Fig. 26) in correspondence

of the square hole come to the light in SU (15) (Fig. 27), with the coming up of the hole is, thus, defined a new SU (23).

In the southern part after going down in the SU (7) and SU (15), the fragment of the floor is evidenced in the whole area excavated, according to the indication of section 2 of last year. Still down in SU (7) it is possible to define better the width of the western wall of the Room I. This wall as the continuation of the same wall in the Trench 4 (see below) present a kind of a parapet or step which makes the whole line particularly articulated.

The floor is located at - 1,27 cm from the northern small wall SE-NW oriented, and it is slightly sloping to the east; more or less in the centre there is a square hole for activity whose content is collected as a sample. The interface of this floor is defined as SU (25).

Down in the Room I the SU (23) is defined by the coming to the light of a circular hole, in order to find the same level of floor as the one occurred in SU (22). The soil of the floor finally is reached at -2,24 cm in the SU (24) (Figs. 28; 29), and it is sloping down in the eastern side here too. Pottery fragments are coming up and some of them can be dated to an earlier date. The floor is made of hard clay, gray colored and in some parts reddish burnt soil. Close to the eastern side the floor seems to go a little bit ahead to East and it means that the presumed *sufa*, left unexcavated, should be at least partially removed in order to see the front face of the wall which now clearly seems to constitute the main encircling wall of the tepe. The *sufa* is located at - 1,54 m (absolute quote). The pavement SU (24) is very much endorsed and presents at west a fire-structure, quadrangular in shape. In the centre there are pottery and stones, may be located in a small sloping endorsement. Alongside the eastern side another endorsement is found. Making empty the square hole soil samples are collecting. The quote of the appearing of the square hole is at - 2,21 m (absolute quote) and the bottom is at - 2,81 m (absolute quote).

Still down in the western part of the Trench 1 in the SU (6) at - 75 cm. from the small wall N-S oriented, it seems easy to distinguish the Room I from a second ambience. Here a footed vessel, almost complete with red burnished slip has been found (Inv. 90) (Fig. 30 a, b).

The operational activity is mainly aimed at cleaning the inner sections of Room I, in order to put in relation the SU already identified. The small depth of the wall constituted by two or three courses of mud bricks and the mud broken clay till SU (18) of the floor, is now more clear (Fig.

31); then a hard compact clay brownish colored related to SU (23) and SU (24) starts.

The cleaning of the surface of the floor gives evidence of the existence of burnt clay, probably related to a simple fireplace and to more than one hole (Fig. 32a): holes 0, 38 cm. h, and 23 wide; hole 1, 38 cm. high, and the side looking to be of a square, 15 x 15 cm (brown colored soil with two fragments of pottery); hole 2, 14 cm deep and 9 cm wide; hole 3, 30 cm high and 15 cm wide and it is very much related to the fire place; specially hole 4 is very small; hole 5 is composed by two parts with at least 6 different very small holes; the structure seems to go inside the eastern side of the Room I (Fig. 32b).

More cleaning operation and the removal of a jar located in SU (22) and SU (24) are conducted in Room I; many fragments of jar, of a spindle whorl and a basis of a vessel (Fig. 33) come from SU (26).

According to the results achieved it is important to remove part of the small wall N-S oriented which goes against the big wall delimiting to east the Room I, especially in the southern corner which is located alongside the section 2. The possibility that this small wall was only later related to the big, is more than an hypothesis, and, thus, it has been decided to remove a large part for almost 60 cm. (Fig. 34) in order to reach the level of floor SU (21) in Room II and the floor SU (24) in Room I.

This operation between Rooms I and II which is defined by the southern part of Trench 1, gives evidence of the presence of mud bricks and *paxa* there too (Fig. 35). On the floor a rim of a large jar (*kum*) and two small circular broken bases of jars have been found in SU (26) and SU (27) (Fig. 36a, b).

The structural remains now more visible on the wide front of the trenches, may be interpreted in the whole area as: a probably period **I**, constituted by the main structural phase of the wall (*paxa* and mud bricks); a period **II** constituted by the insertion of mud bricks and of a *sufa* (short period between them); a period **III** constituted by the floors with the jar and holes.

At last in the cleaning operation in the southern side where it was a kind of pit, on the eastern front, there are mud bricks faced just above the same block of *paxa*, coming from Trench 2. Also a corner (not exactly) is coming up with a circular shaped mud block which seems to be related to the space in SU (20) in Trench 2 (see below).

The western part of the trench is divided by a *paxa* and a line of mud bricks; in the area close to the Trench 2 other mud bricks appear, and seem to be superimposed over the *paxa*, filling, possibly, an original empty corridor or gallery.

As last operation in the trench the central depression in Room I with grayish soil, stone, pottery fragments and bones is removed. The outline of the depression at the end of the work is elliptical and it is located in the large depression in the centre.

Trench 2

A cleaning operation on the eastern extension of the previous section 2, gives to the light different remains of structural elements (Fig. 37). In the area where it is possibly that still an architectonic structure stands up, a mud brick (whose possible dimensions are cm. 25,8x12) has been also found.

Following these interesting results it has been decided to work on the Trench 2, just alongside and eastern ward of the Trench 1, leaving a very small (50 cm wide) part unexcavated. As a first operation the SU (S) has been removed.

Then is removed SU (1) which, as in the Trench 1, contains very few large pottery fragments and many small roots. The granulation of the soil is very large and the color is light grey.

Just after this removal at - 12 cm c. in the middle sporadic traces of ash came to the light and along the eastern border a very late modern pit (20 cm diameter) is found and excavated; the inner soil is named SU (10), and did not present any archaeological remains (Figs. 38a, b). Some small samples of soil are, however, collected. We go down still for few centimeters in the whole area.

On the western part a small portion of soil (few cm by trowel) has been removed. As it appears is defined a new SU (8), because according to the eastern extension of section 2 this part of the soil is the first clearly covering structural remains; this SU (8) most probably corresponds to the SU (2).

Down in the western narrow part of the trench just in correspondence of a possible empty space as seen as from the eastern extension of section 2, is thus defined a new SU (20) (Fig. 39). Down cleaning the space between

the section remained untouched and the block of the wall, something looking like as a small floor and another small wall is appearing.

It is possible to observe the block of *paxa* over which there are 3 mud bricks. Not many pottery fragments are coming from. Finally there is evidence of the wall with a line of bricks, which represents the SU 29 (Fig. 40) corresponding to the same situation (Fig. 41) in the Trench 1 as well.

Down in the western part reaching the floor, which represents SU (30), there are very few pot fragments.

