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Archaeological excavations at Lungi Tepa, south Uzbekistan. Preliminary Report for Season 2019

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ABSTRACT

This report summarises the preliminary results of the first season of excavations at the site of Lungi Tepa in the Kugitang Piedmonts, south Uzbekistan. The research was conducted by an international (Czech--New Zealand-Uzbek) archaeological-bioanthropological team in autumn 2019. The excavations focused on obtaining stratigraphic data from the Medieval settlement of Lungi Tepa and uncovering an adjacent burial ground in order to get well-dated reference material for future in-depth study of the High Medieval chronology of the studied region.

KEYWORDS

Central Asia; Tokharistan; Lungi Tepa; High Medieval Period; Late Medieval Period; archaeology; excavation; bioanthropology; burials; settlement; stratigraphy.

INTRODUCTION

As recently attested, during the High Medieval Period there was unprecedented population growth and a rapid increase in the number of settlements in some well-surveyed regions of southern Central Asia, such as the Pashkhurt Valley, Baysun District, and Denau Region (Stančo 2019; Augustinová 2016, 57; Stride 2004, I/344, tab. 13). This was at least partially a result of the exploitation of metal resources in the foothills and along the south-western spurs of the Hissar Mountains (Damašek 2019, 78), including metal processing at some of the sites attested by finds of metal ingots (Stančo *et al*. 2019, 145, 162). The High Medieval Period in south Central Asia demands a closer investigation of both historical and archaeological sources in order to better understand the social and political processes that took place after the establishment of Islam in the 8th century AD. In previous field seasons, the Czech-Uzbek archaeological expeditions gathered data on the High Medieval Period as part of larger investigations (intensive and extensive archaeological surveys) focused on earlier periods (e.g. the Iron Age and Hellenistic Period). The data collected on the High Medieval Period led to the establishment of a research group with a main focus on this pivotal historical period.

For the first time in the almost twenty-year history of the Czech-Uzbek archaeological expeditions in southern Uzbekistan, a separate team (the Khojaunkan research group) formed to focus on a site dated to the Medieval period. This expanded the scope of the previous research that used surface survey and excavation to investigate prehistoric sites and Early Historic settlements in the Surkhan Darya Province. The team was composed of archaeologists from the Czech Republic led by L. Damašek (Charles University) and anthropologists from New Zealand and the United States led by R. Kinaston (University of Otago, NZ). The research was approved

by local Uzbek archaeologists and authorities. The project is part of a larger research group formed by L. Stančo (Charles University), who had been leading archaeological research in southern Uzbekistan for almost two decades under the auspices of Sh. Shaydullaev (Termez State University).

The Khojaunkan research group was funded by a University of Otago Research Grant (NZ) for the research project titled *Human health and adaptation along Silk Roads* which combined archaeological and bioanthropological research. The main bioanthropological goal of the project was to understand diet, heath, and migration patterns in a High Medieval population by studying their skeletal remains. The main aim of the archaeological research was to obtain well-stratified material culture that would allow us to create a stratigraphic sequence of the High Medieval ceramics for the piedmont steppe region of Kugitang. The main focus of this report is on the archaeological part of the research. The bioanthropological results are addressed only briefly and will be fully reported in forthcoming publications.

The excavations at Lungi Tepa, as well as the post-excavation processing of the material culture, were conducted by the students Daniel Pilař and Markéta Šmolková of the Faculty of Arts, Charles University under the supervision of Ladislav Damašek. The excavation of burials and analysis of the skeletal remains was carried out by Rebecca Kinaston and her PhD student Robyn Kramer (both University of Otago, NZ).

Lungi Tepa had been chosen for the excavation for several reasons. First, the site is known from previous research which confirmed that the settlement was inhabited during the High Medieval Period (Bobokhojaev – Annaev – Rakhmanov 1990) and, later, from a brief survey that confirmed there was a burial ground near the tepa. Surface finds of material culture found at the site and around it appeared to belong exclusively to the Middle Ages. Thus, we did not expect earlier or later strata at the settlement on Lungi Tepa. Although the settlement is located close to the current village, the central mound appeared undisturbed by modern and present-day cemeteries and construction activities. The lack of modern disturbance on Lungi Tepa is unlike many other similar, but recently disturbed sites, surveyed by the Czech-Uzbek expedition in the broader region of the Kugitang piedmonts (Augustinová *et al*. 2016, 266; Augustinová *et al*. 2017, 112). Moreover, the size and height of Lungi Tepa was appropriate to expect sufficient stratigraphic sequence, but it did not seem too demanding in terms of workload.

LOCATION

The site of Lungi Tepa is situated on the outskirts of the present-day village of Khojaunkan in the region of the Kugitang foothills, Sherabad District, Surxondaryo Province (UZB administrative units). Khojaunkan (37°53'48.549"N, 66°46'33.414"E) is situated around 30 km as the crow flies from Sherabad town. Within the village, Lungi Tepa (37°53'48.778"N, 66°47'0.682"E) lies on the eastern margin of the populated area (**Fig. 1**). It is situated at the end of a mountain valley at an altitude of 1322 m. The terrain is elevated so there is a good view east in the direction towards the Sherabad River Valley. Approximately 300 m to the south of the Lungi Tepa site there is a riverbed with a seasonal watercourse.

Lungi Tepa is a tell-type settlement (in local terminology, a tepa). The tepa (tell mound) has a roughly oval shape with dimensions of 60 × 40 m and average height of 6.5 m. To the south and west of the site, present-day mud-brick houses have been constructed in the proximity of the central mound. On the eastern and northern sides, there is a dirt road and the ruins of abandoned houses. As the local topography indicates, the Medieval settlement clearly extend-

ed beyond the central mound, but the above-mentioned modern houses and various minor structures prevent the estimation of the general extent and form of the site. Nowadays, there is no water source in the vicinity of the tepa.

PREVIOUS RESEARCH

The site of Lungi Tepa has been known to archaeologists since the 1980s when it was first excavated by A. Bobokhojaev, T. Annaev, and Sh. Rakhmanov from the Archaeological Institute of the Academy of Science, Uzbekistan. A short summary of the fieldwork was published along with some other data on various archaeological sites across the piedmonts of Kugitang and Baysun Tau (Bobokhojaev – Annaev – Rakhmanov 1990). These archaeologists dug a trench on the northern slope of Lungi Tepa to determine the stratigraphy. Today, traces of the trench are still clearly visible due to a depression on the side of the tepa. During their excavation, they identified a mud brick wall on a platform in the lower part, and a tamped clay wall in the upper part of the trench. With the exception of these features, the only other layers were identified between, and on the outside of, these two walls. A selection of the excavated ceramic fragments, including glazed ware, was published as part of their report (Bobokhojaev – Annaev – Rakhmanov 1990, fig. 4, 5).

In autumn 2017, members of a Czech-Uzbek expedition, along with R. Kinaston, observed Lungi Tepa. They were staying in Khojaunkan village while excavating the nearby Kaptar Kamar cave site, which was discovered in the previous year by L. Stančo (Stančo *et al.* 2017, 127–128). In 2017, L. Stančo's team collected ceramic fragments from the surface of Lungi Tepa

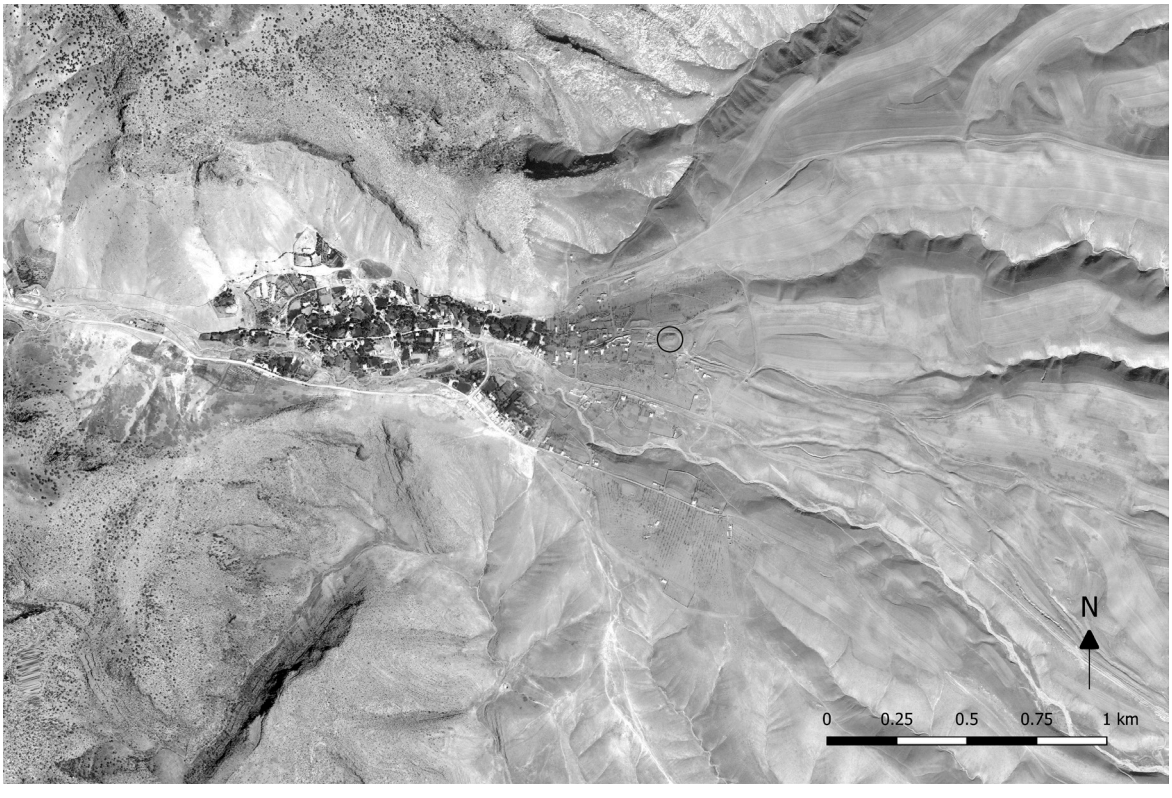

Fig. 1: Map of the village Khojaunkan with marked position of Lungi Tepa (map by L. Damašek; source: mapy.cz).

