

# The Uzbek-Italian Excavations at Kojtepa (Samarkand Area) Uzbekistan

## First results and work perspectives

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**Abstract:** This paper summarises the work of the Joint Uzbek-Italian Archaeological Mission in Kojtepa in the district of Pastargom, Samarkand. The project is based on a collaboration between the Università di Napoli "L'Orientale", Napoli (UNO) and the Institute of Archaeology Uzbekistan Academy of Sciences, Samarkand (IAASU). The project began in 2008–2009, and after several excavations is on-going. Preliminary results have confirmed that the site – which consists of an almost conical central *tepe* surrounded by a quadrangular wall and beyond that an outer channel originally filled with water – is characterised by a form of agricultural settlement that played a role in controlling the near northern area frequently visited by pastoral nomads on the Karatyube piedmont chain. For the moment, the time span covered stretches from the late Hellenistic era to the Kushan period and beyond!

**Keywords:** Central Asia, archaeology, Samarkand, territory.

**Резюме:** Данная статья кратко подводит итог работы Объединенной археологической узбекско-итальянской миссии в Койтепа в районе Пастаргом (Самарканд). В основе проекта лежит соглашение об археологическом сотрудничестве между Университетом Неаполя "L'Orientale" и Институтом археологии Академии наук Узбекистана (Самарканд). Проект был начат в 2008-2009 годах и продолжается до сегодняшнего дня, после семи полевых сезонов. Предварительные результаты подтвердили, что памятник, состоящий из центрального "тепе" почти конической формы, окружающей его стены четырехугольной формы внешнего канала изначально заполненного водой, представляет собой поселение, жители которого занимались сельским хозяйством и которое играло свою роль в контроле над соседним северным регионом, где нередко появлялись скотоводы-кочевники из предгорий Каратюбе. На данный момент речь идет, по крайней мере, о временном интервале от эллинистической эпохи до кушанского периода!

**Ключевые слова:** Центральная Азия, археология, Самарканд, территория.

## 1 Introduction

Since 2008, the joint Uzbek-Italian archaeological activities of the Institute of Archaeology of the Academy of Sciences of Uzbekistan, Samarkand (IAASU), and the Università di Napoli “L’Orientale” (UNO) have been carried out in the Pastdargom district in the Samarkand area.<sup>1</sup> The scientific aims of these activities are to analyse the archaeological consistency during the 6th–4th century BCE of an area recorded for the first time in the trilingual inscription of Darius the Great (522–486 BCE) in Bisutun. There, the old Persian ethnonym or toponym “Sogd/Sugd” is explicitly used, phonetically and most probably lexically connected with the Greek-Roman term “Sogdiana”, an area much better known, in a detailed way, in early mediaeval times for its ethno-cultural and ethno-linguistic eastern-Iranian Sogdian background (4th–7th century CE) (DE LA VAISSIÈRE 2002; DE LA VAISSIÈRE/TROMBERT 2005).<sup>2</sup>

The joint field activities, financially supported by UNO, and in partnership with the Italian Ministry of Foreign Affairs,<sup>3</sup> provided the basis for an archaeological project which, starting from the topographic data collected by UsB (Università di Bologna, Alma Mater) (1999–2006), was basically aimed at investigating the archaeological horizons of the period in the Samarkand area, and possibly of the Achaemenid period as well.

- 1 These field activities located in a crucial part of the historical Sogdiana followed two years (2007–2008) of intensive contacts with the Uzbek colleagues, with the former director of IAASU Timur Shirinov, Shakirdjan Pidaev, the present Amriddin Berdimuradov and Italian colleagues already working there, and in particular Maurizio Tosi, Director of the Italian Archaeological Mission of Università di Bologna, Alma Mater (UsB) in Uzbekistan.
- 2 Sogdiana was in the Late Iron Age and early mediaeval period populated by peoples probably speaking and writing in an eastern Iranian language: Sogdian. According to Greek and Roman authors, the region was located between the territories formed by two rivers, the Oxus (Amu Darya) and Iaxartes (Syr Darya), with the southern border running along the Zeravshan mountain range. It is not clear, however, whether the Sogdians populated all the lands which Greek and Roman authors attribute to the region. It is possible that the sources referred only to the early administrative boundaries of the Achaemenid empire, without taking in consideration the real distribution of the villages, towns, regional walls, etc., and the real population in the area. Sogdiana would indicate, thus, the region, including the Zeravshan and Kashkadarya River basins, whose archaeological remains are generally dated to no earlier than the 1st millennium BCE, when the Sogdians seem to emerge at the historical level.
- 3 Since 2015, UNO-IAASU activities in Uzbekistan have received the support of the *Attribuzione Riconoscimento Istituzionale per Missione Archeologica/Antropologica* of the Ministero degli Affari Esteri e della Cooperazione Internazionale, which here are deeply thanked by the author.

The premises of the project by IAASU and UNO are strictly related to the methodological and field-work difficulties always encountered by scholars when attempting to define precisely any archaeological horizons of the Late Iron Age and of the Achaemenid Empire, and not only in Central Asia (FRANCFORT 1988; 2005). In particular, the joint activities continued working in an area west of Samarkand with the aim of singling out cultures related to the periods of the earliest occupation, and of representing their differing related stages (GENITO 1996; 1998a; 1988b).

In the 8th and 7th centuries BCE, scanty settlements with semi-huts clearly started to be replaced by large “sites”, among them Koktepe (ca. 100 ha) along the Bulungur Canal, and Afrasiab (ca. 220 ha). The studies of these sites have demonstrated that the process of erecting walls and, in some cases, public buildings and/or shrines, also included large-scale earth works. According to a reasonable hypothesis, the irrigation canals in Sogdiana, which stretch for more than 100 km, were possibly built at about the same time as the sites, and, with some changes, they survive to the present day (MANTELLINI 2003a; 2003b; MANTELLINI/RONDELLI 2004; MARCONI ET AL. 2009; MANTELLINI (ED.) 2016).

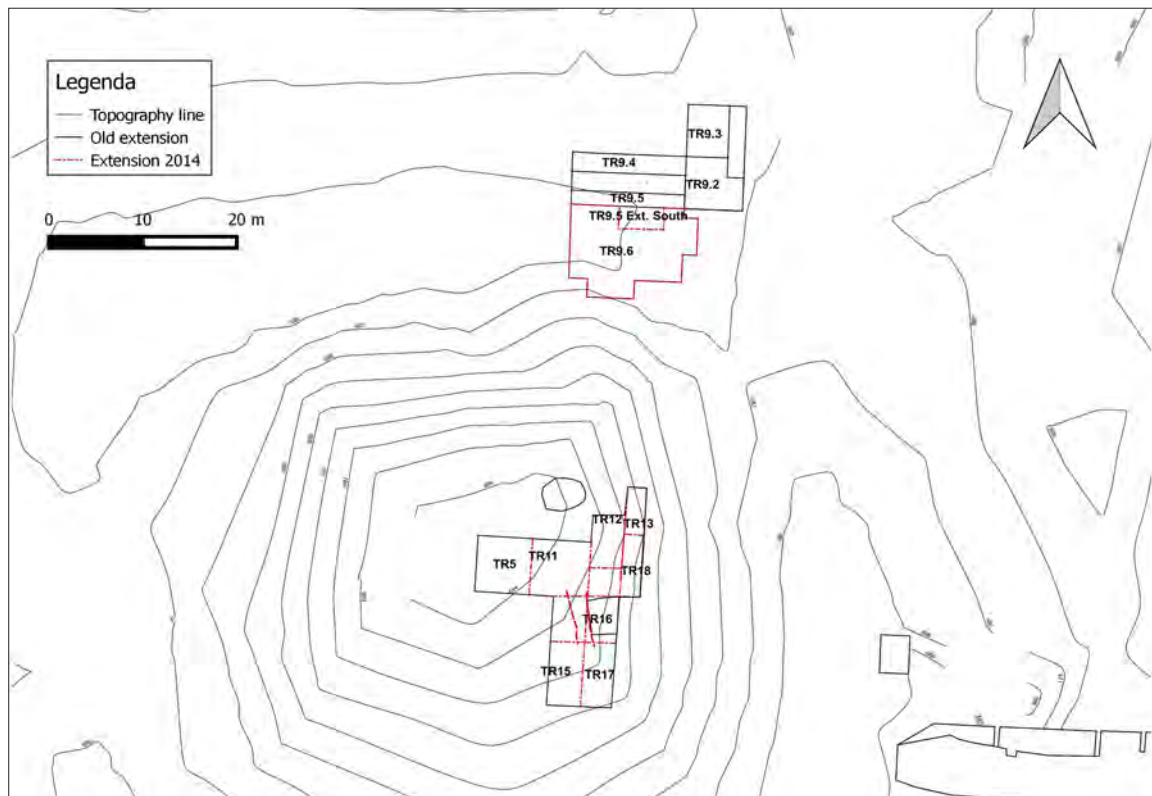
A new stage in the cultural development in Sogdiana began in the 7th and the 6th centuries BCE. Some characteristics of the material culture, including ceramic production, in Bactriana, Margiana, northern Parthia, and, somewhat later, in Chorasmia as well,<sup>4</sup> did not spread beyond the territories in north-east Sogdiana (LYONNET 2013a; 2013b).