The small diaphragm between the main wall and the small wall delimiting the Room I still remains. The soil is consisting of the superior part of a big block of mud or *paxa* and some mud bricks, some of them still complete. The floor SU (24) and SU (21) already reached has the same characteristics as those present over the floor of the rest of area. Removing also the bank or *paxa* located in the eastern part, the floor is not appearing and some mud bricks are, instead, found. The wall on its southern part is appearing in its façade.

Trench 2/3

After having cleaned the area in SU (31) is reached the block of *paxa* and a floor which could be the SU (32).

Trench 3

The Trench 3, is located just alongside the area at east of the Trench 2, leaving a very small (50 cm wide) section unexcavated. As a first operation the SU (S) has been removed, containing few pottery fragments and many roots with bio-turbation activity. It has also been decided to start to remove the SU (8) which covers directly the structural remains, as it occurred in Trench 2.

Only a small part is excavated in the southern part and then, according to the find of some fire-remains SU (29) (Fig. 42) on the eastern extension of section 2, a large part, 1 m at least deep, is furthermore cut in order to reach from the top the eventual structural remains.

Down in the NE extension of the section 2, the SU (29) represents the accumulation of the soil over the activity area and SU (31), which has been revealed to be not a structure, consisting in an activity area in itself with many iron and pottery slags, bones, and specially two horns of sheep

and many nuts of burnt peach pits, a complete knife (Fig. 43) and pottery fragments .

Trench 4

The Trench 4, is located west of the Trench 1, irregularly sized because the area was already cut off in the realization of the section 1 last year and before (Fig. 44).

After the removal of the SU (S), it has been decided to remove also a SU (1), which in the S-E corner brought to the light stones and a big pottery wall fragment with a digital decoration along a small portion of a wall, continuing from Trench 1. This stratigraphic situation allow us to consider a SU (2), but the large quantity of pottery and stone fragments led one to consider the existence of a new SU (12).

After the removal of SU (12), the SU (13) and SU (16) seem to be very similar in character; to the south a sort of wall is clearly appearing running alongside the whole southern side of the Trench. In the eastern part is coming to the light a more greysh soil probably derived from cooking activities.

A rather large apparently wall SW-NE oriented, seems to divide the trench in two parts. In the eastern is recognized the SU (17) and in the western the SU (19). In the first a large amount of pottery fragments including a rim of a large mouthed handled painted jar and many cooking ware come to the light. After a more cleaning operation the wall is looking like not existent. In the SU (17) very large amount of pottery is coming up, including cooking vessels and painted fine ware.

Some further control has been made on the small wall, which represent the continuation of that of the Trench 1. The floor of this ambience (Room III?) corresponds more or less to the cultural levels singled out in the western part of section 1 last year. The floor is located at - 1,15 from the N-S small section left unexcavated between the Trenches 1 and 4; the absolute quote is - 2,65.

Realizing the plan of the Trench 4, where notwithstanding two small further cut in the SU (25), it is clear that there is no trace of a clear floor, as it was clearly evidenced in the section 1.

Down in the space between Rooms I and III (Trench 4) in the SU (6) a vessel was found. Beneath the level where the vessel was found, the SU

(26), more or less corresponding to the SU (19) of the Trench 4, the SU (27) has been reached. Also the wall in the Trench 4 and the corner of section 1 of last year would be of the first phase (Figs. 45, 46).

Appendix 1

List of SU:

SU (S) Humus, thick soil with a very fine granulometry, high level of drainage, some grass remains on the surface, vegetation and small size roots; sporadic pottery fragments inside; grayish colored. Present in all the trenches.

SU (1) cultural layer of soil with pottery fragments, identified inside all the trenches, supposed to be covering the first layers of the structural remains; grayish colored.

SU (2) cultural layer immediately under the SU 1; it is located mainly in the Trenches 1 and 2, containing a rather high presence of pottery fragments and mill stones. The soil is grayish colored. It is practically similar to the SU (8) of the Trench 2 Trench 3.

SU (3) cultural layer recognized after the removal of the big stones and mill stones present in the Trench 1. It is very similar to the SU (2), but it is more compact and hard, very difficult to be cut with the trowel.

SU (4) SU defined mainly on topographic basis, consisting of the upper part of the soil of the Room II, whose floor was clearly present alongside the section 1, already in 2008.

SU (5) cultural layer mainly constituted by very hard and compact clay body, light brown colored, with a very fine granulometry, spreading over the western half of the Trench 1, with a very low frequency of materials; it covers and/or corresponds to SU (9).

SU (6) cultural layer, located on the westernmost side of the Trench 1, defined where a big piece of burnt clay spots came out, containing ash and pottery.

SU (7) cultural layer just located beside to SU (6); apparently the morphological aspects of these SU looked like two contiguous pits, whose precise identification is difficult to be found. The SU contains a large amount of big walls of jar and small stones and some ash remains.

SU (8) cultural layer constituting the one seemingly to cover directly the structural elements of the mud bricks of the walls on the Trenches 2 and 3.

SU (9) cultural layer constituting another one seemingly to cover directly the structural elements of the mud bricks of the walls on the Trenches 2 and 3.

SU (10) SU defined only on topographic basis and constituting by a small pit (40 cm wide) circular shaped, in the middle of the Trench 2 and made of a dark (black burnt?) clay, consequence of a sporadic later human presence above the wall.

SU (11) SU defined only on topographic basis, constituting the internal part of the space constituting the Room I with animal bones and pottery fragments.

SU (12) SU defined only on topographic basis, constituting a set of stone and pottery in Trench 4.

SU (13) cultural layer constituting together with the SU (16) the surface content of the rooms in Trench 4.

SU (14) cultural layer constituting the soil located above the *sufa* in the Room I.

SU (15) cultural layer in the southern part of the Trench 1, beneath the SU (4) in the southern part, alongside the section 2, delimited by a small mud bricks and *paxa* wall.

SU (16) cultural layer constituting together with the SU (13) the surface content of the different parts in the Trench 4.

SU (17) cultural layer constituting the surface content of the room III (???) in the Trench 4 in its easternmost part.

SU (18) cultural layer in the Room I, Trench 2, after the appearing of the *sufa* of the room delimited by a small wall.

SU (19) cultural layer in the Trench 4 in its westernmost part; it is correlated to SU (17).

SU (20) cultural layer in Trench 2 inside the space in the eastern extension of the section 2 identified between two blocks of mud.

SU (21) cultural layer after SU (15) in Trench 1.

SU (22) cultural layer in the Trench 1 in the Room I, beneath the level of *sufa*.

SU (23) cultural layer in the Room I with the appearing of the southern hole irregularly shaped.

SU (24) cultural layer represented by the very endorsed floor in Room I.

SU (25) cultural layer represented by small trenches alongside the presumed wall in Trench 4.

SU (26) cultural layer where an almost complete vessel has been found in the western part of the Trench 1.