and a majority of the ceramic fragments were dated by Sh. Shaydullaev to the High Medieval Period. Fragments from the Early and Late Medieval Periods were found as well (Damašek 2019, 53–54). In 2017, a local man asked the team excavating Kaptar Kamar to come and look at human bones emerging from his backyard. The orientation (north/south) and burial position (supine extended, head facing west) of the observable skeletons suggested that the area was a Muslim burial ground. The man insisted on the collection of the human remains on the surface and R. Kinaston analysed the fragments and took samples for Accelerator Mass Spectrometry (AMS) radiocarbon dating, ancient DNA, and isotope analysis (with State approval). The radiocarbon dating of a human bone sample from one of the burials provided a date of cal AD 1009–1151 (MAMS 35089).

Based on the pottery type found around the site and the human bone AMS date, it was obvious that Lungi Tepa and the nearby cemetery belonged to the Medieval Period. The lack of other material culture or structures from other periods suggests that there is a high probability there are no settlements from earlier periods on Lungi Tepa or in the close vicinity.

EXCAVATIONS IN 2019

In autumn 2019, the Khojaunkan team focused on four research areas on or nearby Lungi Tepa: Trench 1 (T1), Trench 2 (T2), Burial site 1 (B1) and Burial site 2 (B2) (**Fig. 2**). However, the main research area and largest excavation unit during the 2019 field season was T1, located on the southern slope of the tepa. The other three excavated areas were complementary to the excavation in T1.

BURIAL SITE 1 (B1)

B1 is the location of the human remains found in 2017 (mentioned above) and is located approximately 130 m west of Lungi Tepa (**Fig. 2**). Based on the initial observation in 2017, more burials were expected to be found in this area. The original plan was to excavate this burial ground and T1 as the main objectives of the research. Unfortunately, the entire area with burials observed in 2017 was altered by the local inhabitants. This happened because the local landowner removed the eroding skeletal remains sometime between August 2017 and September 2019 and reburied the remains in two pits at the far west boundary of his property (labelled K1 and K2). Both units K1 and K2 (**Fig 2**) were excavated by R. Kinaston and R. Kramer and the skeletal remains were removed from the garden for analysis and curation (at the Termez Museum). Unit K2 provided the majority of the commingled skeletal remains, but together, the minimum number of individuals (MNI) from both units was determined to be six adults (over 18 years old) and three non-adults (aged 0–18 years old). A comprehensive analysis of the commingled remains will be presented in a forthcoming publication. The discovery of the commingled remains (instead of the expected primary burials) in B1 shifted the plans of the Khojaunkan research group. Area B2 was then considered as the next place to excavate intact Medieval burials.

BURIAL SITE 2 (B2)

B2 is situated east of the tepa (**Fig. 2**). The area is defined by six circles of stones that surround small soil mounds. These surface features likely mark graves as this burial type is common for Medieval graves in the region. The six stone circles were mapped by total station and measured.

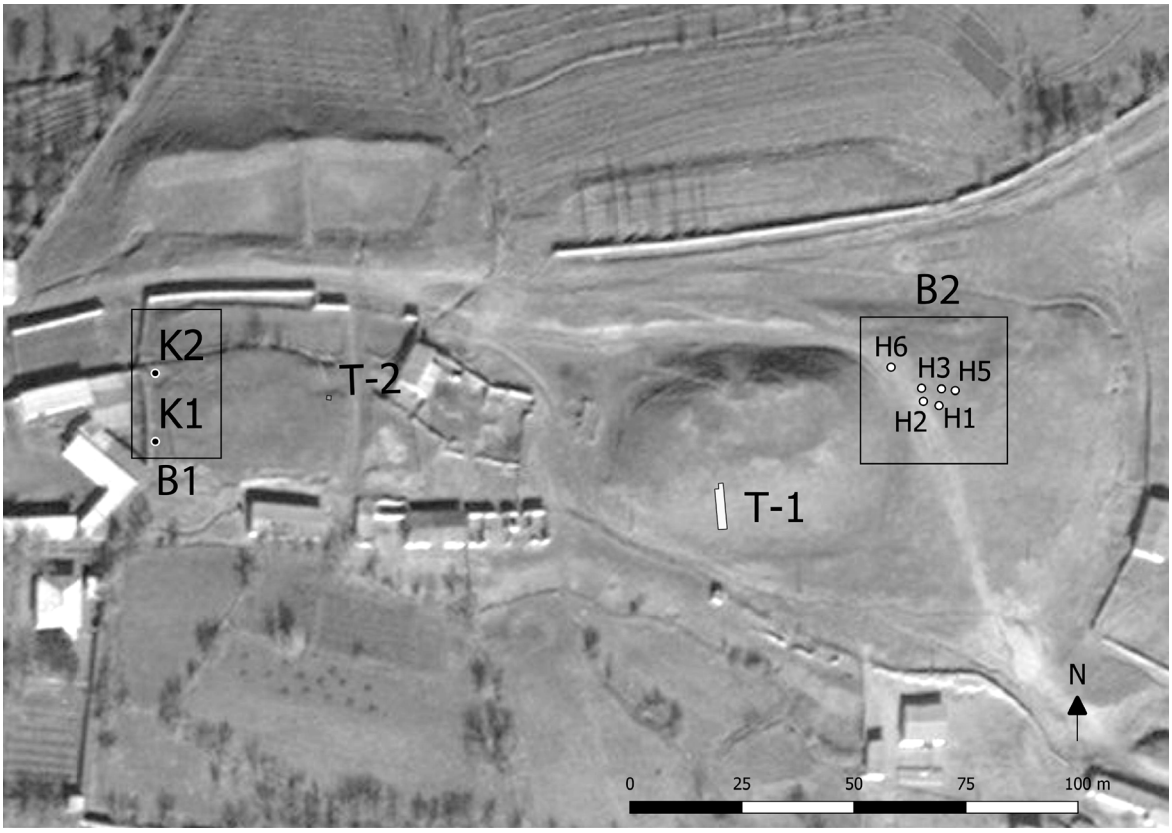

Fig. 2: Plan of Lungi tepa with its surroundings with the placement of T1, T2, B1 and B2 (map by L. Damašek; source: mapy.cz).

One of them, H1E, was excavated, but before the work had reached the level of the skeleton, other burials were uncovered in T1. The bioarchaeology team moved to work on the T1 graves so excavations of the stratigraphic cut of the tepa could continue. As there were 8 graves in total in T1, there was no time to finish the excavation of H1E. Nevertheless, the bottom of the grave pit of H1E was reached. However, H1E was a specific type of grave construction that involved a larger pit (this was the pit bottom that was uncovered) that had a niche cut into the side where the body would have been placed. In the case of H1E, the niche was covered by stones which were visible on the west side of the pit. As mentioned above, neither the body nor the niche was investigated due to time pressure and the larger excavated burial pit of H1E was backfilled.

TRENCH 2 (T2)

T2 was a small 1×1 m test pit excavated between Burial site 1 (B1) and the tepa (**Fig. 2**). In the area of T2, there was a large platform (area of elevated sediment) that was disturbed. The disturbance was caused by the local landowners who made an approximately 40 m long path (probably by bulldozer) which cut through the elevated platform sediment. Large quantities of pottery, especially glazed ware, were found emerging out of the walls on both sides of the path. Trench 2 was excavated to investigate if there were intact Medieval cultural layers in this area of the site and whether the platform was of anthropic origin. A sterile layer (hard soil,

no ceramics) was reached at a depth of 60 cm in Trench 2. No layers could be distinguished during excavation so T2 was excavated in 20 cm spits. The sediment excavated from T2 was rich in pottery (203 fragments in total) and animal bones. There was a high proportion of glazed ware (18.5 %) represented in the pottery fragments. Blue glaze or blue combined with other colours was the most represented glaze type found in T2 (75.5 % of all glazed shards) (**Pl. 5/1:8–12**).