Cultural changes did not occur immediately after the territories of the future Bactriana, Sogdiana, and Chorasmia provinces were probably conquered by Cyrus the Great and so became part of the Achaemenid Persian political-state formation in the second half of the 6th century BCE. Greek forms in the pottery, including “fish plates” and craters, appeared only in the 3rd century BCE, during the Seleucid’s rule, not right after Alexander the Great’s conquest of Sogdiana in 320 BCE. Different nomadic peoples conquered Sogdiana at the end of the 3rd century and the Greeks also may have returned to Sogdiana in the first half of the 2nd century; by mid-century, the nomads took over again. Ancient eastern elements prevail in the architecture of the Greek period, a typical example being the city walls at Afrāsīāb, which were built from large mud bricks of a type unknown in the Hellenistic culture on which the names of the makers are written in Greek letters.

<sup>4</sup> For example, it is the case for cylinder-cone-shaped wheel-made pottery and large, rectangular, unbaked bricks.



a



b

Fig. 1: Kojtepa. **a.** General view as seen as from the south-east (after Missione Archeologica Italiana (MAI), Università di Napoli “L’Orientale” (UNO); photo by Bruno Genito). **b.** General map (drawing by Enzo Cocca 2014).

## 2 The Kojtepa project

The former joint Uzbek-Italian (IAASU and UsB) (1999–2006) topographic activities in the Pastdargom (Lower Dargom) district in the Samarkand region had drawn attention to different sites, preliminarily dated to the period from the Late Iron Age to the early mediaeval period, and possibly to the Achaemenid period as well.

The site jointly chosen in 2008 by IAASU and UNO<sup>5</sup> was Kojtepa,<sup>6</sup> a known and important settlement, constituted by a central truncated cone-shaped *tepe* 9 m high encircled by an earthen wall and moat. According to the topographic results, the city walls, though still not clearly identified, and partially cut through by modern agricultural activ-

ity, are similar to a well-known urban settlement pattern for sites and cities in the ancient Samarkand and Ustrushana areas, present also in the Karatyube range areas, in the historical and Hellenistic period.<sup>7</sup>

Kojtepa is located in the zone between agricultural lands and the steppe (**Fig. 1**). Today, the local population refer to the territory around Kojtepa as far as Chandyr village as *dasht* (steppe), though the whole area is cultivated, covered with orchards, fields of cotton and wheat, and so on. The information in the written sources is scattered and fragmentary. The most important sources about the period in the pre-Arab era are the Chinese authors who visited the area in connection with the establishment of more or less regular contacts with their western areas.

From the 5th century CE, reports on the territories of the Amu Darya and Syr Darya interfluvium become more detailed, and start to provide more and more geographical names – an abundance of toponyms from the Syr Darya, Zeravshan, Kashkadarya and Amu Darya basins which are later confirmed in Arabic and Persian sources.<sup>8</sup>

5 Deepest thanks are due to the Director of IAASU, A. Berdymuradov. The realisation of the work has been possible thanks to the availability of the former Rector of UNO, Lida Viganoni, the present Rector Elda Morlichio and her staff, in particular Marina Guidetti, Nicoletta De Dominicis and Ester Mezzone of the International Affairs Department. Financial support was given by UNO, through the Centro Interdipartimentale di Servizi per l'Archeologia (CISA), and heartfelt thanks are due for this to their former President, Rodolfo Fattovich, the present President Fabrizio Pesando, to Luigi Tartaglia, Antonella Sannino, Andrea D'Andrea of the Directive and Technical-Scientific Committee, Rosario Valentini of the Drafting Committee, and Irene Bragantini (former Vice President), and Roberto Bocchino (former Drafting Committee). Local support was possible thanks to the UsB and, in particular, special thanks are due to the Director, M. Tosi, the Deputy Director, D. Giorgetti, and to Simone Mantellini and Rita Dimartino. A particular thank is also due to Dmitry Khosthuskhin for his help as translator and for any other organizational type of support. For the scientific work thanks are due to Alexej Gricina (Co-director 2008–2009), to Rahimov Kamil both excellent and precious helper in the field work, Kazim Abdullaev (co-director 2011–2012), Mukhtar Pardaev (co-director 2013–2015) and Sherzod Pardaev, who was present in all our activities as scientific collaborator. Last but not least, gratitude is also due to: Fabiana Raiano (2008–2014), who devoted time to the pottery analyses and drawings, Francesco Spinelli (2009), Giulia Ciucci (2009), Francesco Franzese (2011–2012), Michele Maria Lamberti (2013), Edoardo Cefariello (2014–2015), Lucia Cerullo (2014), Andrea Montella (2015) of UNO, Maria Francesca Pullia (2014–2015), Natalia Valenzano (2014) of the Università di Pisa, Davide Lunelli (2012–2014), Enzo Cocca (2013–2015) (UNO), Li Yusheng (2011–2013) (Peking University), Luciano Rendina, archaeologist, topographer and draftsman of Lecce University (2008–2009), the workmen, the driver Rahmatullo Rasulov and Mr Davronbek Jurakulov for the precious help given in differing circumstances.

6 Kojtepa (Sheep Tepe), or Kendyk Tepe (Umbelicus Tepe) (Pas 588), is an area 175 m long × 150 m wide (2.62 ha), the difference in the level from the top to the bottom being 9.94 m. It is 697.30 m above sea level, and the geographic coordinates of the site are 42N 300099.77 m E, 4386573.90 m N (UTM); the geo-referencing system is WGS84 42N.

7 The decision to examine the site was suggested by the Italian Archaeological Mission (IAM) of the Università degli Studi di Bologna, Alma Mater (UNIBO), which had identified other sites of the period (GENITO/GRICINA 2009: 126–128; GENITO/ABDULLAEV (ED.) 2014).

8 Archaeological research into the piedmont areas in Sazagan, Agalyk and Mirankul', i.e. in territories bordering the Dargom Steppe, have brought to light the existence of groups of burial mounds, which testify to the fact that this part of the steppe was also used as pasture land. In particular, the question of interaction between nomadic and settled cultures was one of the research topics on which Suharev worked (1935–1936). In connection with the historical topography, a short but extremely informative essay by VJATKIN (1902), written on the basis of an extremely thorough analysis of sources in *waqf* (charitable endowment under Islamic law) documents, is invaluable. Comparison of his data with old maps made by engineers and topographers before the 1917 Revolution may, at times, provide extremely fruitful results. Another important landmark in the study of nomadic sites in this contact zone was the excavation work carried out by Obel'čenko in the 1950s. He studied the burial-mounds of Sazagan to the south of Samarkand, which he dated to the post-classical era. In the piedmont zone adjoining the Dargom Canal, at a distance of 18 km south-west of Samarkand, a group of Mirankul' burial mounds was studied. The earliest of these burial mounds were dated by Obel'čenko to the 2nd century CE and the others were assigned to later dates in the Early Medieval period (OBEL'ČENKO 1966: 66–81; 1969: 80–90). The earliest burial mounds were discovered along the Agalyksai River; some flat graves were dated to the 4th and 3rd centuries BCE (OBEL'ČENKO 1972) on the basis of an analysis of grave goods. Attention should also be drawn to the work of KABANOV (1959: 154–174), who investigated the area where the Ankhor Canal was being built in the 1960s. Thanks to the work carried out to compile a comprehensive list of archaeological sites by teams from the Institute of Archaeology affiliated to the Academy of Sciences



An important contribution to the study of the ancient culture of Sogdiana, and specifically its capital, Marakanda (the Greek name for Afrāsīāb), was made by the French-Uzbek expedition that began archaeological investigations on the Afrasiab site at the end of the 1980s. At the beginning, it was conducted by P. Bernard (1996) and M.K. Isamidinov, and then by F. Grenet (BERNARD ET AL. 1990; 1992).

A further contribution to the study of sites in Samarkand-Sogdiana, and in particular of the Pastdargom district, has been made by the joint Uzbek-Italian Expedition of UsB led by M. Tosi, the results of which have been published in various papers (RONDELLI/MANTELLINI 2004; RONDELLI/TOSI 2006; SHIRINOV/TOSI 2003; TOSI ET AL. 2007; TOSI ET AL. 2002). A comprehensive survey of these processes of urbanisation within the territory of ancient Sogdiana has been carried out by M.K. ISAMIDDINOV (2002).