SU (27) cultural layer under the SU (26) in the western part of the Trench 1.

SU (28) cultural layer under the SU (8) in Trench 2.

SU (29) cultural Level in Trench 2 and on the eastern extension of section 2.

SU (30) floor on the western part of the Trench 1.

SU (31) cultural layer of the activity area on the eastern extension of the section 2 with iron slags and burnt peaches nuts.

SU (32) cultural layer represented by a possible external floor with holes and a mill-stone on the external side of the *paxa* wall on the eastern extension of section 2.

References

al-Tabari, Ibn Jarir (1988-2007) *Tarikh al-Rusul wa al-Muluk (Tarikh al-Tabari)*, ser. II, p. 1590. New York.

Cattani, M. and Genito, B. (1998) The pottery chronological seriation of the Murghab Delta from the end of the Bronze Age to the Achaemenid period: A preliminary note. (Gubaev, A., Koshelenko, G. e Tosi, M., eds.) *The Archaeological Map of the Murghab Delta. Preliminary Reports 1990-95*, pp. 75-88. Roma.

Francfort, H.P. (1988) Central Asia and Eastern Iran. (Boardman, J., Hammond, N., Lewis, D. e Ostwald, M., edd.) *The Cambridge Ancient History*, vol. IV, pp. 165-193. Cambridge.

Francfort, H.P. (2005) Asie Centrale, *L'archéologie de l'empire achéménide. Nouvelle Recherches, Actes du Colloque organisé au Collège de France par le "Reseau International d'études et des recherches achéménides*, 21-22 novembre 2003, *Persika*, 6, pp. 313-352. Paris.

Frumkin, G. (1970) *Archaeology in Soviet Central Asia. Handbuch der Orientalistik*, vol. III, 1. Leiden.

Genito, B. (1998a) The Iron Age in Merv Oasis. (Gubaev, A., Koshelenko, G. e Tosi, M. edd.) *The Archaeological Map of the Murghab Delta. Preliminary Reports 1990-95*, pp. 89-96. Roma.

Genito, B. (1998b) Trial-Trench at Site No. 215. (Gubaev, A., Koshelenko, G. e Tosi, M. edd.) *The Archaeological Map of the Murghab Delta. Preliminary Reports 1990-95*, pp. 125-35. Roma.

Genito, B. (1988c) The Iron Age in Merv Oasis, (Gubaev, A., Koshelenko, G. e Tosi, M. edd.) *The Archaeological Map of the Murghab Delta. Preliminary Reports 1990-95*, pp. 89-95. Roma

Genito, B. and Gricina, A. (2009) The Achaemenid Period in the Samarkand Area (Sogdiana), in Genito B. (ed.), *Newsletter Archeologia*, (CISA), n. 0,

pp. 122-141.

(www.unior.it/index2.php?content_id=3632&content_id_start=1).

Gubaev, A. Koshelenko, G.A. e TOSI, M. (eds.) (1998) *The Archaeological Map of the Murghab Delta. Preliminary Reports 1990-95*. Roma.

Gumbah G. (1974-1975) Ptolemy and the Middle Asia in Kushan epoch, *Middle Asia in Kushan epoch. Works of the international conference on a History, Archaeology and Culture of the Middle Asia in Kushan epoch* (Dushanbe, 1968). 2 tom. Moskva.

Ibn al-Fakih, al-Hamadani (1967) *Compendium libri Kitab al-Boldan*, ed. M.J. de Goeje, BGA, p. 19. EJ. Brill.

Ibn Khordadbeh, Abu'l Qasim Ubaid'Allah (1889) *Kitāb al Masālik w'al Mamālik*, de Goeje (with Fr. tr., 2nd ed., 1967) p. 33. Leiden.

Inevatkina, O.N. (1983) Citadel' Afrasiaba, *Istituta Material'naja Kul'tura Uzbekistana*, 18. Tashkent.

Inevatkina, O.N. (1995) Akropol' drevnego Samarkanda v structure goroda (VI do n.e.-V n.e.). *Avtoreferat kandidackoj dissertacii*. Moskva.

Isamiddinov, M.Kh. (2002) *Istoki gorodskoj kul'tury Samarkandskogo Sogda*, Tashkent.

Koshelenko, G.A. (ed.) (1985) *Drevnejšie Gosudarstva Kavkaza i Srednej Azii*. Moskva.

Lazard, G., Grenet, F. and de Lamberterie, C. (1984) Notes bactriennes, *Studia Iranica*, 13, pp. 199-239.

Lyonnet, B. (1997) *Prospection archéologiques en Bactriane orientale (1974-1978) Sous la direction de Jean-Claude Gardin. Volume 2. Céramiques et peuplement du Chalcolithique à la conquête arabe. Mémoires de la Mission Archéologique Française en Asie Centrale. Tome 8*. Paris.

Mantellini, S. (2001) The Dargom Canal and the Early Settlement of the Middle Zeravshan Valley, *Italo-Uzbek Scientific Cooperation in Archaeology and Islamic Studies: An Overview (Rome, January 30, 2001)*, edited by Samuela Pagani, Rome, pp. 41-48.

Mantellini, S. and Rondelli, B. (in corso di stampa) Strategie e metodi per la storia del popolamento nella Media Valle dello Zeravshan (Uzbekistan). La ricostruzione in ambiente GIS attraverso survey, cartografia storica, telerilevamento e modellazione tridimensionale, *Teoria e Pratica nell'analisi e interpretazione della cultura materiale antica, I Convegno degli Studenti di Archeologia, Napoli 26-28 maggio 2003*.

Mantellini, S. (2009) Alma Mater Studiorum – Università di Bologna
DOTTORATO DI RICERCA ARCHEOLOGIA Ciclo XXI Settore/i
scientifico disciplinari di afferenza: AREA 10, L-ANT/10 *La gestione dell'acqua come oggetto d'indagine per la ricostruzione delle dinamiche insediamentali e delle trasformazioni del territorio. Il caso di Samarcanda nella Media Valle dello Zeravshan (Uzbekistan) Settlement Dynamics and Water Management for the Reconstruction of the Landscape Transformations: A Case Study form the Middle Zeravshan Valley (Samarkand, Uzbekistan)*. Ravenna.

Masson, V.M. e Sarianidi, V. (1972) *Central Asia before the Achaemenids*. London.

Pugačenkova, G.A. and Rtveladze, È.V. (1985) s.v. Afrasiab, *Encyclopaedia Iranica*, I, edited by Ehsan Yarshater, pp. 576-578. London, Boston and Henley.