The ceramics emerging from the walls of the path were also collected. No methodological approach was attempted for this collection except that the most diagnostic shards were selected. These pottery fragments included an almost complete lamp, a lamp handle and beak and several glazed bases and rims (**Pl. 5/1:1–7**). Blue glaze was also dominant among these shards. One base had a specific decoration that combined blue glaze with black geometric painting (**Pl. 5/1:2**).

Based on the material culture collected from T2 and the modern path earthwork, we can conclude that the platform is of an anthropic origin. The ceramics found in T2 and collected from the wall of the modern earthwork belong to the Late Medieval Period (13th– beginning of the 16th century AD). Clearly some anthropogenic activity (most probably a settlement) in the Late Medieval Period took place in this area. The original dimension of the platform cannot be estimated because there are houses, outbuildings and fences built on and around what remains of the structure. In the southern part of the platform, it has been used as a source of clay (for mudbricks) for constructing buildings and fences. Without further investigation, our current analyses do not allow any other assumptions about the platform's function, form and purpose.

TRENCH 1 (T1)

The main focus of the archaeological research in 2019 was Trench 1 (T1). T1 was placed on the southern side of Lungi Tepa (**Fig. 2**) opposite the previous stratigraphic trench made in the 1980s (Bobokhojaev – Annaev – Rakhmanov 1990) to avoid interference with previously excavated areas. A stratigraphic trench (a narrow cut of the mound) was chosen as the best method of excavation for the tepa. This method was chosen because it most suited the research goal of obtaining stratigraphic information and intact material. However, the downside of this method is that it does not provide much information about the settlement (i.e., types of buildings, the function and type of settlement, etc.). The stratigraphic trench was positioned on the slope and it spanned from the top edge of the tepa towards the base of the mound. The sides of the trench were oriented according to the cardinal directions. The final dimensions of T1 were 9 × 2 m with an extension (1.3 × 1.1 m) in the north-eastern corner to allow for the recovery of two burials (H4 and H5). A depth of almost 2.6 m was reached in the northern part of T1 and in the southern part only the upper 20 cm of soil was removed (due to the location on the slope). The subsoil under the tepa was not reached and it is estimated that there is approximately 1 to 2 m of unexcavated cultural layers below the lowest level reached in 2019. In T1, horizontal and vertical units were distinguished in addition to eight graves.

The whole trench was dug by hand and no machinery was used. All the ceramics and other artefacts, as well as ecofacts, were collected and recorded. A metal detector was used throughout the excavation to search the excavated area and the spoil heap. All the ceramic shards were labelled, described and photographed. The characteristic shards (rims, bases, decoration, glaze etc.) were also drawn.

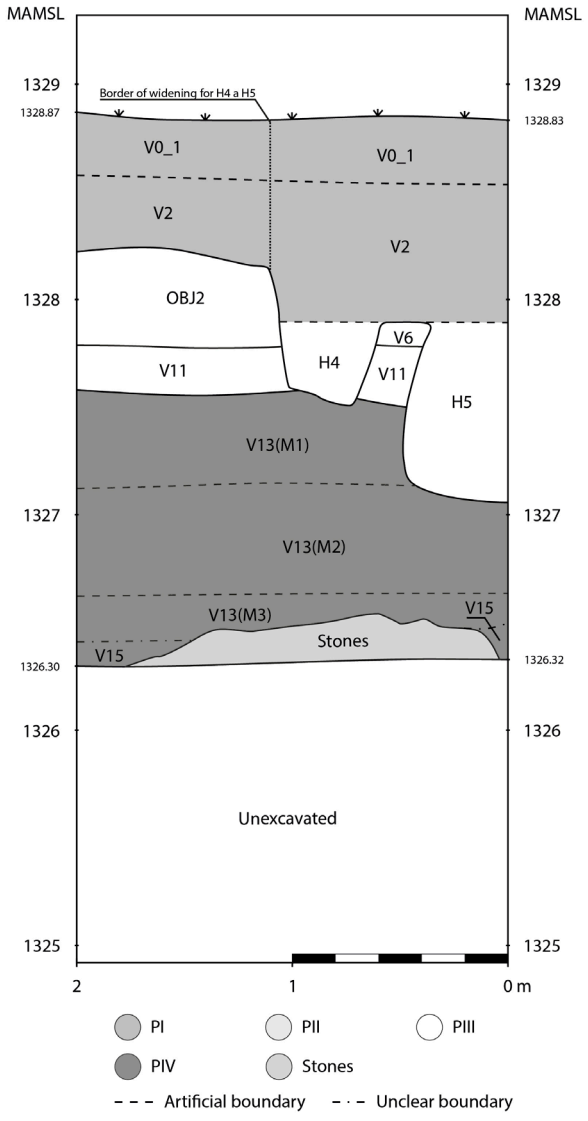

Fig. 3: North profile T1 (drawing by L. Damašek).

Distinguished phases

Four main phases with one sub-phase were identified from the stratigraphy of T1 – Phase I (PI), sub-phase IA (PIA), Phase II (PII), Phase III (PIII), and Phase IV (PIV). The divisions were made based on stratigraphy and artefact type.

Phase I (PI) included the surface layers of Lungi Tepa marked V0, V1, V2, V8 and V9 (**Fig. 3–5**). Layers V0, V1 and V2 were excavated in arbitrary spits. Layers V0 and V1 were merged into one unit, V0_1, with a total thickness of 30 cm. Layer V2 included all the sediment between V0_1 and the first distinguishable units and layers. Layers V8 and V9 were associated with graves H7 and H8. Except for the first few centimetres of sod, all these layers were soft and dusty, easily removed even by a brush. V0_1 and V2 contained stones with dimensions up to 30 cm. Both layers V0_1 and V2 were rich in ceramics including glazed ware (70 fragments, 11 % of all shards). Similar to V0_1 and V2, glazed ware comprised 10% (11 fragments) of the ceramics from layers V8 and V9. After removing V0_1 and V2, the first distinguishable features were identified. When the area was cleaned and layers V8 and V9 were removed, eight graves were identified (**Fig. 6**).

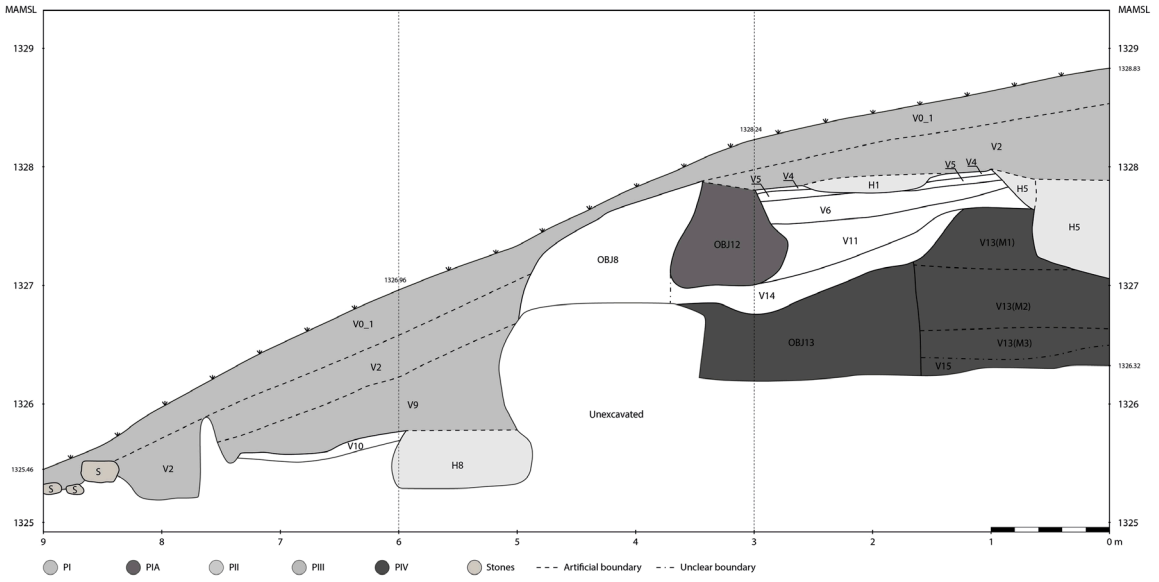

Fig. 4: East profile T1 (drawing by L. Damašek).