The walls of Kojtepa have survived only in its south, east and west sections, the northern side having been destroyed. According to information provided by local inhabitants, the destruction took place in the 1980s. It is possible that the levelled areas at this location resulted from the in-fill of the moat with earth from the destroyed wall; it is probable that the moat and the destroyed wall were levelled by a bulldozer. Another cause of major damage is the trench dug by a bulldozer along the eastern wall. The earth from the destroyed wall was shifted into the moat and used to form a barrier across the moat, serving at the same time as a boundary marker. As we succeeded in establishing, the base of the moat is currently marked out for individual plots where wheat, vines and other crops are grown.

For a period, the moat was also used as a reservoir into which water flowed from the fields surrounding the site. Silt deposits accumulated at the base of the "moat", which is now used for cultivating crops: these are most likely to have come with the water flowing off the surrounding fields. Yet the thick layer of reddish-yellow sand, which can be traced from outside the encircling walls, shows that this silt must have been deposited by mudflows. The colour and structure of the sand from the bed of the River Chilburdzhsai into which water flows from the streams coming off the mountains seems to support that argument. It can therefore be assumed that one of the ways in which the moat might have been filled in antiquity was by using the water brought down by mudflows.

It can clearly be seen in aerial photographs that all the walls encircling the site of Kojtepa were built as a single unit without any gaps, apart from the northern wall and, in particular, its north-east corner; there, if one moves a short distance away,

to the left of the corner, a dark section can be seen which shows that there is a break in the northern wall at this point. It is possible that there was once an entrance there, or a space in front of a gate. This gap links with the pit of the moat, however, which suggests that the drawbridge of the wall had been set up at that spot.

Finally, there are several more details in the aerial photograph which indicate the special features of the site's layout. The first is the pale line linking the citadel and the north-east corner. The aerial photograph made it possible to "reconstruct" in part the lay-out of the wall, at least until the time of its subsequent major destruction. A similar site designated as No. 322 on the same aerial photograph (in the lower right-hand corner), very close to other sites (323 and 324), is square in plan and has a citadel at its centre. Along its western wall, there is a pale line (a wall or rampart), which could have been part of an irrigation system, such as a feeder canal: it then continues in a north-south direction, the beginning of this canal being linked to another winding irrigation canal (known locally as an *aryk* or *sai*).

In the topographical surveys conducted by UsB, and in the field by Simone Mantellini, around Kojtepa for a radius of 6 km, about 150 sites have been identified, which, apart from their good or poor state of preservation, give clear evidence of the extent to which the area immediately north of Karatyube was settled and inhabited; amongst those sites, there are many different sized *tepe*.<sup>9</sup>

On the archaeological map provided by O.N. INEVATKINA (2010), sites with a lay-out of this kind are classified as "early medieval" and have Hellenistic layers at their base. As excavations at Kojtepa have shown, the upper levels of the site – to judge from the archaeological finds – date from the Late Classical period, i.e. to the 3rd or early 4th century CE. Apart from Kojtepa, other walled settlements located on the Dargom steppe are also classified as sites founded in the Hellenistic period. On a 1905 map, the sites nearest to Kojtepa were designated as the Abduvaitepa "Bugry" (or hillocks); they have survived to the present day, though they have suffered major destruction.

Archaeological excavations at the site have shown that the ancient population at Kojtepa was heavily engaged in agriculture. There are many signs of agricultural activity, the most numerous being different kinds of millstones. Despite the powerful walls of the settlement – two rows of defences, a moat, and an encircling wall – the economy played an important part in the life of the inhabitants. It was noted above that the whole territory adjoining the site was a border region between the steppes of the nomads and areas having a farming culture. The elevated

of the Republic of Uzbekistan in the 1970s, it proved possible to piece together a general picture of the cultural development of the region over a long period.

<sup>9</sup> Sites Pas nos. 540, 538, 530, 083 (Karaul), 082, 176 (Kara Tepa), 177 (Azliartepa), 511, 512, 519, 514, 513.

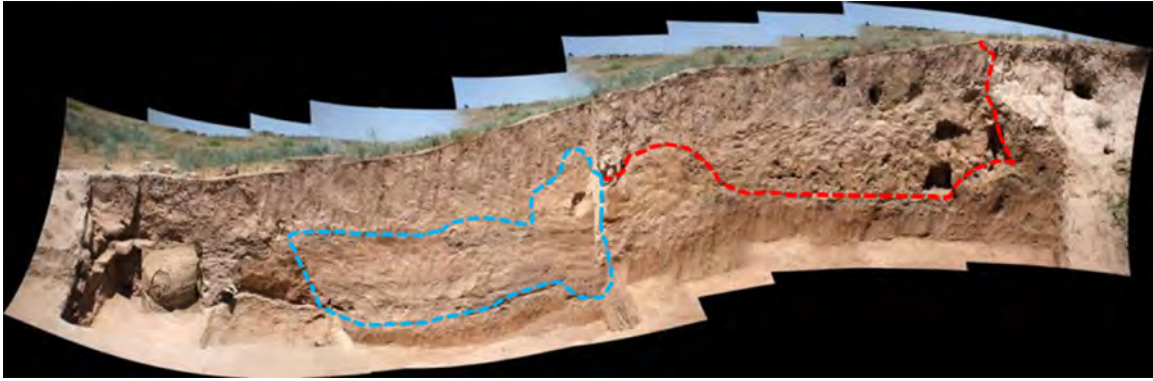


Fig. 2a: Sections 1 and 2 after the excavation; on the left are the cultural layers, and on the right, the remain of different clay blocks (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo and drawing by Luciano Rendina 2009).

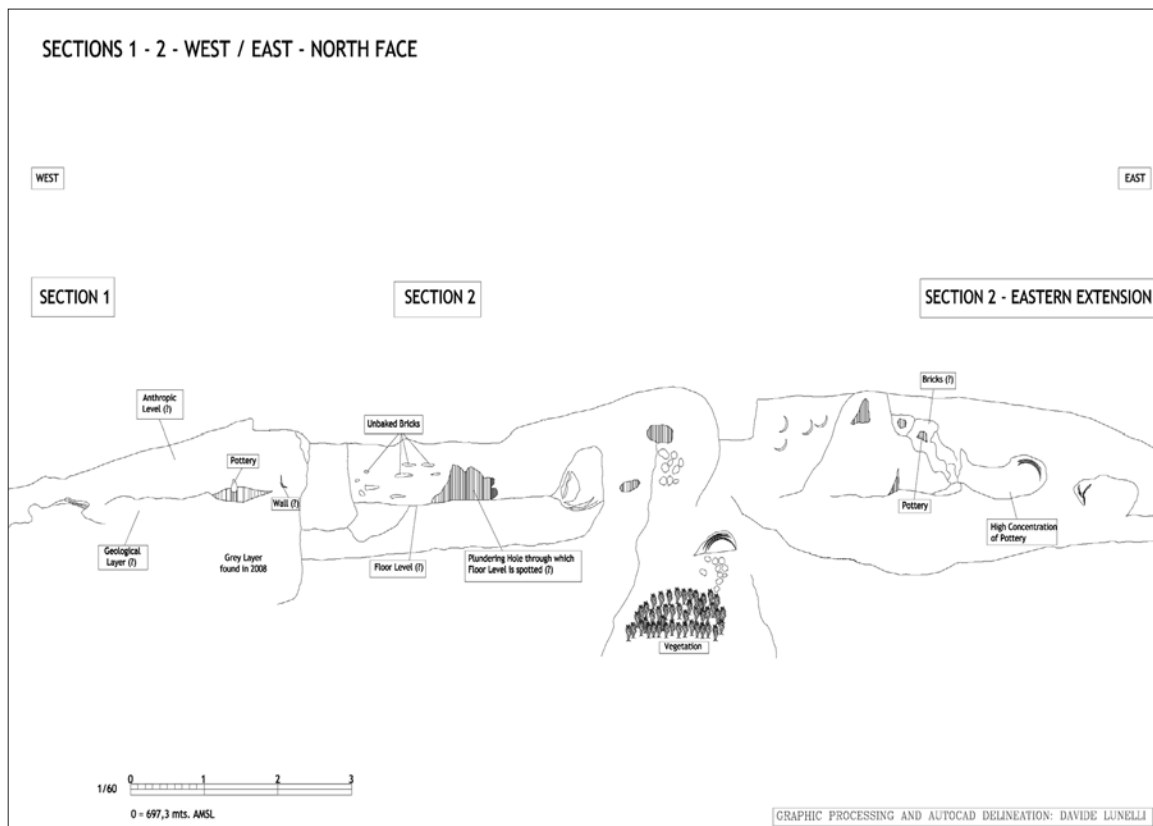


Fig. 2b: Sections 1 and 2, from west to east – North Face; after field activity in July 2009 (drawing by Luciano Rendina and Davide Lunelli).

position of Kojtepa, and the fairly even relief of the area around it, lent it a major strategic importance. From its vantage point, not only neighbouring settlements were clearly visible, but also distant places to the south, settlements situated in the main on mountain slopes. It should be remembered that in the settlement of Boisarytepa, founded in the Hellenistic period and located next to Sazagan, a Seleucus I tetradrachm was found during excavations by the Uzbek-Italian Expedition of UsB (ABDULLAEV/FRAN-

CESCHINI/RAIMKULOV 2004).<sup>10</sup> The location of the site made it possible to survey from a high vantage point the whole Dargom Valley. Bearing in mind this feature of Kojtepa, one can assume that settlements of this kind could have been used as observation posts from which warnings of an enemy's approach could be sent out, but also as a means of delimiting

<sup>10</sup> For other important coin finds in the area, see ZEJMAL'/VAFAEV 1982; ABDULLAEV/ERRKULOV 2004; ABDULLAEV/BERDIMURADOV 2010.

fields for intense agricultural activity. Small towers have also been identified during the survey, around the encircling wall, similar to those of Kafir Kala (RONDELLI ET AL. 2003), even though on a smaller scale.