Rondelli, B., Mantellini, S., Bonora, G.L. e Franceschini, F. (2003) Carta Archeologica della Media Valle dello Zeravshan: aspetti diversificati per una comprensione diacronica del popolamento antico - Missione Archeologica italo-uzbeka a Samarcanda: campagna 2002, *Ocnus, Quaderni della Scuola di Specializzazione in Archeologia - Università di Bologna*, 11, Bologna, pp. 35-63.

Rostovcev O.M. and Ivanickiy I.D. (1976) Raboty v Samarkandskoj oblasti, *Arheologičeskie otkrytiya*. Moskva.

Rtveladze, E.V. (1981) Ksenippa - Paretaka. (Litvinskij, B.A., ed.) *Kavkaz i Srednjaja Azija v drevnosti i srednevekovye (istorija i kul'tura)*, pp. 95-101. Moscou.

Sagdullaev, A.S. (1987a) Osobennosti osedlogo rasselenija v južnom Sogde v epohu antičnosti, (Pugachenkova, G.A. e Askarov, A., edd.) *Gorodskaja kul'tura Baktrii-Tokharistana i Sogda*, pp. 131-134. Taškent.

Schaeder, H.H. and Bosworth, C.E. (1995) s.v. Samarkand, *The Encyclopaedia of Islam - new edition*, English version, VIII, pp. 1031-1034. Leiden.

Shirinov, T. and Tosi, M. (2001) Land behind Samarkand. The Archaeological Map of the Middle Zeravshan Valley: Perspectives and Geographical Repartitions, *Italo-Uzbek Scientific Cooperation in Archaeology and Islamic Studies: An Overview (Rome, January 30, 2001)*, edited by Samuela Pagani, Rome, pp. 13-40.

Stride, S. (2001) Le programme de prospection de la MAFOuz B dans la région du Sourkhan Darya. (Leriche, P., Pidaev, C., Gelin, M., Abdoullaev, K. e Fourniau, V. edd.). *La Bactriane au carrefour des routes et des civilisations de l'Asie centrale. Termez et les villes de Bactriane-Tokharestan. Actes du colloque de Termez 1997*, pp. 173-183. Paris.

Sulejmanov, R.K. (2000) *Drevnij Nahšab. Problemy civilizacii Uzbekistana VII v. do n. e. - VII v. n. e.* Samarkand-Taškent.

Tosi, M., Rondelli, B., Menghi, E. e Mantellini, S. (2002) Interventi archeologici in Uzbekistan, *Ocnus, Quaderni della Scuola di Specializzazione in Archeologia - Università di Bologna*, 9-10, Bologna, pp. 343-351.

Tosi, M. et alii (2007) *La Carta Archeologica della Media valle dello Zeravshan: strategie e metodi per la storia del popolamento nella regione di*

Samarcanda, in «The Role of Samarkand in the History of World Civilization (Material of the International Scientific Symposium devoted to the 2750th Anniversary of the City of Samarkand, Samarkand, 24- 26 May 2007)», Tashkent 2007, pp. 68-73.

Vafaev G. Ivanickyj (1992) Laylakuytepe - ranneantičnoe sel'skoe poselenie Samarkandskogo Sogda, *Uzbekistan v drevnosti i srednevekov'e. Tezisy dokladov respublikanskoj konferencii molodyh istorikov*. Samarkand.

Vogelsang, W. (1992) *The Rise and Organization of the Achaemenid Empire. The Eastern Iranian Evidence*. Leiden.

Acknowledgements:

Republic of Uzbekistan:

- Ministry of Culture
- Institute of Archaeology of Uzbek Academy of Sciences
- The Embassy of Uzbekistan, Rome

Republic of Italy:

- Ministry of Foreign Affairs (DGCS & DGPCC)
- Italian Institute for Africa and the Orient (IsIAO)
- University of Bologna
- University of Naples “L’Orientale”
- Italian Embassy at Taskent



Fig.1 - Koj Tepa general view as seen as from SE, after MAI, UNO University

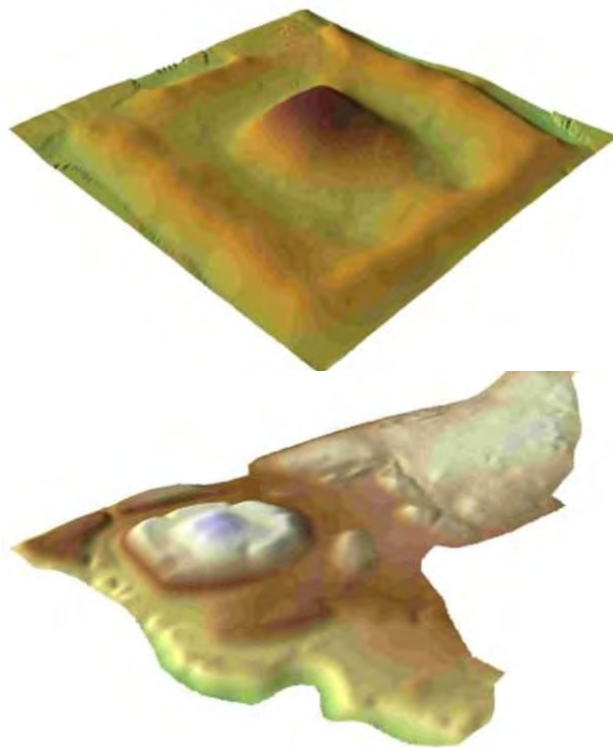


Fig.2 - Koj tepa 3d map, after MAI, Bologna University (submitted to a revision by UNO, Naples)

FORMS OF SOCIAL EVOLUTION



ASPECTS OF THE SOCIAL EVOLUTION OF THE ACHAEMENID STATE

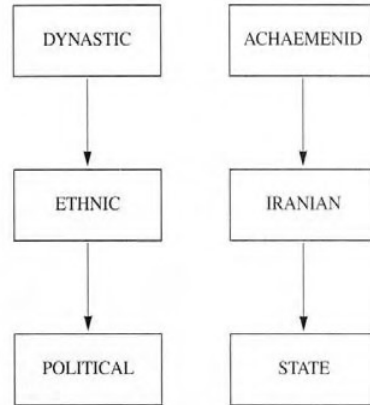


Fig.3 - forms of the social evolution and the different aspect/levels to be investigated, after Genito 1988



Fig.4 - citadel of Kok tepa, photo of the author, 2002



Fig.5 - Koj Tapa satellite view, after Google 2009



Fig.6 - Trench 1, before the excavation. At the foreground section 2, after MAI, UNO, the author



Fig.7 - Trench 2, after the removal of SU (1). At the foreground, the eastern extension of section 2 and the wall remains, after MAI, UNO, the author



Fig.8 - Trench 4, before the excavation. At the foreground section 1, after the MAI, UNO, the author