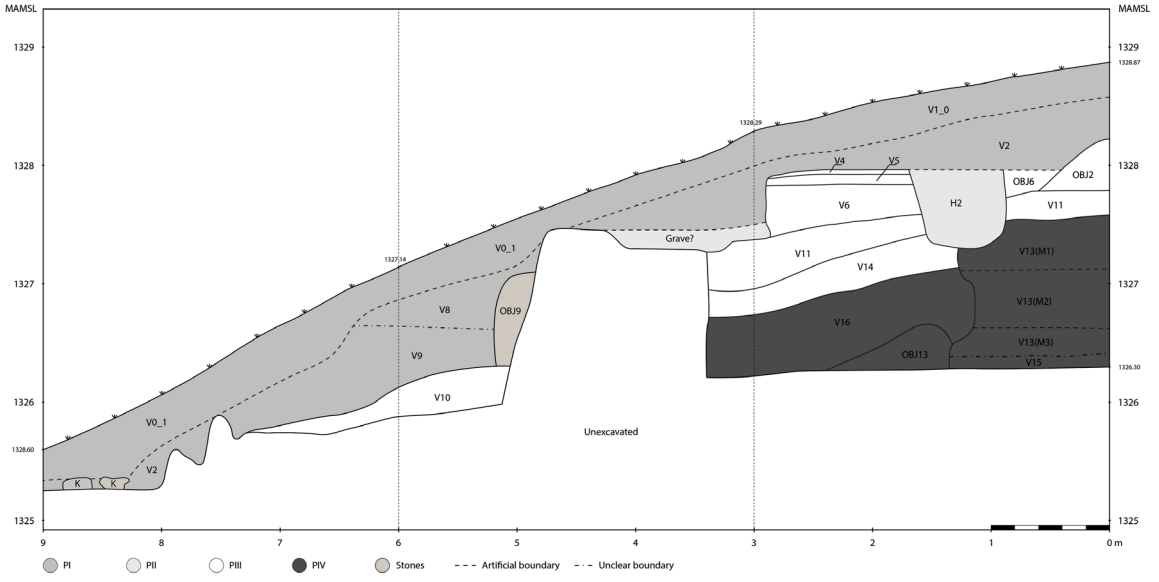

Fig. 5: West profile T1 (drawing by L. Damašek).

PI included the uppermost layers without any distinguishable features. Modern intrusion and disturbances, soil movement, and erosion may have impacted these units. Therefore, the pottery collected from these top layers is not ideal for establishing pottery chronology and typology.

Subphase IA (PIA) includes just one unit called OBJ12 (**Fig. 4**). It is a pit which interfered with grave H6. The borders of these two units were not clearly defined, but there were indications that OBJ12 cut into H6. That would make OBJ12 the youngest distinguishable unit in T1. All the other layers and units were cut by or found under the graves (H1–H8),

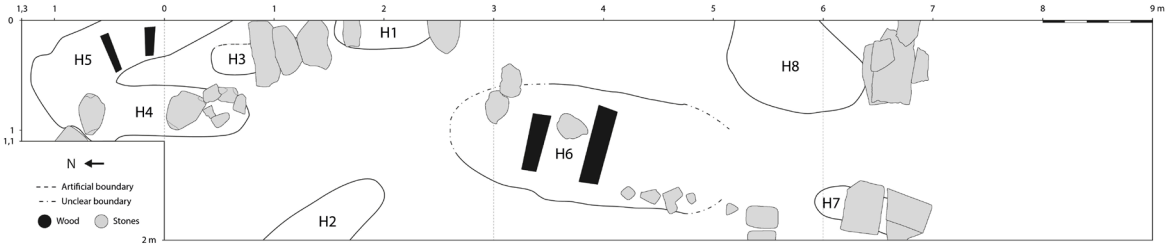

Fig. 6: Graves in T1 before excavation (drawing by L. Damašek).

which form phase II. The relationship between OBJ12 and V0_1 and V2 (PI), which lie above, is uncertain. The position of OBJ12 under V0_1 and V2 would suggest that it is older, but ceramic shards of one vessel were found in the filling of OBJ12 as well as in V2. The specific engraved decoration allowed these shards to be reconstructed into a large part of the upper body of a vessel (**Fig. 7**). The ornate decoration is analogous to those found on ceramics in the Nishapur pottery assemblage, which is dated to the 11th and 12th century AD (Wilkinson 1973, 293, 305, fig. 43a).

Fig. 7: Reconstructed part of a vessel with engraved decor found in OBJ12 and V2 (photo by M. Šmolková).

Subphase PIA may be important for understanding the stratigraphic relations of the upper layers of the site. If OBJ12 cut into the grave of H6, then all the graves from PII were prior to OBJ12 and OBJ12 would form another, later, phase. Subphase PIA was distinguished because the relationship was too uncertain to merit a full phase designation.

Phase II (PII) is composed of eight graves marked H1–H8 (**Fig. 6**). A 1.3 × 1.1 m extension was excavated in the northern part of T1 to uncover the full extent of graves H4 and H5. Seven graves were excavated completely. Only H2 was not fully excavated because two thirds of the grave extended into the western profile.

Four of these graves (H4, H5, H6 and H8) belonged to adults and four were infant or children's graves (H1, H2, H3 and H7) (**Fig. 8**). In the case of H3, the assumption that it was a child's grave was made because of its small size and its similarity to other graves in shape and depth. No skeleton was found inside the grave pit of H3. All the grave pits had roughly the same shape, an elongated oval and south-north orientation according to the cardinal directions. The buried individuals also share the same orientation with the head to the north, facing west (**Fig. 9**). The depth of the graves was variable. The four children's graves were shallow whereas the adult's graves were deeper.

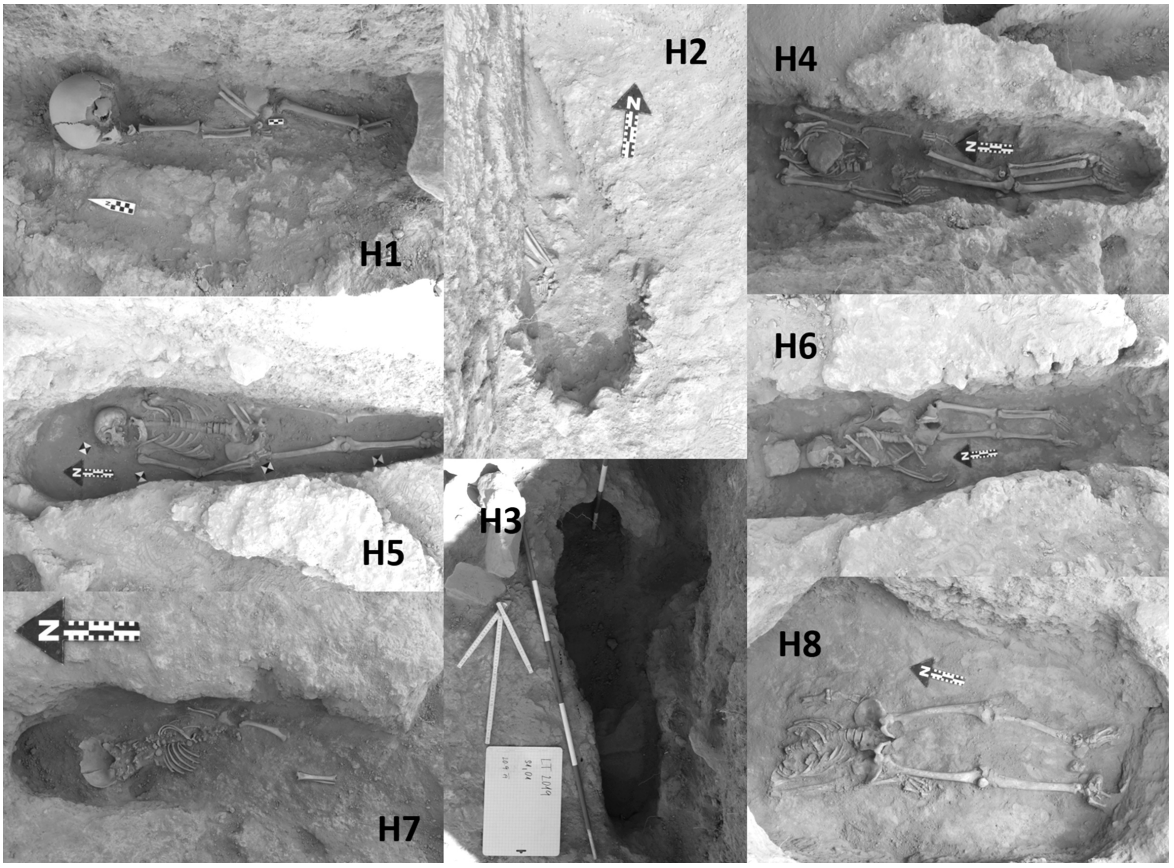

Fig. 8: Graves H1–H8 (photos by R. Kinaston).

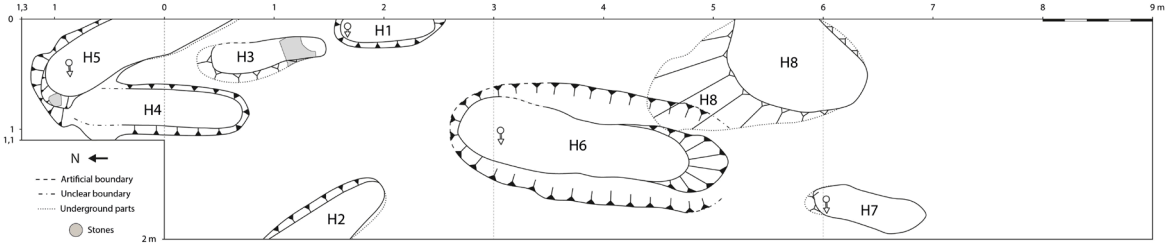

Fig. 9: Graves after excavation. Position of head and face direction is marked by a circle and arrow (drawing by L. Damašek).