### 3 Archaeological work in 2008, 2009, and 2011–2015

All these activities have provided the basis for a better understanding of the site and its related historical and archaeological problems. The archaeological approach taken was to first single out a preliminary stratigraphic sequence, and then to collect as much dating material culture as possible in order to propose a typological and chronological span time in different parts of the site: alongside the encircling wall of the *tepe* (to the east): on sections 1 and 2 (in 2008) in its eastern (Trenches 1–4) (in 2009) and southern areas (Trench 6, and the related extensions), Trench 8<sup>11</sup> (in 2011–2012), Trench 10 (in 2011–2012); on the top of the *tepe*: Trench 5 (in 2011, 2012, 2013), Trenches 11–24) (2013–2015); in the flat area between the *tepe* and the eastern wall: Trench 7 (in 2011)<sup>12</sup> and the area between the main *tepe* and the north-eastern corner, Trench 9, with different successive extensions) (in 2011–2015).<sup>13</sup>

11 This Trench was opened ca. 12 m west of Trench 6 in order to see if other parts of the area, possibly within the encircling earthen wall, were still standing or were re-settled later. The Trench was 63 m long (north to south) × 2 m wide (east to west). The first cut removed SUS (Stratigraphic Unit Surface) and SU1. At 15 cm in depth, wall SU38 was found.

12 Trench 7, 3 m wide × 4 m long, located on the surface between the central *tepe* and its eastern wall, was opened in order to gain a better understanding of the archaeological consistence of this part of the site. There was no trace of any man-made phenomenon. In order to reach the basal soil of the area between the central *tepe* and the encircling wall, an area of 50 cm wide was excavated close to the northern wall, which was named Sector A. The northern side of Sector A is made up of four layers, their depth as follows: surface SU0, 6–12 cm; SU1 a stony, compacted texture in which grit is well-distributed, close to the western side, the thickness of the eastern half being 18–23 cm; SU2, 14–39 cm; basal sandy clay (virgin), dark yellow with a fine and pure texture. The excavation of SU (virgin) revealed a soft soil with well-distributed grit. At the end of the excavation, Sector A was 104–114 cm in depth. It was decided to enlarge sector A, whose width was increased from 50 to 70 cm. On the basis of the three layers already existing, SU (virgin) was divided approximately into two parts, because of the disappearance of fragments. Sector A is now 118–123 cm in depth. The depth reached in 2009 at a point between section No. 1 and section No. 2 was QP 692,15 and the basal clay soil here in Trench 7 is QT 691.54.

13 For the Kojtepa reports, see ABDULLAEV/DŽENITO 2010–2011; 2011; 2012; GENITO 2014; GENITO/GRICINA 2009; GENITO/GRICINA ET AL. 2010; GENITO/PARDAEV 2015;

### 4 Work on the eastern part of the encircling wall (in 2008 and 2009)

In sections Nos. 1 and 2 (Fig. 2) were found walls of notable thickness, in bricks and blocks, that had probably belonged either to the original system of the wall compound or to the re-utilisation of a later period. On the western side of section No. 1, the recovery of a notable quantity of ceramics, fragments of millstones, and the remains in situ of a large container for commodities (widest diameter in excess of 30 cm) very close to the south of large bricks placed of cut. has allowed us to hypothesise that this area beyond the limits of the sections was also settled.

The opening of trenches, starting in the area between the *tepe* and the encircling wall, has shown a complex stratigraphic situation, the effect of a reuse of the area which, partially having lost its original function, came to have rooms or spaces meant for different activities.

In the central part of the excavated section, traces of walls are clearly visible, made of raw bricks held by clay blocks. On the inner side, toward the *tepe*, the presence of an almost complete jar embedded in a clay bench allows us to hypothesise that structures were built close to the wall.

The four trenches opened in 2009 to the north of sections 1 and 2 – Nos. 1–4 – are progressively narrower according to the orientation of the line of the soil already present in those sections, and were aimed at regularising them. The excavation has allowed us to identify 33 different stratigraphic layers in order to link the materials collected and to read and interpret the different alignments of the architectural remains and walls. In those levels, different kinds of finds, and in particularly two rooms, I and II, with clear, soft and clean floors with different holes for domestic activities, were found.

### 5 Work on the southern part of the encircling wall (in 2011, 2012, and 2013)

Trench 6 (4 m long × 4 m wide) over the southern encircling earthen wall yielded a large number of potsherds, stones, bones, ceramic waste, and millstones. The surprising character of this discovery is related

2016. For the production of ceramics, see GENITO/RAIANO 2011; RAIANO 2012; 2013; 2014. A first monography on the excavation was published in 2014: ABDULLAEV/GENITO (ED.) 2014. For the most important Italian recent MA and PhD dissertations written on the Sogdiana archaeology from Bologna and Naples candidates, see FRANCESCHINI 2007; MANTELLINI 2009; DI MARTINO 2011; RAIANO 2011; 2014.



Fig. 3: Trench 6 2011: jar in situ SU74 (Object inv. no. 0020) (after Missione Archeologica Italiana (MAI), Università di Napoli “L’Orientale” (UNO); photo by Bruno Genito).



Fig. 4: Trench 6, EH, the enlargement to remove the jar Pythos SU84 in SU85 (after Missione Archeologica Italiana (MAI), Università di Napoli “L’Orientale” (UNO); photo by Bruno Genito 2012).

to the nature and historical development of the encircling earthen wall. It is evident, in fact, that the presence of such large amounts of pottery typologically and technologically similar to that found alongside sections 1 and 2 would mean that the area of the wall here, and there as well, was occupied by other later structural elements (pits, working activities areas, etc.).

On the northern side, a large amount of clay plaster, over-fired concretions, and ceramic waste has continuously been collected; in the southern part, by contrast, there was a high concentration of potsherds widespread within a dark and greyish, softer soil: fragments of gypsum plaster, goblets, a terracotta female figurine with one arm longitudinal to the body, the other folded. Two fragments of framed sculpted

terracotta, small bricks and a simple terracotta fragmented figurine also came to light.<sup>14</sup>

I the area full of sand (SU52) in its northern part, about 140 cm away from the western side and 135 cm from the southern side of the trench, small objects made of mud clay, including loom weights, a sketchy figurine, and a large inverted jar were found (Fig. 3). Very rare materials were found on the floor, which was made of a pure yellow/brownish soil.

At the same time, a new area was opened, Trench 6 Extension South, at the south of the trench (6.13 m long × 2 m wide), whose southernmost points were located ca. 96 m from the

<sup>14</sup> Stylistically, the item recalls the so-called Venus/Anahita type. For this item and the following figurines, see ABDULLAEV 2014: 359–382, for a long chronological and typological discussion. For the general issue of the terracotta figurine production, see MEŠKERIS 1965; 1977; ABDULLAEV/BADANOVA 1998; ABDULLAEV 2002; 2013.





Fig. 5: Trench 10, inner contents of the large fragmented jar found along the southern border, SU164 (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito).

Station 1, the basic topographic point on the top of the *tepe*. On the north-western side at ca. 70 cm from the northern side of the trench, large fragments of the upper parts of two jars in situ came to light: the first, to the west, was 70 cm in diameter, the second, 10 cm to the south-west, 45 cm in diameter. In the western jar SU47, a small piece of bronze (a rattle with two hole) was found.

Another small trench, 2 m long (east-west) × 13 m wide (north-south), was opened, Trench 6 Extension North. Just below, the soil appears hard and compact and of a light greyish colour. It is definitely identified with the earthen encircling wall SU38 over the whole area.

The eastern half of Trench 6 was also excavated. An interesting fragment of a black-painted and engraved rim of a jar, possible under Kušan influence, was collected. The soil in the southern side is greyish, with gypsum remains inside and around the jar. To the north, a base of an inverted, middle-sized jar was discovered, and, immediately to the east, the edge of a new jar (SU84). It is clear that it is an un-necked *pythos* which goes very deep; basically, the broken rim extends far beyond the eastern border of the trench, and to the west (SU85; Fig. 4). Inside SU86, there was a large amount of material, including the stem of a goblet, a wall, the base of a vessel and some terracotta loom weights. Two matching fragments of blackish-painted pottery, considered possibly 4th- or 2nd-century Hellenistic, came from SU85 and SU86.