Fig.9 - Trench 3, after the removal of SU (1), after the MAI, UNO, the author



Fig.10 - Trench 1, after the removal of SU (1), the lines of alternating pottery fragments and stones come to light, after the MAI, UNO, the author

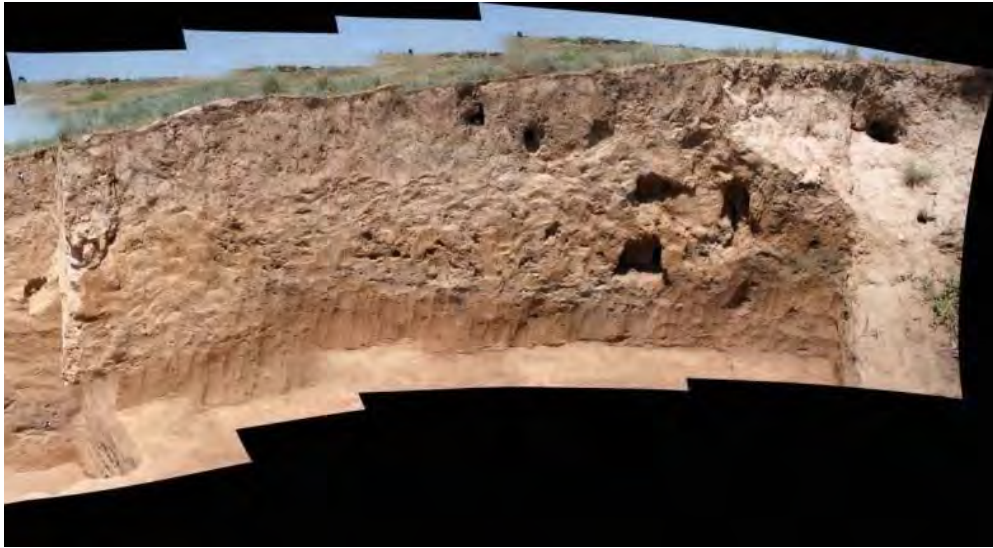


Fig.11 - section 2 with the burnt level of a floor, already evidenced in 2008



Fig.12 - Trench 2, along the section 2, the fragmentary part of the floor, already recognised last year, after MAI, UNO, the author



Fig.13 - Trench 2, along the section 2, the fragmentary part of the floor, already recognised last year, detail, after MAI, UNO, the author



Fig.14 - pottery fragment coming from the floor in the hole in the section 2, Inv. 143, after MAI, UNO, F. Spinelli



Fig.15 - SU (2), the stone E, after MAI, UNO, the author



Fig.16 - SU (2), stone F, after MAI, UNO, the author

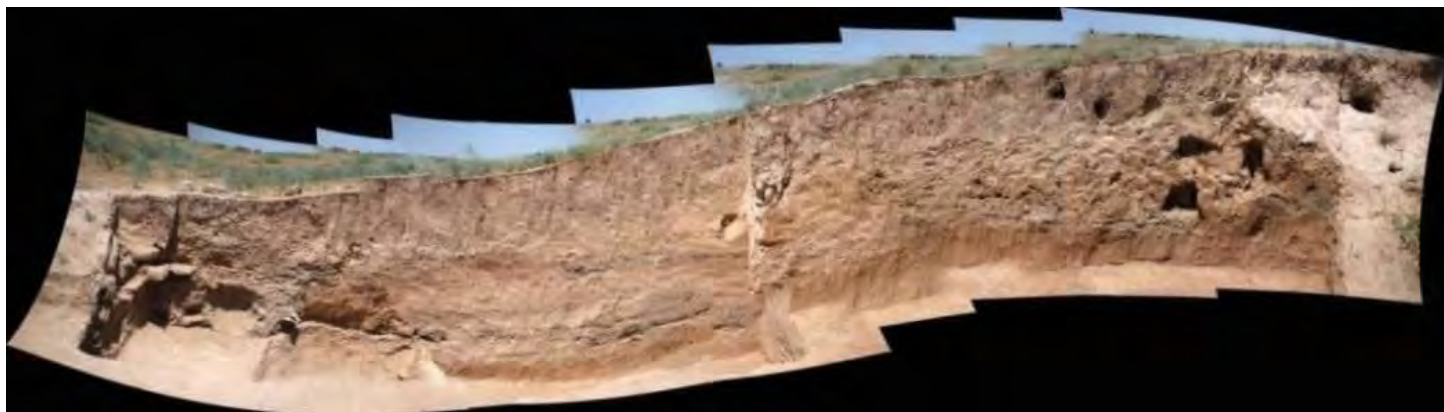


Fig.17a - photo composition of the sections 1 and 2 (2008), after MAI, UNO, the author



Fig.18 - alignment of a small wall E-W oriented, 55 cm wide which delimits the SU (4) from the rest of the Trench 1, after MAI, UNO, the author



Fig.19 - Trench 1, SU (7), circular-shaped remains of burnt clay, after MAI, UNO, the author



Fig.20 - Trench 1, SU (7), painted stemmed base of small jar, Inv. 123, after MAI, UNO, F. Spinelli



Fig.21 - Trench 1, SU (9), southern part with small functional hole, of a secondary occupation, after MAI, UNO, the author



Fig.22 - Trench 1, SU (5) and SU (9), eastern part with the front wall made of blocks of *paxa* and the presumed N-E corner, after MAI, UNO, the author



Fig.23 - Trench 1, SU (11), Room I, with floor of a secondary occupation, after MAI, UNO, the author



Fig.24 - Trench 1, SU (14), Room I, and a probable *sufa* along the eastern side, after MAI, UNO, the author



Fig.25 - SU (18), a fragmentary stone figurine with a 4 legs animal (Inv. 44), after MAI, UNO, the author



Fig.26 - Trench 1, SU (18), SU (23) Room I, and a circular hole in the southern part close to US (4), after MAI, UNO, the author



Fig.27 - section 2, floor SU (23,) below SU (4) and SU (15), with the square hole, after MAI, UNO, the author



Fig.28 - Trench 1, Room I, floor SU (24.), below US (22), after MAI, UNO, the author



Fig.29 - Trench 1, floor SU (24,) below SU (22), after MAI, UNO, the author



Fig.30 a, b - Trench 1, western part, SU (6), location and photo of a stemmed base of a jar, Inv. 90, after MAI, UNO, the author and F. Spinelli



Fig.31 - courses of mud bricks and the mud broken clay till SU (18) of Room I, after MAI, UNO, the author



Fig.32 a, b - burnt clay, probably related to a simple fireplace and to more than one hole; these small structures seem to go inside the eastern side of the Room I, after MAI, UNO, the author



Fig.33 - Koj tepa, fragment of vessel base coming from SU (26), Inv. 150, after MAI, UNO, the author