Fig. 10: Remains of wood in grave H5 (photo by R. Kinaston).

In six cases (H1–H5 and H7), the grave was just a simple, narrow pit. The graves H6 and H8 were different. The individual in H6 was interred in a narrow pit surrounded by a larger, shallow pit (**Fig. 9**). This type of construction corresponds with wood scraps discovered in the larger shallow pit. The larger pit was clearly made as a bed for the placement of wooden planks which covered the narrow pit. Wood scraps were also found on the surface of H5 but in this case there was no wider pit found for the placement of the planks (**Figs. 6** and **10**). In the case of H8, the northern part of the grave pit was partially dug into the soil, so it formed a niche. There were three large flat stones above H8. These stones were likely covering the grave pit of H8, but slid aside after burial. The children's graves H7 and H3 were almost fully covered by large flat stones that were placed over the pits after the graves had been filled with soil. In the case of H1 there were stones in the grave above the legs and behind the skull of the skeleton. H2 was the only child burial that did not have stones either in or on top of the grave. However, only the lower third of the grave was excavated because the remainder of the burial extended into the west wall of T1. The grave-pit H4 was surrounded by smaller stones in its southern part. Larger stones were also discovered in the burial fill in the northern part of the grave H4, one of which was embedded in the thorax of the skeleton (**Fig. 8**). The fact that there was no soil between the stone and skeleton suggests that the stone was placed directly on the chest of the individual in H4 when she was buried. Another possible interpretation is that this stone was placed on top of a wooden cover that sealed the unfilled grave and when this decomposed, the rock fell into the thorax of the buried female. However, the lack of wood particles in the grave, the full articulation of the skeleton and the location of the ribs showing that decomposition likely occurred around the rock, indicate that the rock was likely placed on the person during interment.

There were no intentionally placed artefacts in the graves with the exception of H1. The child from H1 was clutching a blue/green bead in its hands (**Fig. 8**). The burial fill of all the graves was rich in ceramics including glazed ware. In the case of H8, there was even a glass bottom of what was perhaps a cup. The artefacts found in the burial fill bear little significance for chronology and typology analyses because they are part of a mixture of material culture from units that were cut into to dig the graves, then used to backfill the burials.

There were no identifiable layers or units above the graves. On the contrary, the graves clearly cut all other identified units except the above mentioned OBJ12. Based on this observation, the graves were created after all other activities at Lungi Tepa stopped and no major activity returned to Lungi Tepa since the area was used as a burial ground. Two of these graves, H4 and H5, superimposed one another, which indicates that the cemetery was in use for a period of time. PII is important for the stratigraphy of Lungi Tepa because it provides the *terminus ante quem* date of the settlement and use period of Lungi Tepa. This is because the graves from PII cut into units from PIII which belong to the High Medieval Period (discussed below). Therefore, the burials date to the end of the High Medieval Period or later and we can be certain that the individuals are almost certainly Muslim, which corresponds with the method of interment (e.g., north/south orientation, head facing west and lack of grave goods).

The placement of later graves on ancient or medieval sites is not uncommon in this region. Tepa mounds were often used as graveyards in the Medieval and modern periods and, in some places, they are still used as graveyards today. Some of these sites were encountered by the Czech-Uzbek expedition (Augustinová *et al*. 2017, 114; Augustinová *et al*. 2016, 266; Damašek 2019, 60). Nevertheless, the graves on Lungi Tepa were not expected. There were no signs of the graves on the surface and no graves were known by the local community or mentioned by the Uzbek archaeologists who undertook the previous excavation on the north side of Lungi Tepa (Bobokhojaev – Annaev – Rakhmanov 1990). The discovery of the graves resulted in two outcomes. First, there was no time to excavate the graves in B2 and the Khojaunkan research group was focused on excavating T1 as these burials needed to be removed to reach the lower layers. Second, the excavation of the graves delayed the work on stratigraphic trench T1 and the planned work could not be completed in the 2019 season.

Phase III (PIII) followed PII and contained units V4, V5, V6, V10, V11, V14, OBJ2, OBJ6, OBJ8 and OBJ9 (**Figs. 3–5**). Unit V4 (5 cm thick) and V5 (8 cm thick) were likely floors. These units were flat surfaces (the difference in the height of their surfaces varies between 1–2 cm). Both were hard and made of grey loess. Once their borders were found, they were easily removed by peeling them off as blocks. Neither V4 or V5 contained many ceramic shards or other artefacts. Two other recognizable features in PIII were OBJ8 and OBJ9. OBJ8 was probably a wall and was located roughly in the middle of T1, stretching from the west to east profiles. Another wall of stones (OBJ9) was attached to OBJ8 on its southern side (**Fig. 11**). Both features were disrupted by the graves H6 and H8. The grave pit H6 cut into OBJ8 in the middle of its extension across T1 (**Fig. 12**). The disruption by the graves and small dimensions of T1 do not allow for further interpretation of these two features. Only the part of OBJ8 east of H6 was excavated and the rest of the feature had to remain unexcavated because of time constraints. Units V6, V11, and V14 were horizontal layers in the north part of T1. They were all rich in ceramics. Units V11 (47 fragments, 21 %) and V14 (26 fragments, 46 %) contained a large number of glazed ware shards.

A number of significant types of glazed ware were recovered from PIII (**Pl. 5/2**), including colour-splashed sgraffiato ware. The sgraffiato method involved covering the ceramic product in white slip, then incising the motif into the slip and applying coloured splashes (green, brown, yellow). Finally, the product was covered in transparent glaze and fired. Ceramics with this decorative pattern were produced in Termez (Ferreras *et al*. 2020, 261). This ceramic type is dated to the late 9th–11th century AD and it spread throughout Central Asia (Wilkinson 1973, 61–62; Ferreras *et al*. 2020, 261). Specimens with this decorative motif were found in V11 and V14 in relatively high quantities (V11 – 17 % of glazed ware, V14 – 30 % of glaze ware; **Pl. 5/2:5–6**). Cross-hatching or squares filled with dots, or with a green or yellow colour, in a symmetrical

Fig. 11: Stone wall OBJ9 (photo by L. Damašek).

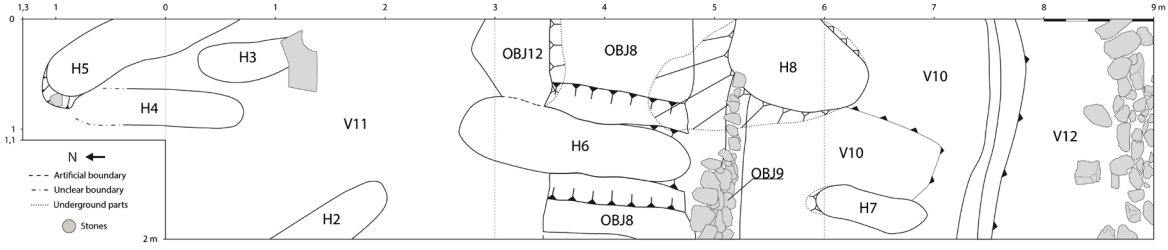

Fig. 12: T1 – level of layer V11 (drawing by L. Damašek).

pattern was another specific decorative motif found on the ceramics from Lungi Tepa PIII. This type of decoration originated in Nishapur and was widely used on ceramics and glass from the 9th century AD across Central Asia (Wilkinson 1973, 8). Ceramics with this motif type were found at Shurobkurgan in Pashkhurt village (approximately 20 km from Lungi Tepa) in the Kugitang piedmonts (Solovjov 2014). This motif was also found in deposits from medieval Termez and other medieval cities on Amu Darya (Houal 2001, pl. 5:2a; Vishnevskaja 2001, pl. 17:3,4). Two shards (4×3 cm and 3×2 cm) with this motif (squares filled with dots or a yellow and green colour) were found in V11 at Lungi Tepa (**Pl. 5/2:9–10**). Ceramics with vegetal decoration were also found in Phase PIII. This motif is composed of curved arches which connect, and by dots placed around and on the arches resulting in a final composition that looks like branches. Two shards carrying vegetal decoration were found in V11 (**Pl. 5/2:3–4**). Ceramics with vegetal decoration are also known from Shurobkurgan (Solovjov 2014, 43) and Termez and the motif is dated to the 10th–11th centuries AD (Ferreras *et al*. 2020, 257). Wheel-thrown ware made with a fine beige/white clay and wares with surfaces covered in a beige/white slip on ceramics made with red clay were also found in units from PIII. Another distinctive ceramic type that was found was handmade ware with red or brown painting, but this type of pottery is rare in PIII (6 fragments) (**Pl. 5/1:13–14**). Two zoomorphic sculptures were found in V6 and V11 (**Fig. 13**). Unit V11 also contained two pieces of glass.