In order to clarify a possible relationship between the bottom of jar SU74 and jar SU79, found in the eastern half of Trench 6, we again tried to reach the floor of SU73 in the western half. A sec-

tion of this sandy floor was reached and revealed the square cut made for the removal of jar SU74. Reaching the floor is still an operation intended to clear the excavated area. To the south and north, there are three small holes, in one of which (No. 1), the smallest (10 cm wide), is an ellipsoidal and fragmented (two parts) mud-clay projectile. Other holes, located to the north of SU81, are 15 cm and 20 cm in size. The eastern limit of this activity is SU81, more or less very close to the border left un-excavated, and more westward. Floor SU73, which is being continuously uncovered to the west, looks very sandy.

In the meantime, three other small holes appeared, No. 4 (13 cm wide), No. 5 (15 cm wide), and No. 6 (8 cm wide), very close to No. 1; these holes, like the ones which have already appeared, are located in this very thin layer of clay, which covers the same layer of sandy pebbles.

Trench 10 (4 × 4 m) was opened in 2013 not very far from Trench 6. To the south there is a mostly soft terrain; to the north it is harder. To the west, and deeper, there is a burnt reddish area approximately 20–30 cm wide. In the middle, there were large pottery fragments and grey-brownish terrain; no alignment and no other structural elements are visible at the moment. In the same level, SU120, the head of a figurine and a terracotta tile with a figurine in Hellenistic style, have appeared.

On the southern border, the fragments of the lower part of a large jar were found, the rest of which is still in the soil. The vessel is designated SU134, the internal part SU164 (Fig. 5). Around the vessel, a flat area is almost recognisable, SU165, where pottery



Fig. 6: Trench 11, SU101, 95 (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito 2014).

fragments are located in situ. The area is clear and the distribution of the pottery fragments is more or less regular, even if at different heights. In the northern section, the reddish line identified seems to indicate a level (the bottom of SU120). The plane is SU167. All the pottery fragments, stones, and some animal bones are grouped into 24 numbered items.

A further enlargement 3 m long (south-north) and 1.38 m wide along the eastern border of the trench was opened in order to understand the alignments of mud blocks oriented north-east to south-west, which from one side could be interpreted as belonging to the encircling wall of the *tepe*, from the other side as a small wall built in connection with the location of the vessel indicated as SU134. One goes down for more centimetres and most probably the line of wall SU170 seems to go down as well, even a little bit at the north-eastern corner, where the line seems to disappear. A small rectangular area 60 × 35 cm was extended on the external southern border of the trench in front of vessel SU134 in order to remove its fragments completely.

The outline of an oval pit (SU172) appeared and was excavated, to the detriment of the scarce amount of material, and the bottom was reached at 35/40 cm from the top. The border and the bottom are difficult to clearly identify. Another extension was made to the west, 50 cm wide (west to east) × 5 m long (north to south).

## 6 Work on top of the *tepe* in 2011, 2012, 2013

On the top of the central *tepe*, several trenches have been opened in order to investigate possibly the

earliest periods in the most elevated archaeological deposit (ca. 9 m higher than the plain) of the site. In Trench 5, the alignment of walls probably different in chronology, SU35, running north-east to south-west, and perpendicular to possibly another wall, SU41, have been identified. To the south, a female terracotta figurine (in the style of the so-called *Venus pudica*) was found (ABDULLAEV 2014: 359–364, 377, Fig. 1). Different mud remains and floors appeared to the west of the two walls and between them to the north.

Continuing the excavation, a row of two large mud bricks was located on a fragment of the original corner of a wall, which probably goes in the direction of wall SU35. The eastern and northern faces of wall SU58 have been uncovered. Along the eastern border, SU115 is constituted on the top by two big-mud blocks delimitating a kind of structure.

Whilst excavating SU116 and removing part of SU106, we discovered pottery fragments that belong to the same handled vessels still in situ, partially decorated by incised wavy lines and partially painted with parallel narrow red lines; these fragments can be pieced together. In the north-east quadrant, SU106 is being cleaned and recorded. However, lumps of mud clay and sporadic pottery fragments aligned vertically have been found. The sections in the north-west quadrant clearly identify SU63, SU113, SU41, and SU118. A single pottery fragment (the painted disc-shaped base of a goblet) (Tall-i Barzu type)<sup>15</sup> has been found in situ on the top of the floor.

<sup>15</sup> This base type has been considered, and is still, a fossil guide for the chronology of the pottery production in Sogdiana, see GRIGOR'EV 1940; 1946.



Fig. 7: Head of a terracotta figurine, gender unclear (Inv\_Object no 61, Trench 11, SU95 (after ABDULLAEV/GENITO (ED.) 2014; photo by Kazom Abdullaev).



Fig. 8: Trench 11, SU119, post-holes (MAI, IMG\_5306) (Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito 2014).

In 2013, Trench 11 (5 m north to south, 5 m east to west) was opened just to the east of Trench 5. Structural remains running north-south all along the trench in its mid-eastern sector were designated SU94; they occupy all the western half of Trench SU93 and run from the eastern limit of SU94 to the eastern limit of the trench; it should be an empty area (Fig. 6).

In SU95, the head of a terracotta figurine was discovered (Fig. 7).<sup>16</sup> In the process, SU104 was cleaned again, with some softer terrain still present between the clay agglomerates. We continue to remove SU102 and finally reached SU104. Under three pot fragments, on the same SU112, fragments of horse teeth and painted pottery were found together; in the same context, there was also a biconical spindle-whorl in black pottery. Another find was a squared pottery piece with a hole in the middle and possibly incised marks on one face (seal).<sup>17</sup>

16 At a first glance, it seems quite peculiar: it displays both Hellenistic features (mainly the mouth and vicinity to the nose) and Central Asian ones (such as the elongated eyes and the strange hat, which looks like both the "Scythian beret" as seen in the Achaemenid representation, and a helmet.

17 It could be a spindle-whorl, but the identification is prob-

The thin layer of clay in the northern part of SU110 and SU156 in the north present the same mixed terrain, brownish, quite soft, grey, and harder, more compact.

There is a continuation of SU106 in Trench 5, with large, medium and small irregular mud blocks which seem to be located over a plane. The big stone, surrounded by potsherds, in the north-western corner of former SU168 is still embedded in the ground. The final operation is to remove SU162 in the south-west corner of Trench 11. The bottom that was reached in the southern area of SU is possibly the extension towards the west of SU111; in the northern area, the reddish terrain remains. Anyway, the nature of this particular SU and its relations with the surrounding area are still difficult to interpret, requiring further examinations and the complete removal of SU.

Work continued in Trench 11 in 2014 to remove SU106, located on the north-western side of the trench. This SU was first recognised in Trench 5 when Trench 11 was not yet opened. This SU is a cultural level composed of irregular mud elements

lematic due to the square shape (most probably used as amulet).





Fig. 9: Trench 13, SU176: mud blocks of a greyish clay (MAI, IMG\_6314) (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito 2014).

of dimensions ranging from small to quite a few centimetres, located on the north-eastern side of Trench 5. It is also characterised by a series of hard mud "blocks"; within them, there is a softer, dark, grey-brownish soil.

Removing SU178 (filling SU177), we found one pottery disc, one small stone, and one mud-clay lump. SU178 had an irregular shape, 55 × 17 cm maximum dimensions, 21 × 7 cm minimum. In the three corners, there were different elements that came from the excavation of SU177. During the cleaning operation, this particular soil continued below SU119; the layer is designated SU184.<sup>18</sup> SU119 is not completely removed because, after a deep cleaning operation, some small holes were found, widespread over the plain and ranging from

ca. 5 to 1 cm in diameter; they appeared in the central part of SU119.

One hole is in the corner between Trench 11 and Trench 5. There are two more holes on the southern side of Trench 5. All of them are interpreted as "post-holes", and SU119 is cut by all the SU represented by the holes. All these holes are circular and have different dimensions (**Fig. 8**).

A new area, Trench 12, was opened in 2014 on the top of the *tepe* to gain a better understanding of a possibly massive piece of architecture on the elevated part of the site, following the jump of altitude. This trench extends for 5 m north to south, and 3 m east to west, starting from the middle of Trench 11. Close to the western side of the trench, adjacent to SU94, big fragments of large jars and some limestone in medium dimensions (about 20 cm) were discovered.

There are some fragments of ceramics located vertically, a pottery disc, and, possibly in connection with it, a very large granite millstone and a small grinding-stone.

<sup>18</sup> In the south-eastern border, an object difficult to interpret has been found: it is made by terracotta, prismatic in shape with a narrower top, and its dimensions are: max. length 25 cm, height 7 cm, max. width 14 cm, minimum 7 cm. In the top there is a small concave depression. The object has a fracture line in the middle.