Fig.34 - Koj Tepa, Removal of the small wall in Room II SU (24) for 60 cm, after MAI, UNO, the author



Fig.35 - Koj Tepa, mud bricks and *paxa* in the southern limit of Room I, after MAI, UNO, the author



Fig.36 a, b - section 2, pottery fragments coming from SU (26, 27) large *Kum* (storage jar) and broken circular bases of jar, after MAI, UNO, the author



Fig.37 - western extension of section 2, and the appearing of structural remains. Above the opening of the Trench 2, after MAI, UNO, the author

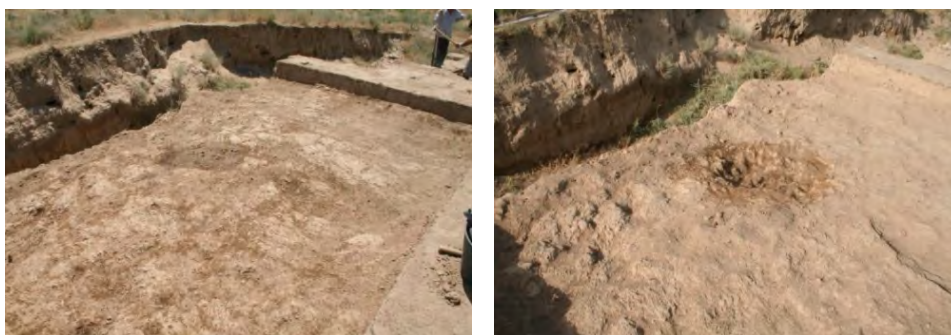


Fig.38 a, b - Trench 2, SU (10) a late large hole, before and after the excavation, after MAI, UNO, the author



Fig.39 - Trench 2, western part, SU (20), possibly structural remains, after MAI, UNO, the author



Fig.40 - Trench 2, wall with a line of bricks, which represents the SU (29), after MAI, UNO, the author



Fig.41 - Trench 1, southern part, lines of mud bricks, after MAI, UNO, the author



Fig.42 - Trench 2, western part, outside of the structural remains, some fire-remains SU (29), after MAI, UNO, the author



Fig.43 - Trench 4 SU (31), knife, after MAI, UNO, F. Spinelli



Fig.44 - Trench 4, before the excavation, after MAI, UNO, the author



Fig.45 - Trench 4, SU (2) SU (12), SU (13) and (16); in the eastern part SU (17) and in the western SU (19), (25), US (26), SU (27), after MAI, UNO, the author

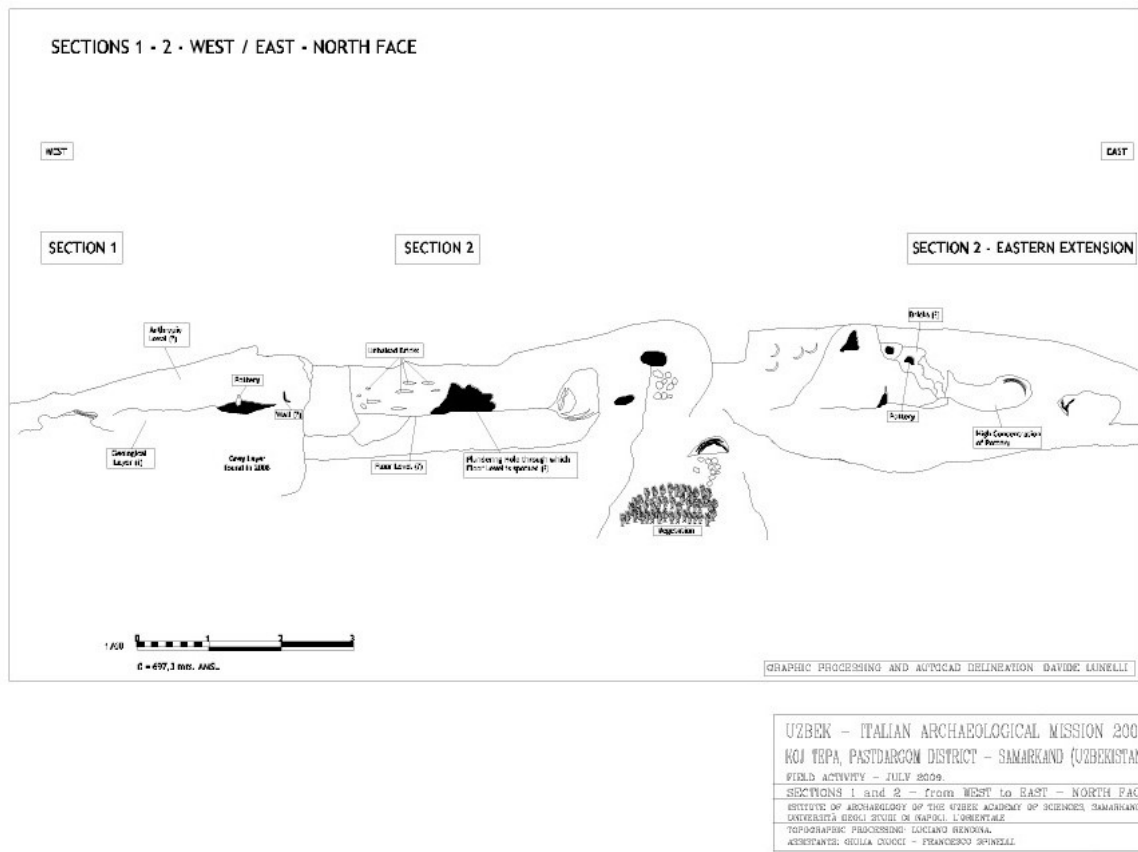
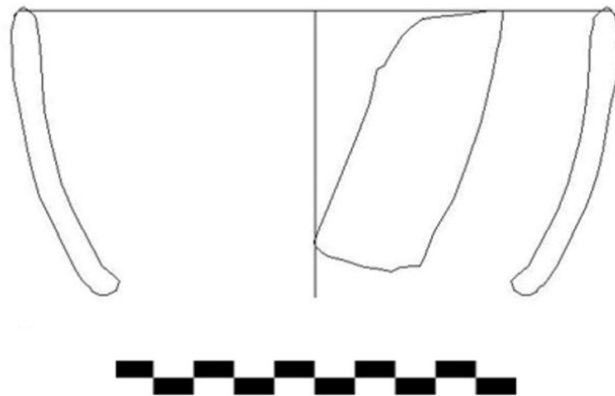
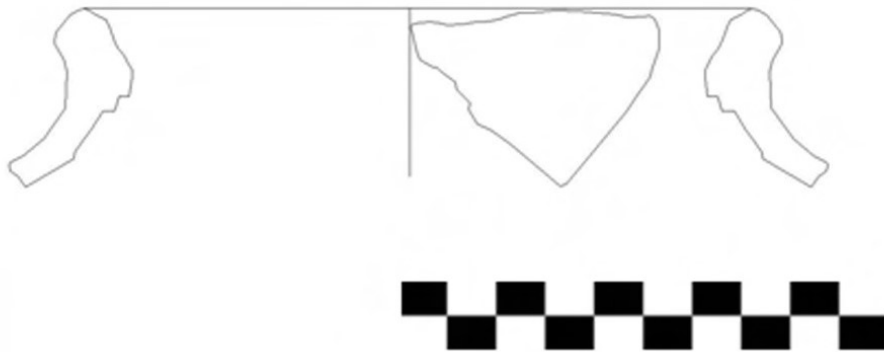
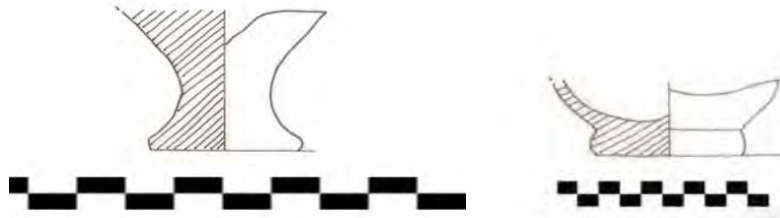