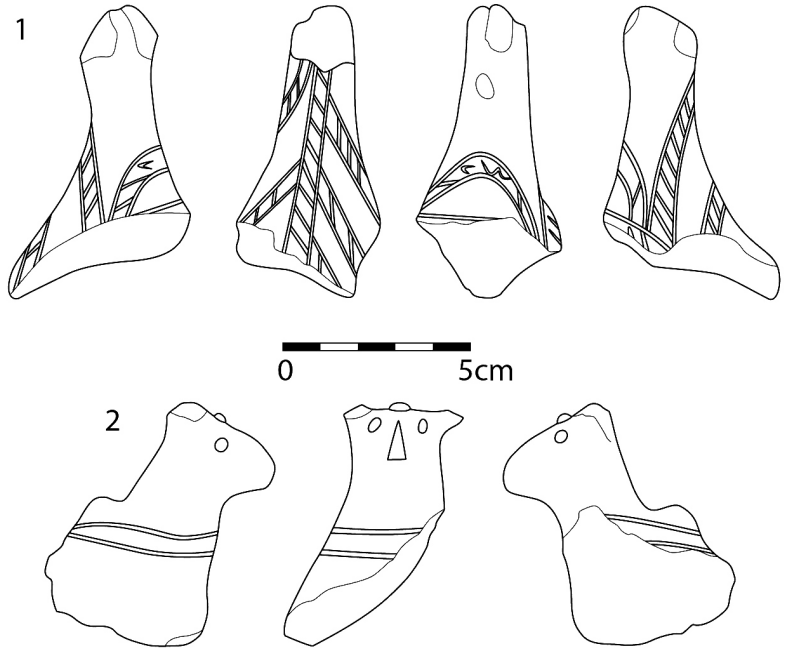

Fig. 13: Zoomorphic sculptures from V6 (2) and V11 (1) (drawing by L. Damašek).

Phase PIII is located in a secure stratigraphic context. From above, it is delimited by the graves of PII and no other disruptions (except for the graves) were detected in PIII. Thus, material from PIII is well suited for an analysis of the chronology and typology of the ceramics. Based on the analysis of the ceramics from PIII, especially the glazed ware, it can be concluded that this phase belongs to the High Medieval Period (9th – 13th century AD), which is the main focus of the current research.

Phase IV (PIV) contained units V13, V15, V16 and OBJ13 (**Fig. 3–5**). Phases PIV and PIII were separated based on the identification of several unique characteristics. Visually, the two phases could be differentiated by colour. All the units from PIII had sediment in shades of grey whereas all the units from PIV were shades of ochre. The units from PIV contained many more animal bones and more charcoal (and sometimes even ash) compared to PIII. Artefacts from PIV were completely different compared to PIII. In units V13, V15 and V16 from PIV, earthen plaster was found that was unlike anything observed in the units from PIII. No glass or glazed ware was detected in any unit from PIV. Ceramics from the PIV units lack the variety of shapes and forms that were found in the ceramics from PIII. The main bulk of PIV ceramics (91 %) were shards from handmade vessels. This is in contrast with PIII, where handmade ware comprised only 65 % of the total ceramics.

As mentioned above, as a result of the time pressure, the research team was unable to reach the subsoil under the tepa. Therefore, PIV is not necessarily the last phase in the stratigraphy of Lungi Tepa. No significant features were discovered in PIV. Units V13, V15, and V16 were horizontal layers rich in ceramics. All these units (V13, V15, and V16) also contained charcoal and animal bones. V13 was dug in arbitrary spits (V13, M1–M3) because of its thickness (1.17 m at the northern profile). Two accumulations of stones were found in V13. The first was in the

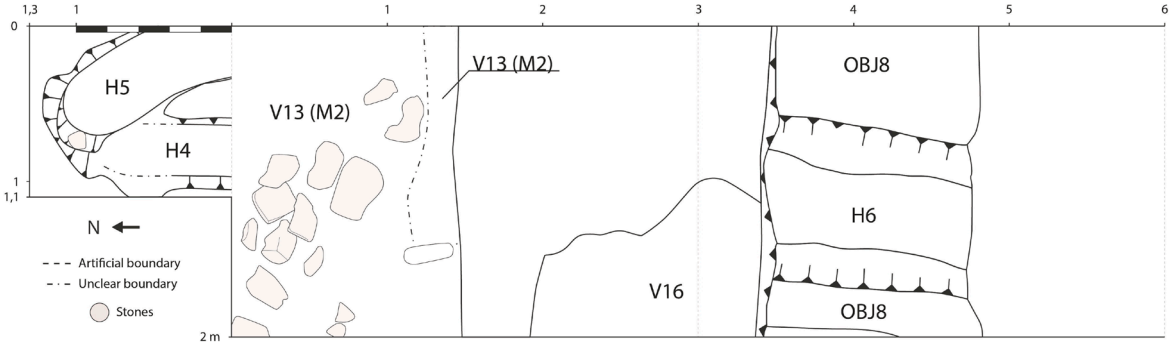

Fig. 14: First accumulation of stones in the north part of T1 (drawing by L. Damašek).

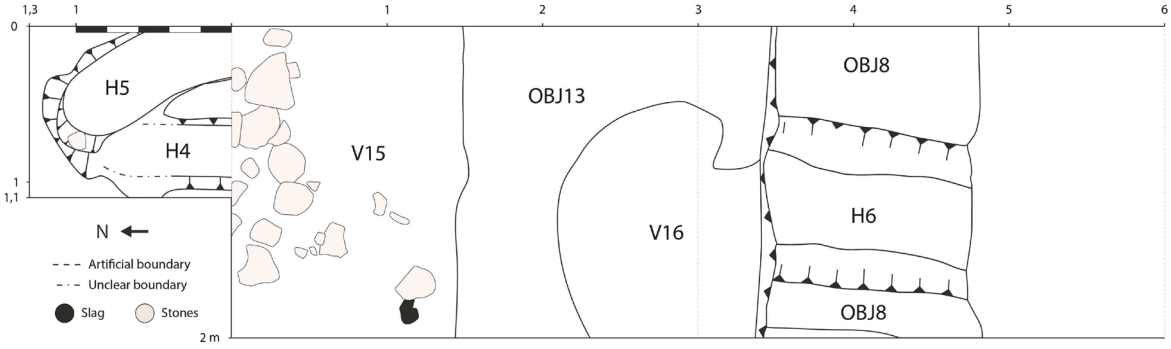

Fig. 15: Second accumulation of stones in the north part of T1 (drawing by L. Damašek).

upper part of V13 (**Fig. 14**). The second accumulation of stones divided units V13 and V15 (**Fig. 15**), which were otherwise very similar. Unit OBJ13 was separated from V16 because it was so hard it could only be excavated with a pickaxe. The border between V16 and OBJ13 was not well defined and the transition to the hard unit (OBJ13) was gradual. In V15 a piece of slag was found with a glassy surface. Results from the preliminary inspection of the slag (done by M. Kmošek) was that it originates from a pyro-technological facility. In layers V13, V15 and V16, pieces of unburnt clay mixed with chaff were found, which may be earthen plaster or some kind of unburned ceramic.

Ceramics from PIV had a simple composition and were mostly handmade vessels (91%) with simple rims (**Fig. 17:1–10, 12–13**) and a few variations in vessel shape (**Fig. 16–17**). Among the handmade ware, horizontal handles with a ring in the middle (**Fig. 16:4–5**) were found as well as simple vertical handles from pitchers (**Fig. 16:1–2**). The handmade ceramics often had burns that indicated that they had been used on open fires. Wheel-thrown ware from PIV included thin-walled ceramics, rims of jars (**Fig. 17:11, 14**) and one specimen with a double handle (found in V13) (**Fig. 16:6**).

Based on the analysis of the ceramics and consultation with S. Shaydullaev, PIV is dated to the Early Medieval Period (5th–8th century AD). The nature of the ceramic material is very different from PIII but homogenous throughout the units of PIV.