In SU176 during the cutting of a layer in the southern half, near to the eastern wall of SU94, one terracotta tile with the representation in relief of a fragmented figure (male or woman) touching with both hands a probable musical instrument was found.

On the north-western side of SU270, one stem on a flat base (goblet), one pottery disc, charcoal fragments, and a few animal bones have been found. Trench 12 was extended for another 2.5 m to the south (Trench 12.1). One spindle-whorl, one piece of pottery slag, and some pottery fragments were collected. In SU181, some mud blocks, one aligned on an east-west orientation, were found.

Trench 13 was opened in 2014 along the eastern side of Trench 12; it is 5 m long and 2 m wide. During this excavation, on the northern side along the western wall, mud blocks of greyish clay were found, constituting a new layer (SU317), separated by six channels (north-south: SU318–323) (Fig. 9).

Trench 14, located on the south-eastern side of the *tepe*, and continuing to the southern side of Trench 11, is 5 m long north to south, and 3 m wide east to west. A large number of potsherds, three pottery discs, and a ceramic filter were discovered. In the southern section, a large area reddish in colour – SU265, a kiln – has been found, with two or three compacted bricks. SU265 (from north to south: 1.28 m north to south, 0.75 m east to west) and SU342, located in the north-western corner of the structure, are being revealed.

Trench 15, which is located to the south of Trench 14, is 3 m wide east to west and 5 m long north to south. At this point, the excavation of SU268 has suggested that this is a fireplace/kiln. The reddish colour appears in particular at the southern limits of SU290. On the north-western side, there is some baked clay, arranged in a linear fashion, while on the western side there is another clay block, greyish coloured, that is on an upper level with respect to the southern limit. Maybe this area was originally bigger than now and the southern limit was lost during the former excavation. Clay elements located in SU330 and SU268 are of different sizes and shapes, but two of them, in the lower face, are wavy. The larger is around 16 × 23 × 13 cm. No other finds, such as bones or charcoal, were discovered. On the south-eastern border between SU326 and SU268, one piece of clay slag was found.

From Trench 16, one pottery disc came up in SU306. Oriented west-east are a series of alignments which probably constitute SU314, under which there seems to be compact clay soil of a greenish colour.

A few baked clay, and very few pottery, fragments came out; one animal bone and one pottery disc with a hole were found in SU332. The outline of wall SU314 is becoming clearer. A third cut was made in the same SU329 and two pottery bases (one of the

Tall-i Barzu type), and one stone spindle whorl with incised signs, have been found.

In Trench 17, which is contiguous with Trench 16 to the south, a very large number of pottery fragments were discovered, including pottery discs. On the northern border, denominated SU307, one pottery disc was found, the southernmost SU315. During the removal of SU290 in the eastern part of the trench, a new layer, denominated SU325, came to light.

In the area common to the three former trenches (14, 15, 16 to the south), on a sloping edge, the soil is very hard and compact, suggesting it may be the dissolution of structural remains. Along the eastern border, there is subsidence just where there is a change of altitude. All the area around SU265 (furnace/kiln?) is very hard and compact along the western border. Between the former Trenches 14 and 16, there is no evidence of the continuation of SU94; the soil is whitish; south of SU265, it is still reddish.

When the soil was being removed, three main areas were found: SU94 (old), SU291, and SU265. SU94 was localised clearly in the north and east; it presents mud-clay blocks. In the northern section, these blocks are rather regular, but to the south the situation is quite different because the blocks are mostly eroded. There are burnt clay elements (bricks, potsherds) and pottery still in situ, all close to SU265, in the centre of the trench. It is a very compact and well-burnt area, with some mud bricks with a reddish colour. The situation is similar in the western section of the trench.

The excavation of trench 15/17 on SU290 revealed the hardness and consistency of the soil, even if some areas are soft. During the removal of SU290, some areas of a different, reddish and grey colour, have been found.

Trench 18 is located to the south of Trench 13 and measures 5 × 3 m. The soil is brownish in colour, darker, and has roots. During the excavation, a few potsherds were found. Work continues on SU317, which extends to the southern end of Trench 18, and the end section of the trench are badly preserved.

We started with the general cleaning of the two sectors 13 and 18. The SU which connects to the east has been denominated SU288, a sort of washout layer, covered by SU156 and connected to SU317. It is a not very compact yellowish-brown coloured clay matrix. On the inner side, there are no inclusions, but sporadic pottery fragments and some uniform mud-block clay.

On the top of the *tepe*, a new area of excavation, Trench 19, was opened in 2015, east of Trench 12; it measures 7 × 3 m.

SU400 was removed, where we discovered Tall-i Barzu type bases, and another probable rim with an sort of decoration with grooves (Inv. Object 0250). SU402 is the continuous section of SU317, and con-



Fig. 10: Trench 24 SU452, Dep. Neg. IMG\_3920 (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito 2015).

sist of mud bricks measuring  $40 \times 30$  cm. Its entire width is 1.2 m and on the western side consists of baked soil. Situated on the western side of the trench, and consisting of grey mud bricks, SU403 is possibly a wall.

Jar fragments were also removed. In order to remove the pottery fragments, it was decided to go down 20 cm. Of note among the finds in SU401 are a small bronze pin (Inv. Object 0245), two Tall-i Barzu-type bases of vessel, of which one is complete (Inv. Object 0233, 0234), and one pottery disc.

The western side of structure SU402 consists of baked plaster – in a poor state of preservation – and large pottery fragments set in the northern side of SU401. In the middle section of SU402, an elongated stone, as well as four other stones, are arranged in a horizontal line, probably inserted beneath SU401 pottery fragments placed vertically. Moreover, its eastern side (Trenches 13–18, SU308–317) was removed to reveal only the lower part of the wall. In the north-eastern corner of SU451, there is a hole in the wall, probably a drainage pipe that passes through the wall in order to reach the outside. The mud bricks measure  $38 \times 38 \times 12$  cm, just like the mud bricks in SU445.

Trench 20, which is open on the northern side of Trench 19, measures  $3 \times 3$  m. SU402 seems to end about 1 m from the southern side, and the remaining part seems to be SU401. We started to remove it so as to reach the pottery fragments in SU401 of Trench 19.

During the excavation of Trench 19/20, SU401 pottery fragments, including another Tall-i Barzu-type or pottery disc (Inv. Object 0235), were discovered.

In the southern part of Trench 19, a layer consisting of potsherds was designated SU417. It should be noted that on the eastern side of Trench 19, near SU402 and 409, there is a pit, SU428–429 (cut and filling). The latter, SU429, consists of a loose clay matrix soil of greyish colour and is 20 cm in diameter. A small pottery disc was found there. Trench 21 was opened near the north-western side of Trench 20, on the eastern side of Trench 20, and on the northern side of Trench 13, measuring  $5 \times 2$  m. In the southern section of SU436, a painted neck of a vessel was found.

At the western limit, a small hole was found (SU431), with a diameter of ca. 10 cm. After cleaning, a new layer was discovered, SU436. Inside, some pottery fragments and one white stone pendant were found. In the eastern section of Trench 21, some fragments of a big *dolium* (SU438) were discovered, as well as a pottery disc in SU438. As SU436 was removed, a small oval-shaped stone with a hole in its middle (Inv. Object 0247) was discovered. In the south-east section of SU450, there was a black stone object on which different sized circles were incised.<sup>19</sup> During the cleaning operation, two potsherds (two possible covers) and another pottery disc came to the light in north-east side of the trench.

New Trench 22, 5 m (north to south)  $\times$  2 m (east to west), strongly sloping to the west and contiguous to Trench 19/20, was open on the eastern side.

<sup>19</sup> In one of the tombs at Filippovka (Orenburg district, Russia), for the first time a complete set of implements for tattooing was found, and among the objects there was also a stone palette to mix colours, very similar to the object discovered here.



Fig. 11: The area of Trench 9 before the excavation, the gentle slopes to north and south, with an almost circular perimeter (after Missione Archeologica Italiana (MAI), Università di Napoli “L’Orientale” (UNO); photo by Bruno Genito 2015).

The space between SU419 (wall) and wall SU402 was excavated. These fragments of soil, the results of a few cuts, do not have any real consistency.

The sloping edge of Trench 22 allows one to follow the external area of wall SU402, which in its limits and faces is not very clear, even if it is more than 1 m wide. The northern face of the wall is made of compact hard clay and not from brick and/or *pakhsa*. Along SU402, it becomes a hard and compact grey around SU455, and this probably contributes to our understanding of the wall (one polisher and one pottery disc were found). In Trench 22, SU443 was cleaned, starting along wall SU402. A new layer along the eastern side of SU402, named SU455, was noted. It consists of a compact clay matrix soil with some light-grey potsherds. It has been defined as SU463, in the space between SU419 and SU402. When starting to remove SU463, two stones, two pottery fragments, and two pottery discs were found.