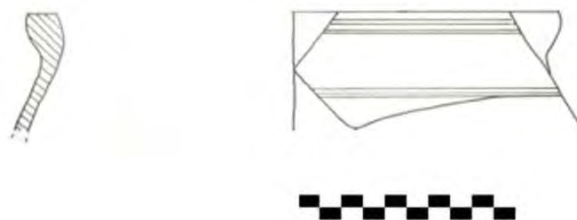
Fig.46 - sections 1 and 2, drawing by Luciano Rendina and graphic elaboration by Davide Lunelli (2009)

APPENDIX 2

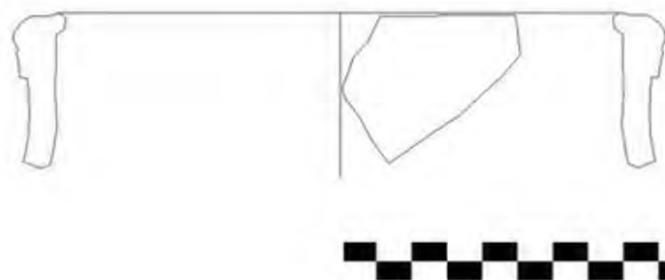
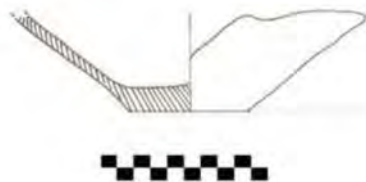
*LIST OF THE MAIN TYPES AND POTTERY
FORMS*



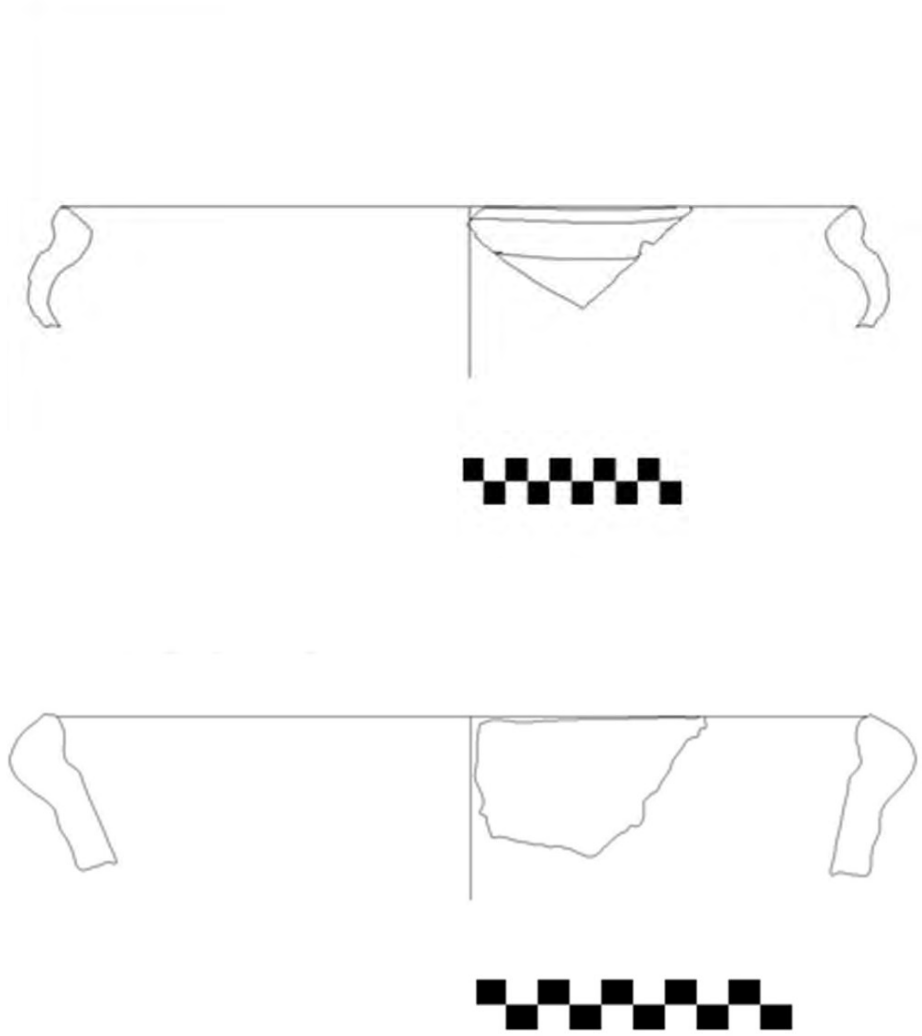
Inv. 0075, Trench 1, SU 2; Inv. 0076, Trench. 1, SU 2; Inv. 0134, Trench 1, SU 2;
Inv. 0136, Trench 1, SU 2



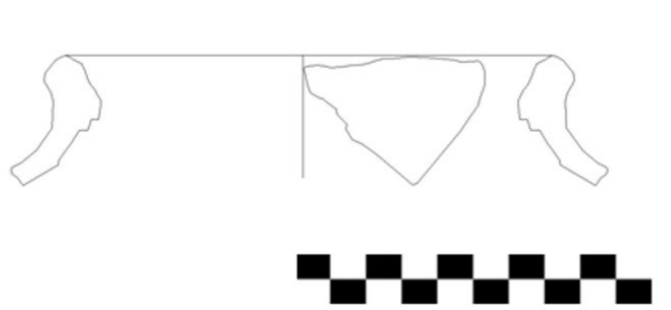
Inv. 0034, Trench 1, SU 3; Inv. 0061, Trench 1, SU 3