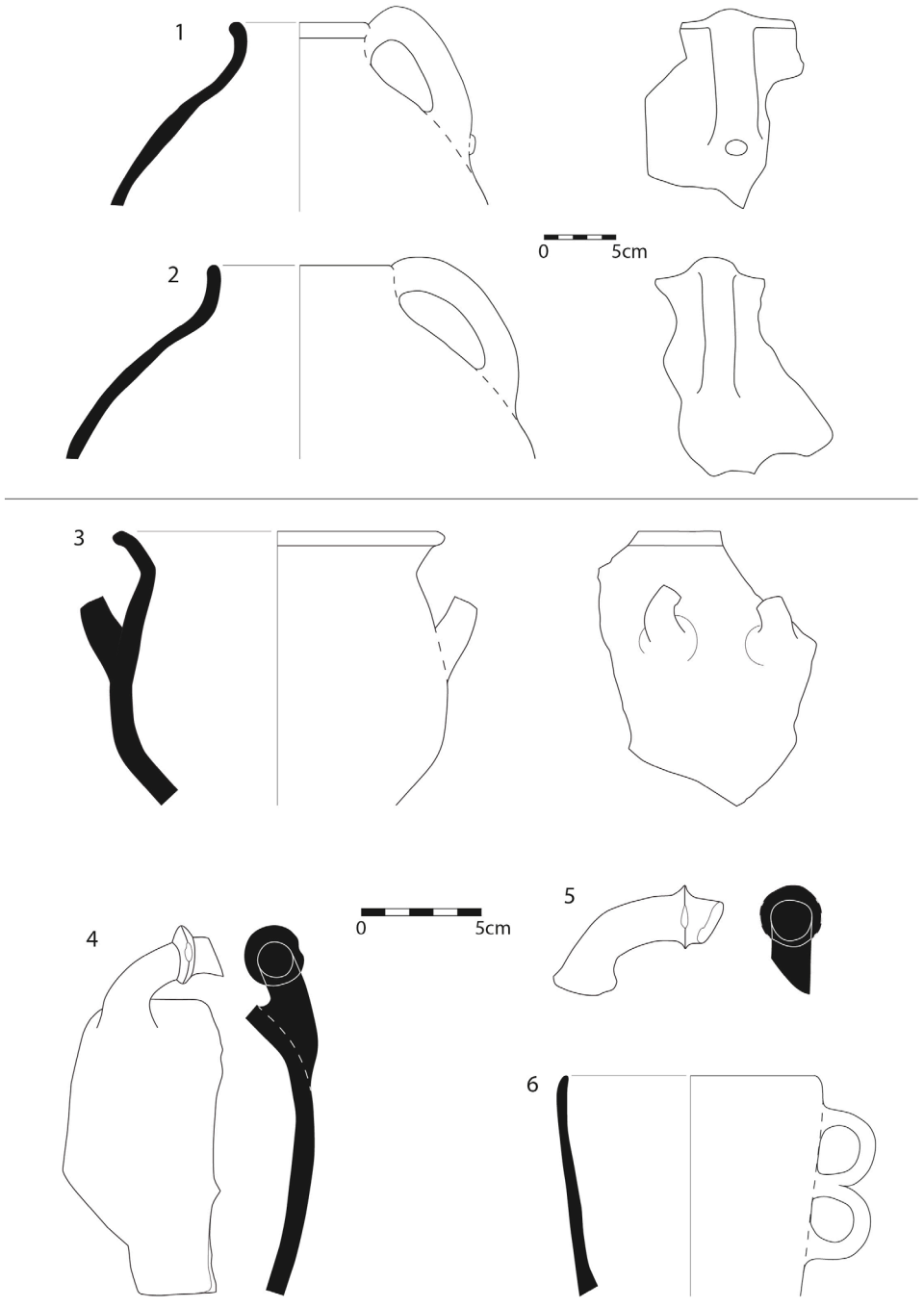

Fig. 16: Ceramics from PIV dated to the Early Medieval Period. Pitchers (1, 2), handles (3–5) and double handle (6) (drawing by L. Damašek).

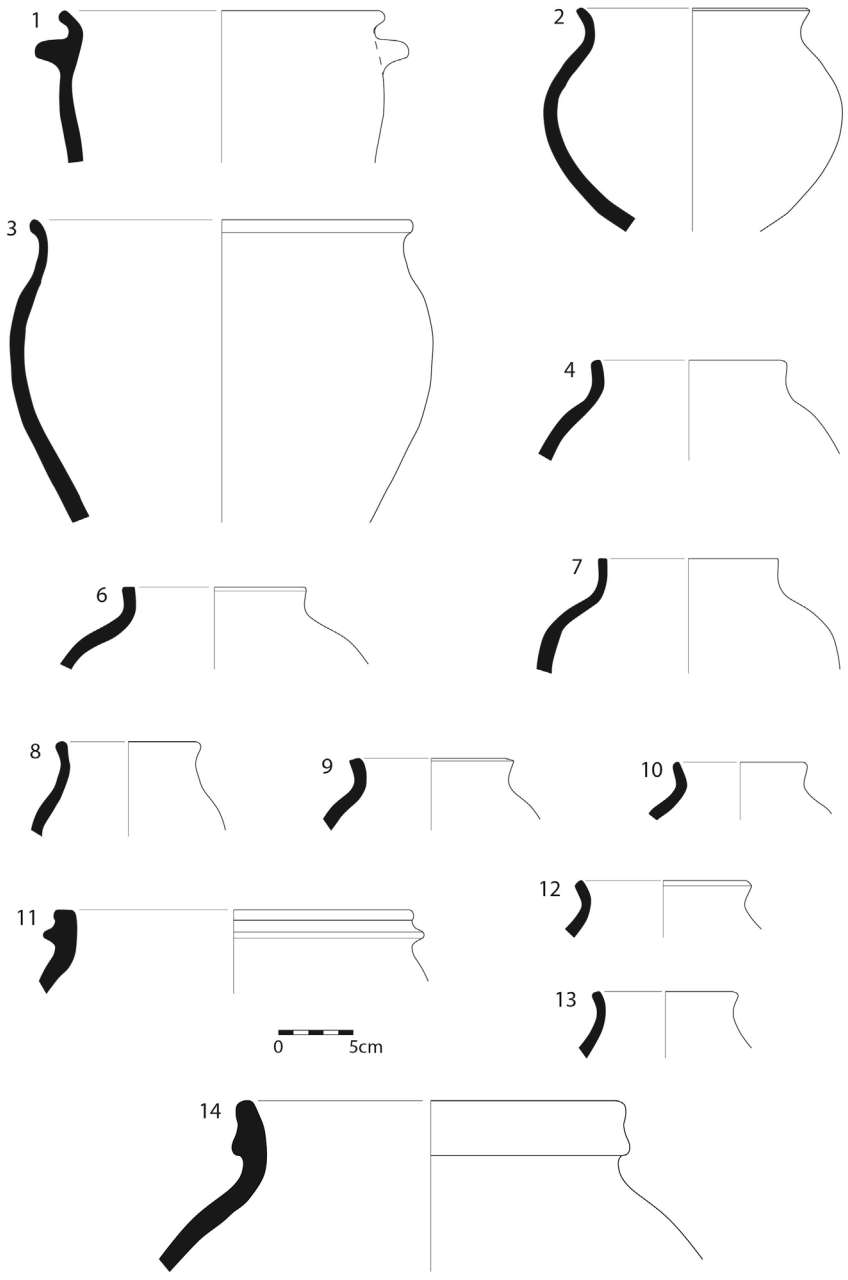

Fig. 17: Ceramics from PIV dated to the Early Medieval Period. Simple rims (drawing by L. Damašek).

DISCUSSION

One of the questions which was raised during the excavation regarded the total absence of any metal artefacts. Even though a metal detector was used the entire time to check the excavated area and spoil heap, no metal artefacts belonging to any historical period were found. Some metal was found on surface layer V0_1 but this was all modern rubbish (e.g., pieces of iron

and aluminium wire, iron sheets, bolts, caps from bottles, etc.). The lack of metal artefacts in the historical layers was surprising. Members of the wider Czech-Uzbek expedition have been using metal detectors for both surface surveys and excavations for sites dating from Prehistory to the Middle Ages (e.g., Iskandar Tepa, Chilonzor Tepa, Kulal Tepa). Most recently, in 2019, the Czech-Uzbek team employed a survey group of metal detectorists during the research of many sites around Darband. At all these sites, metal coins (mostly of copper alloys) were found and, in some cases, arrowheads and other metal artefacts were discovered in large numbers. After taking all the factors in consideration, it is possible that the relatively small deposit excavated at Lungi Tepa simply did not contain metal artefacts and that they might be located elsewhere at the tepa. The total excavated area is approximately 20 m^2 whereas the total area of Lungi Tepa covers approximately 2400 m^2. The best way to settle this question is to use metal detectors to survey the entirety of Lungi Tepa in future field seasons.

Another question, which can only be resolved by further research, is the nature of the settlement that stretched around the central mound of Lungi Tepa. Was this settlement parallel with the central mound or had the settlement shifted over time? This question was partly answered by excavating T2, which shows that in the Late Medieval Period the settlement probably shifted west of the tepa. We unfortunately do not have further data for the platform on the western side of the tepa because of the later human disturbance to the area. From the direct human bone dates of the skeletons in this western zone (Burial site 1), we know that this area was used as a cemetery during the High Medieval Period. This cemetery could feasibly be the final resting place of the people who lived on Lungi Tepa during the High Medieval Period. Once AMS dates are conducted on the burials from PII that were interred on the tepa itself, we may be able to determine if there was a shift in site use, at least for cemeteries, between the High and Late Medieval Periods.

CONCLUSIONS

The stratigraphy of Lungi Tepa shows that the settlement lasted from the Early to High Medieval Periods (5th–13th century AD). The burial ground marked the final use period and *terminus ante quem* date of Lungi Tepa. We are awaiting AMS dates on the skeletal remains from T1 to determine when the burials were interred. Our excavation of T1 suggests that, after the site was used as a cemetery, Lungi Tepa was not used again for settlement or burial purposes. A secondary use or some minor activities cannot be ruled out, but almost certainly the tepa was not inhabited or otherwise used as a whole. In the Late Medieval Period (13th– beginning of the 16th century AD) the settlement was possibly moved west of the tepa, as attested in the garden, where trench T2 was excavated. The earliest settlement of Lungi Tepa is yet to be determined, since the lowest strata remain unexcavated, but there is a high probability that settlement began in the Early Medieval Period. It is possible that the burials dating to the High Medieval Period found in B1 (which was a cemetery) may belong to the people who lived at Lungi Tepa during this time.