Trench 23 was set up ca. 20 m to the west of Trench 21. In terms of stratigraphy, it is possible to identify a deposit because some ruined structures on the *tepe* were discovered. In fact, one can notice some brownish mud bricks. SU444 was excavated down for about 20 cm along the whole trench. In the north-west corner, a turtle’s shell of medium size was found, while in the south-east corner, part of a circular pseudo-structure constituted by grey mud bricks was identified (SU452). A new layer, SU454, consists of a compact clay matrix soil with remains of mud bricks. SU454 is covered by SU444 and covers SU452.

Trench 24 was opened near Trench 23 in order to reveal more of the continuous section of the structure found in Trench 23 and named SU452. In this layer, the fragments of the base of a vessel were found, as well as two stone objects. Along the eastern and the southern sections, a group of small mud bricks was located ca. 20–30 cm from the surface of the layer belonging to a previous structure different from SU452. As SU494 was excavated, and after a detailed cleaning with trowels, 15 new mud bricks oriented south-west to north-east and 38 cm wide × 38 cm long were found (Fig. 10).

## 7 Trench 9

Trench 9 close to the encircling wall was first opened in 2011 in the inner space between the wall and the central *tepe* towards the north-east corner of the site. This area provided evidence of the only slightly elevated mound (Fig. 11). It could be interpreted either as a structure, a late deposit of the wall’s collapse, or as a barrier (made by the collapse of the encircling wall) against the moat. The hillock slopes gently to the north and south and has an almost circular perimeter of ca. 20 m. After a careful excavation, fragments of mud brick have been found, meeting at right angles, one oriented north-west to south-east and 70 cm wide, the other oriented west-east and ca. about 90 cm wide (bricks: 40 × 40 cm, and 20 × 20 cm). In the extensions of Trench 9, different alignments of mud bricks have been found, which have given evidence of complex structural re-





Fig. 12: Trench 9, new alignments in the new trench as seen from the north-west (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); photo by Bruno Genito 2011).

mains (SU75):<sup>20</sup> south to west extension (in 2012), west extensions 2 and 3 (in 2012), west extension 4 and 5 (in 2013), extension 6 (in 2014), and east extension (in 2015). These finds are still difficult to completely analyse and interpret.<sup>21</sup>

After many attempts, it was finally possible to confirm that the mud-brick platform SU75 extends to Trench 9 (east-west), while only a few tracks were found, especially in the eastern part. The southern border was full of collapsed mud bricks of broken irregular shape and order.

Mud bricks arranged vertically have been identified, their width 8–13 cm, the gap between them ca. 2–5 cm. To the north, the situation is much the same: approximately 20 mud bricks in a vertical arrangement, their length a little shorter. Along the line of the vertical bricks, two new bricks were found, their width ca. 23–25 cm.

The decision to excavate SU75 was based on the following aims: to find the edge in both the southern and northern sections; and to follow its spread along the slope in the western section, the position of which is Trench 9 Extension 5, and to the east Trench 9 Extension 6. To the north, though the existence of vertical bricks showed some analogies with the southern part, the border is still unclear. Two mud bricks were recognised distributed along the

slope; they have more or less the same orientation as the ones on the top. To establish the bricks' layout in the eastern part, several cuts were made.

The work focuses on distinguishing mud bricks from the other part in Trench 9 Extension 5; as a result, about six lines of bricks were recognised. Although there is still a gap between bricks on the top and the later ones, their orientation could have been the same. Like those on the top, bricks along the slope also have different sizes, and can basically be divided into two kinds: most are more or less square, while there are others are rectangular, both of them approximately 40 cm wide. In terms of texture, there are also two types: one is off-white, compact and sandy, and the other is greenish and more fragile. More details, such as their distribution up and down the slope, should be noted, also their joining the bricks in Trench 9 Extension 3–4. There is a hard block to the east of the vertical bricks already recognised, and some collapsed bricks with compact texture distributed between the two areas of vertical bricks. In Trench 9 Extension 5, along the bricks on the slope already noted, eight mud bricks were found, six of them forming the same horizontal line. Not all of the bricks have the same size; the biggest, located at a lower level, is ca. 47 × 39 cm (**Fig. 12**). According to the distribution of newly found ones, it is quite clear that there are also bricks in the southern part of Trench 9 Extension 5.

Several cuts have been made in an attempt to find new bricks at the end of the slope, in the area close to the flat ground, in Trench 9 Extension 5. As a result, the situation of this area could probably be divided into two parts. In the southern area, the texture has always been very hard and compact since

20 SU75: a hard and compact platform made of mud bricks and its following extensions.

21 The structure found consists of square mud bricks mostly measuring 37 × 35–37 cm and 40 × 40 cm. It should be noted that the bricks measuring 40 × 40 cm are typical for the Early Hellenistic period and possibly, in this particular case, they could have come from earlier levels and have been reused.



the beginning of the excavation; the colour is off-white, and there are fewer insect holes in it. In the northern part, which is of a brownish colour, the texture is less compact and there are more insect holes; most of the potsherds were found in this area. In the upper part along the slope, two cuts were made in order to find more bricks, but only two lines, which formed a more or less rectangular shape, were discovered. Its relationship with the area of Trench 9 Extension 1–2 and the newly found bricks of Extension 5 still needs careful consideration.

Several bricks were identified, quite different in orientation and size from the ones located to the north, which were formed in lines. Although details of the bricks still need to be confirmed, their arrangement could not be explained as a common accumulation of collapsed bricks, especially considering the position of this area, between the two areas where bricks have been found. The different size and orientation may indicate some reuse during the later period, and the breaks between different bricks also support this. Work still focuses on the details of the area not clear in Trench 9 Extension 5, especially the area close to bricks put in order. After two cuts, two more bricks were recognised; their size too is different from that of the regular ones. In other parts along the regular line, no obvious traces of bricks were found, while in the upper part along the slope, several bricks different in size and orientation were found, some of them difficult to recognise, with only one side being confirmed. The soil among the irregular bricks is brownish and very soft, and it was here that most of the potsherds were found. Some of the bricks in the southern part were covered in a thin, very hard and off-white layer full of compact sand.

The situation is also not clear in Trench 9 Extension 3–4, which was full of irregular bricks, even in the lower part. There are at least five layers of bricks from the top to the bottom.

Close to the flat inside surface of Kojtepa, there are still fragments of bricks in this area. As mentioned, at least five layers of bricks can now be identified, and the surface of the bottom layer was found. Of all the objects (potsherds, stones, sinter) unearthed in this area, a fragment of pottery is particularly important. In the meantime, another new cut was also carried out in the lower part of Trench 9 Extension 5. The thickness of the five layers of bricks is about 48 cm; the deepest part of Trench 9 is along the northern side of Extension 3–4, ca. 50 cm, while the shallowest part is along the western side of Extension 3–5, ca. 10 cm.

In order to understand the distribution of bricks along the slope, another excavation was carried out in the lower part of Trench 9 Extension 4–5. Fragments of a big jar and bricks, as well as pieces of plaster, were found. Considering the slope and its

loose texture, excavation in this area should be continued in the future.

In the meantime, a new cut, named Trench 9 Extension 6, was begun. The size of the new extension, which was opened along the southern side of Extension 5, is about 2 × 5 m, and 1.5 m away from the western line of Extension 5. The same work was continued in 2014 in Trench 9 Extension 6. As a result, approximately eight rows of bricks were found, spread over almost all of Extension 6 along the slope; only the area on three sides (west, east, south) was not cleared. Considering the situation in Extension 5, which has proved to be full of irregular collapsed bricks, the area around the east and west sides especially may be in the same condition as Extension 6. Close to the west side, the same kind of texture, which is soft, brownish, full of insect holes, was extended, but finally stopped by a hard, off-white texture. In terms of size, there seems to be a special kind of brick, the big rectangular one, not only in Extension 6, but also in Extension 5.

A very thin cut was made close to the eastern and southern sides of Trench 9 Extension 6 in order to see if there are any bricks. As a result, about three alignments of bricks, arranged in eight rows, were found. Four of the rows have an orientation that matched that of the rows in Extension 5, though because of this the southern line of bricks partly disappeared in the southern side of the Extension 6, which means the bricks extend to the south along the slope. In terms of size, one is most irregular, another one ca. 41–44 cm square. But there is still another kind, which has already been mentioned, namely three large rectangular ones. After several attempts, it was still hard to find if there is a line of them inside. On the lower part of the slope, after the off-white, compact soil was removed, traces of bricks were identified, which should be the second layer of bricks under the surface one. On the eastern side a 6 × 5 m trench was opened on the top part in order to clarify the extension and the vertical structural continuity of wall/platform SU75.<sup>22</sup> Excavation confirmed the presence of lines of 40 × 40 cm mud bricks north and south of this cut, and also some smaller and rectangular mud bricks (10 × 50 × 50 cm).

To the north, a new unit, SU407, was found in 2015; looking like a small pit, it contained some burnt potsherds, including a fragmented painted high-necked jar (Inv. Object 0248, no. 2), and two other fragmentary vessels one above the other. The reason for such a concentration of pottery fragments is still not clear; a situation unique in the whole of Trench 9 and all its extensions.