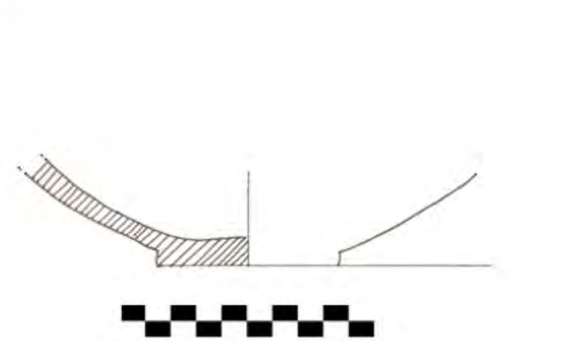
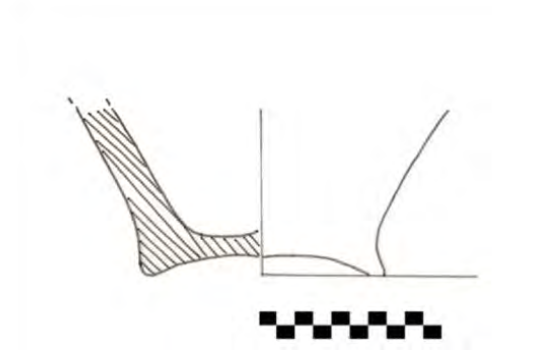
Inv. 0073, Trench 1 SU 5; Inv. 0130, Trench 1, SU 5



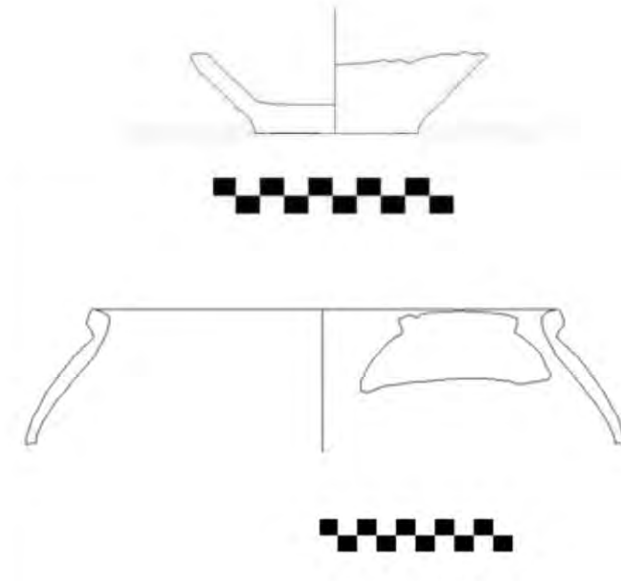
Inv. 0087, Trench 1, SU 6; Inv. 0098, Trench 1 SU 6



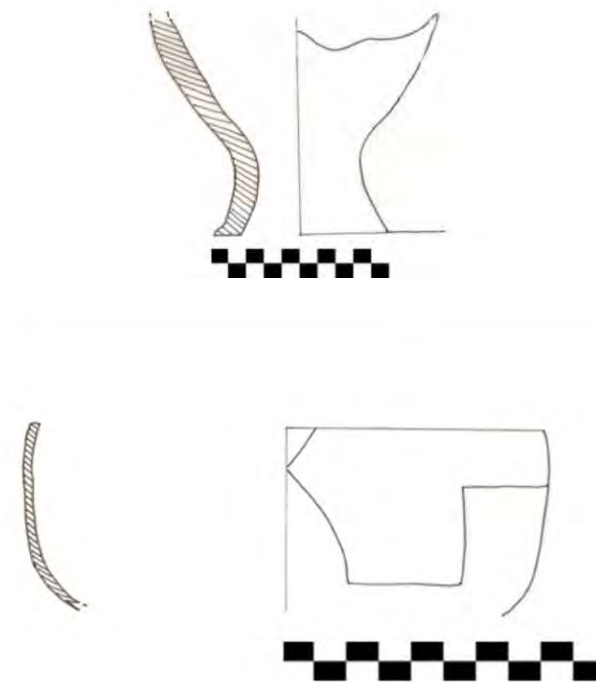
Inv. 128, Trench 1, SU15



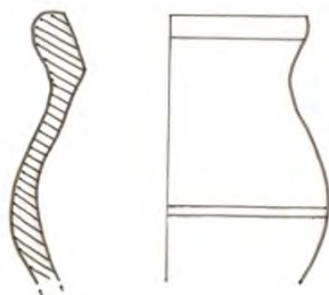
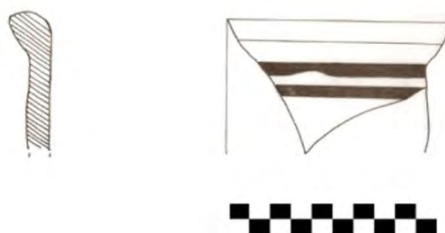
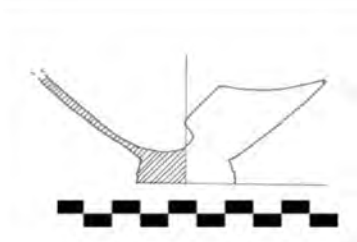
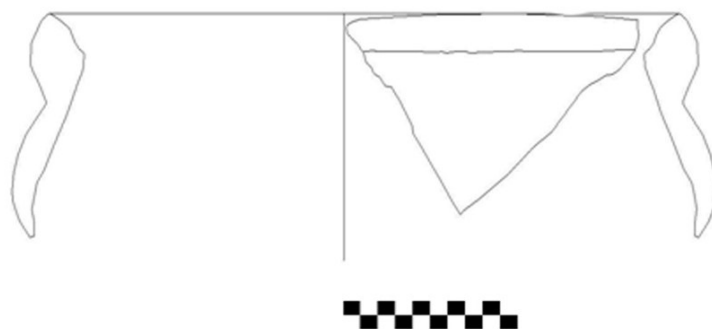
Inv. 0059, Trench 1, SU 18; Inv. 0072, Trench 1, SU 18



Inv. 0082, Trench 2 SU 26; Inv. 0145, Trench 2, SU 27



Inv. 0048, Trench 4, SU 13; Inv. 0049, Trench 4, SU 13



Inv. 0055, Trench 4, SU 17; Inv. 0066, Trench 4, SU 17; Inv. 0067, Trench 4, SU 17; Inv. 0071, Trench 4, SU 17