Four main phases were distinguished at Lungi Tepa (PI– PIV). PIV clearly belongs to the Early Medieval Period (5th–8th century AD), while PIII belongs to the High Medieval Period (9th–13th century AD). Both were well preserved and provided a considerable amount of ceramics for further analyses. More detailed analysis of pottery along with other research (dating, archaeometry) will give a better insight into the Early and High Medieval ceramics from Lungi Tepa and will allow for a more detailed division of the phases. Subsequently, this research will provide the basis for the chronology and typology of High Medieval unglazed

ware in the Kugitang piedmonts. The excavations at Lungi Tepa remain to be finished in the near future to understand the full stratigraphy of the site and further investigate the graves in B2. Currently, more in-depth research of the material culture and skeletal assemblages are underway. This includes the dating of burials from PII and animal bones from PIII and PIV, the detailed analysis of ceramic forms from the site and the analysis (diet, health, migration, ancestry) of the commingled skeletal remains from B1 and the burials from PII (H1, H2, H4–H8). In the near future, archaeometry analysis of pottery and burials will also be conducted.

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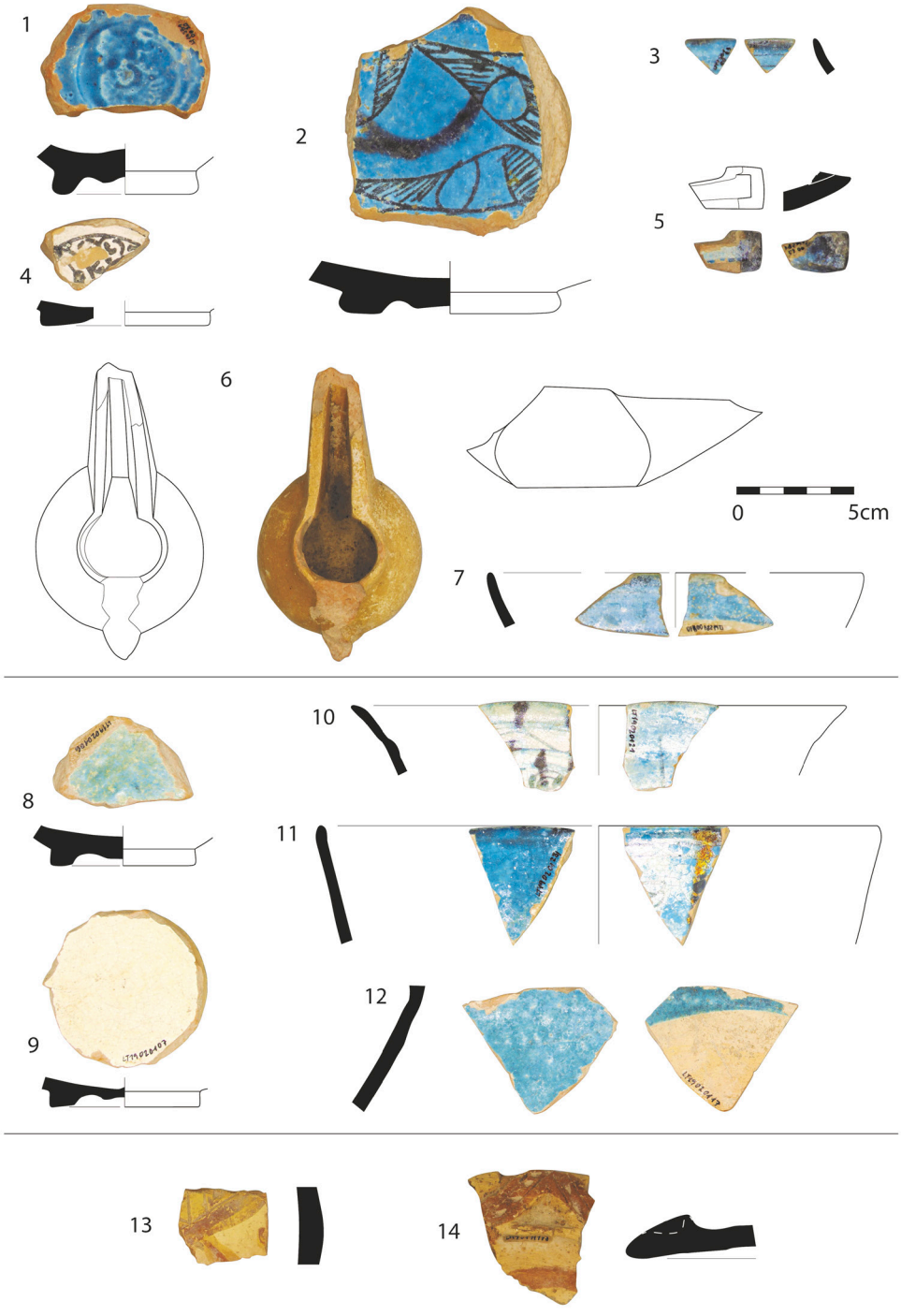
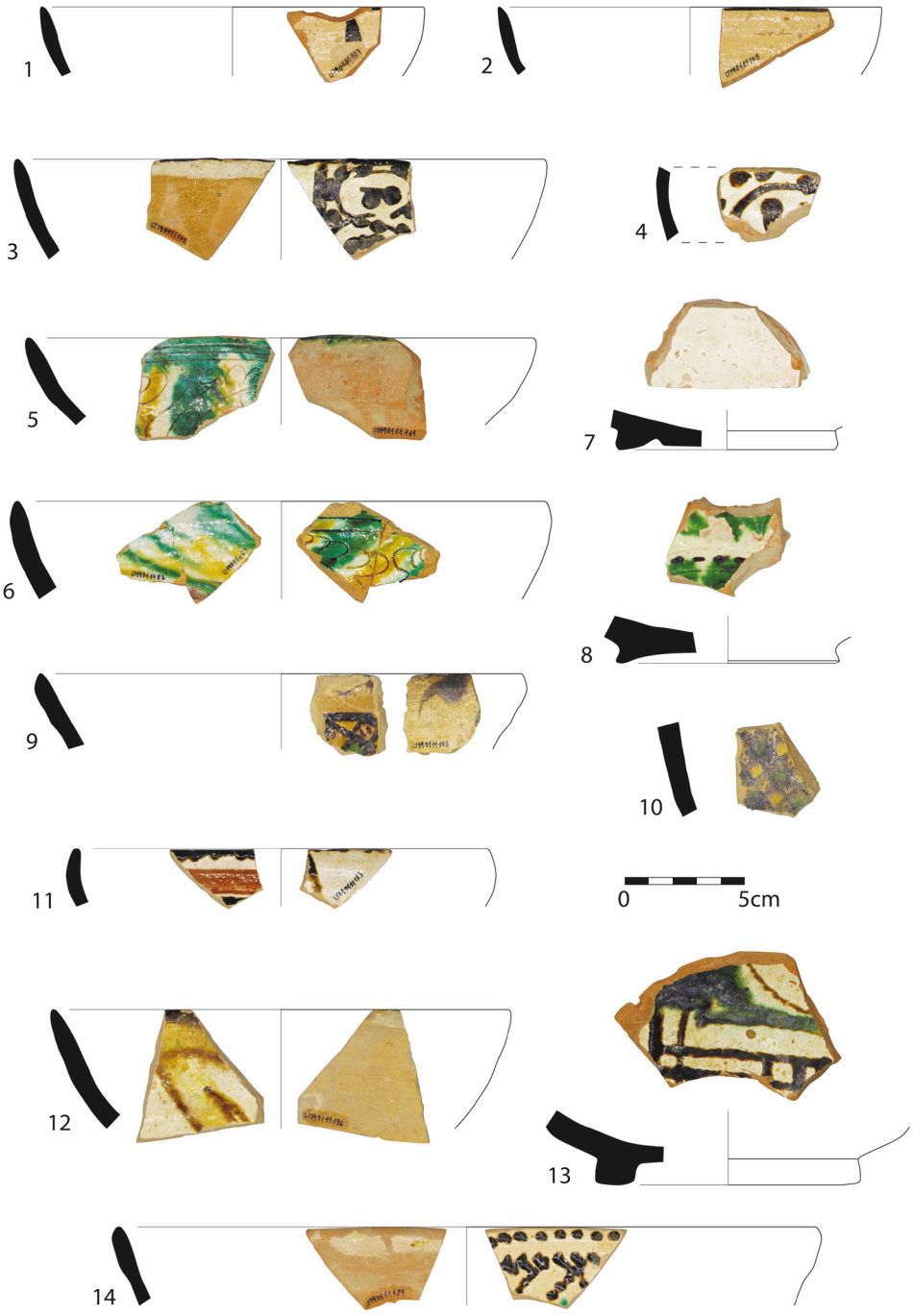


Pl. 5/1: 1–7 – The ceramics collected from the walls of the path; 8–12 – Ceramics from T2; 13–14 – Ceramics with red or brown painting from T1 – PIII.



Pl. 5/2: Glazed ceramics from T1 – PIII.