After SU406 was cleaned, a terracotta figurine was found in the east, not far from the segmented

22 SU75: hard and compact wall or platform made of mud bricks in Trench 9 and its following extensions.

profile of the mud-brick structure, a representation of a *Venus pudica* (Inv. Object 0236). In SU420, a pottery disc was found (Inv. Object 0243), and it could easily be related to a kiln that it will be interesting to relate to SU75. This “kiln” has been excavated. On the inner side of SU426 is a quadrangular structure measuring ca. 80 × 70 cm. Its walls are reddish due to the thermic alteration. When SU427 was removed, a structural element with a diameter of 13 cm was discovered, interpreted as a pillar and named SU433. At the base of SU433, a cooking surface formed by terracotta ca. 2 cm thick was also found. The central part of the trench has been confirmed to be a sort of platform or the remains of a large structure, possibly identifiable with an ideological space (*hram* and/or *dakhma*), a tomb, or even a functional space, intended to reinforce the encircling wall of the *tepe* to the east.<sup>23</sup>

23 The first two hypotheses at the present state of excavation are not based on sufficient evidence. As far as the third possibility is concerned, it is important to point out some of the following points related to that particular ritual installations. A *dakhma* is generally a circular, raised structure used by Zoroastrians for the exposure of the dead, particularly to scavenging birds, for the purposes of exarnation. The common *dakhma* or *dokhma* (from Middle Persian *dakhmag*) originally denoted any place for the dead. Zoroastrian tradition considers a dead body – in addition to cut hair and nail parings – to be *nasu*, unclean, i.e. potential pollutants. Specifically, the corpse demon was believed to rush into the body and contaminate everything it came into contact with, hence the Vendidad has rules for disposing of the dead as “safely” as possible. Scholars generally accept that prior to using religious buildings, Zoroastrians usually performed rituals on open-air platforms, which are usually located on high places (BOYCE 1992). Such platforms, made of mud bricks, have recently been discovered by an Uzbek-French team at Koktepe, near to and north of Samarkand, and at Sangirtepe near Shahr-i Sabz in the Surkhan Darya Valley. The recent Uzbek-German mission at Kindyk-tepe, in the Bandikhan region of the Surkhan Darya Valley, yielded a religious structure, so far the earliest and best candidate for a Zoroastrian fire temple in Central Asia. The excavation of the Délégation Archéologique Française en Afghanistan (DAFA) at Chashma Shafā, 20 km south of Balkh, in northern Afghanistan, yielded a limestone altar which is one of the earliest fire altars found in Central Asia. Although Greco-Bactrian kings worshipped Greek gods, as shown by the images of Greek deities on their coins, many of the local population may have followed Zoroaster’s teachings. Excavations at Sogdian sites, such as Afrasiab in Uzbekistan and especially Panjikent in north-western Tajikistan, yielded buildings religious in character, and sumptuous houses of wealthy merchants, richly decorated with elaborate wall paintings, wooden sculptures and ornamental carvings, many of which contain Zoroastrian-themed imagery. In fact, the Sogdians created the richest set of religious images ever produced in a Zoroastrian context. In contrast with Bactria, where images of deities are often represented in a Greek fashion, the divine images produced in Sogdiana do not betray strong Greek influences. Rather, they seem to follow closely the Indian models and show a strong tendency

## 8 Trench 9.6

The concentration of very hard and compact soil regularly cut as bricks constitutes SU75, while SU8 represents the collapse and erosion of those structural remains. The depth of SU8 varies from 3 and 6 cm.

This part of SU75, previously covered by SU8, measures ca. 2.50 × 1.50 m, with bricks of different size ranging from 60 × 40 cm, and from 15 × 30 cm.

In Trench 9.6, cuts were extended in two different direction. The first was to the south and measured 1.50 × 3.60 m. This cut, SU0, removed ca. 5 cm horizontally from north to south; the soil is of a brown colour, friable, and with some roots and potsherds. The situation of mud bricks in this area is not yet clear because there has probably been some partial erosion. A second cut was opened in the eastern area of the trench, measuring 3.90 × 1.50 m.

In 2015 a new extension in Trench 9, 1 × 5 m, was opened to the east, focusing on digging SU411, to south of which SU412 was identified and excavated; walls 441 and 442 were identified. SU412 was extended a little (50 cm) to the west. The east-west line of mud brick (continuing the lines of SU75) is continuously evidenced and the line facing south keeps on going deeper (10 cm); digging SU423, an-

to assimilate Iranian gods with their Hindu counterparts. During their heyday, many Sogdians moved to China and lived in trading colonies or urban centres along the Silk Roads. Sogdian immigrants brought Zoroastrianism to China. Principal cities, such as Chang’an (today’s Xian), the Tang Empire’s capital, and Luoyang had Zoroastrian temples: at least five in Chang’an and four in Luoyang, usually in or around markets. In Central Asia, the funeral practice was to expose the dead to vultures or dogs. After the flesh of the corpses was removed, the disarticulated bones were collected and stored in a special ceramic ossuary. Many of these ossuaries are decorated with stamped images of Zoroastrian iconographies, such as temple, fire altar, deities, priests, funerary and other scenes. An ossuary from Shahr-i Sabz, for example, shows the scene of the soul’s judgment at the Chinvat Bridge and its admission into Paradise. Two types of *dakhma* were used by Zoroastrian communities in Iran and other places: the first is a round, man-made stone or mud-brick tower-like structure having a platform on the top for exposing the corpses, with a central well that reaches to the ground, used to contain bleached bones; the second is a natural mountain ridge or rocky spur encircled by mud brick walls. The *dakhma* discovered in Durmen-tepe near Samarkand is a variant of the first type. The most famous *dakhma* is at Chil’pyk in Chorasmia in northern Uzbekistan, used perhaps during the 4th to 8th centuries CE. This spectacular site is a natural rocky mount near the Amu Darya River, along which the corpses could be easily transported from far away. Rising high above the surrounding plain, the site can be seen from a long way off. The *dakhma* contains a monumental staircase, high mud-brick walls and compartments for depositing corpses (*pāvis*). Associated with it was also a fire chamber (*sāgrīs*). – *Hram* comes from Arabic and means sacred, but also forbidden.

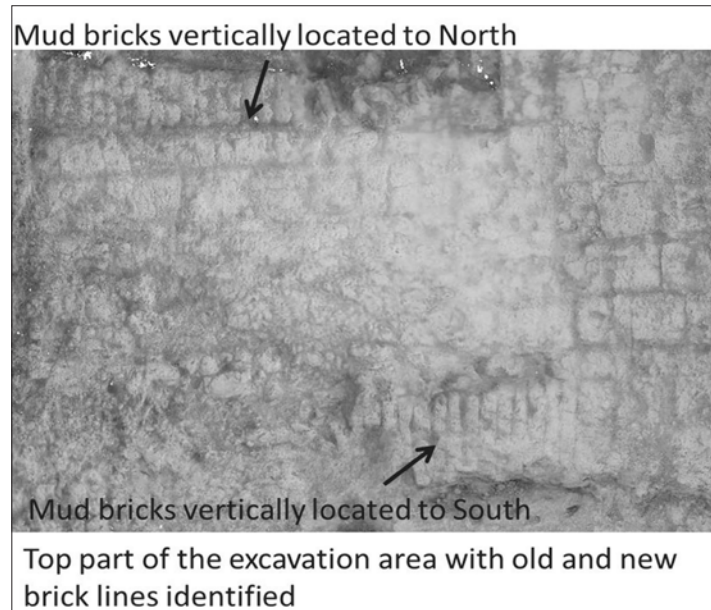


Fig. 13: Trench 9: the condition of the trench at the end of the 2015 season (after Missione Archeologica Italiana (MAI), Università di Napoli "L'Orientale" (UNO); by Bruno Genito 2015).

other part of the mud-brick line facing north was revealed; this face is composed of a very irregular line. A new line of mud bricks was identified, denominated SU442 (west of SU412), perpendicular to SU441 and oriented east-west and on the same level as SU75. North of SU423, there is another mud-brick wall (SU440) oriented east-west (**Fig. 13**).

## 9 Conclusions

The first seasons of excavation at Kojtepa have clearly established the importance of the site in the history and topography of the area. Its position, between the agricultural area to the north created by the extension of the Dargom Canal, and to the south

the piedmont slopes of the Kara Tyube chain, make it one of the most important sites in the region in terms of the relationship between nomadic and agricultural ways of life.

The architectural remains so far unearthed have revealed traces of important fortification walls on top of the tepe, and a clear re-use of the northern and eastern encircling walls dating back to the early and late Hellenistic periods. Future excavations will focus on a still enigmatic mud-brick structure located in the north-eastern corner between the encircling wall and the *tepe*. The material culture collected indicates that there were several distinct phases of occupation, stretching from the 3rd century BCE to the 3rd century CE and beyond.

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