Preliminary report on the 2016 season in Metsamor (Armenia)

Krzysztof Jakubiak, 1 Mateusz Iskra, 2 Ashot Piliposyan 3
and Artavazd Zaqyan 4

1 Institute of Archaeology, University of Warsaw, 2 Faculty of History, University of Warsaw,
3 Service for the Protection of Historical Environment and Cultural Museum-Reservation NCSO,
4 Metsamor Museum

Abstract: Excavation in Metsamor in 2016 was focused on the settlement area as well as necropolis. Extended trenches uncovered a substantial part of the settlement and contributed new stratigraphic and chronological data on the three phases of occupation, especially the heavy fire that appears to have destroyed the buildings in the early 8th century BC. A unique find from this level of destruction was a necklace made of sardonyx, agate and gold beads. In the post-Urartian period, the northeastern part of the settlement was clearly rearranged. Exploration of a kurgan tomb in the cemetery showed that the tomb had been reused for the most recent burial, looted, which may have included a symbolic horse burial. The construction of the tomb, based on finds from a layer at the bottom of the burial chamber, which included several golden adornments and beads of different materials, can be dated to the Middle Bronze Age, the latest burials to the Iron I period.

Keywords: Metsamor, Armenia, Middle Bronze Age, gold jewelry, beads, cemetery, kurgans

The archaeological site of Metsamor is situated about 35 km southwest of the city center of Yerevan. Its citadel on top of the Mets Blur hill dominates the surrounding landscape in the northwestern part of the Ararat Plain. An Armenian–Polish Archaeological Mission has been excavating on the site since 2013 (Piliposyan et al. 2013; Piliposyan 2014; Jakubiak 2015; Piliposyan et al. 2015: 44–45). It has proved to be one of the most significant excavated settlements within the territory of the Republic of Armenia to date.

The excavated part of the settlement revealed a square stone structure, which was designated as the North Settlement Building (=NSB) 2, but the relation to the surrounding stone architecture was elusive and difficult to interpret due to the limited area uncovered in the trenches (Jakubiak et al. 2016: 562). The present work concentrated on uncovering the northern part of the site. The trenches from the previous seasons were extended in all directions, giving in effect a broader view of the settlement [Fig. 1].
**Team**

*Dates of work:* 16 August–30 September 2016

*Co-Directors:* Dr. Krzysztof Jakubiak (Institute of Archaeology, University of Warsaw), Prof. Ashot Piliposyan (Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO)

*Archaeologists:* Tatiana Adamowska (Antiquity of Southeastern Europe Research Center University of Warsaw), Mateusz Iskra (PhD candidate, Institute of Archaeology, University of Warsaw), Marek Truszkowski (PCMA UW), Artavazd Zaqyan (Metsamor Museum, Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO)

*Pottery specialist:* Tigran Zaqyan (Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO)

*Anthropologists:* Dr. Ruzan Mkrtchyan and Hasmik Simonyan (both Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO)

*Topographer:* Menua Gevorgyan (Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO)

*Archaeology student-trainees:* Otto Bagi, Kornelia Kasperkiewicz, Sergi Manas Jolis, Aleksandra Grzegorska, Julia Maczuga, Anne Maëlle Desmarquoy, Aleksandra Zaleska, Dominika Majchrzak, Anna Weżranowska, Zofia Arcab (all Institute of Archaeology, University of Warsaw), Maciej Sobczak (Adam Mickiewicz University in Poznań), Lusine Aleqsanyan, Nerses Mamikonyan (Service for the Protection of Historical Environment and Cultural Museum-Reservations NCSO), Elisabeth Bastien (Universite de Nantes)

*Volunteers:* Joanna Dzik, Karol Zajdowski

---

*Fig. 1. Metsamor: general view of the excavated area of the settlement (PCMA Metsamor Project/photo M. Truszkowski)*
In the cemetery, which is located about 500 m east of the settlement, more than 100 tombs were explored in the past. More graves were now explored and an aerial survey was carried out, covering the already known area of the cemetery and the fields nearby (for the results, see Truszkowski and Bagi 2017, in this volume).

SETTLEMENT

The excavated area was now enlarged to the east (squares B16, B17, C16, C17), northwest (squares R15, R16, S16) and southwest (squares P18, P19, P20, R19, R20) [see Fig. 3]. The eastern extension of the trench investigated the area around the remains of building NSB 1 uncovered in the 2013 and 2014 seasons (Jakubiak et al. 2016: 564–566; Piliposyan et al. 2015: 48–51) [see Figs 3, 4]. At the time, a flagstone floor and a wall foundation were recorded overlying the NSB 1/1 chamber. Further remains of this stone structure, in a very poor state of preservation, were recorded in the extension, barely 0.20 m below the ground surface (squares B16, B17 and C17). They rested squarely on top of the partly destroyed walls of chamber NSB 1/1. The layout of this structure cannot be determined based on the evidence; it was probably a rectangular room with a flagged floor. Similar structures unearthed in Benjamin (Ter-Martirosov 2007; Ter-Martirosov et al. 2012: 200) and Tsaghkahovit were dated by the excavators to the Iron III/Achaemenid period (6th–

Fig. 2. Necklace from the debris of building NSB 1
(PCMA Metsamor Project/photo T. Zaqyan)
Fig. 3. Metsamor: general plan of the excavated sector after the 2016 season (PCMA Metsamor Project/drawing M. Iskra)

Fig. 4. Eastern part of the excavated area: Building NSB 1 and surrounding stone architecture (PCMA Metsamor Project/photo M. Truszkowski)
4th century BC). The Metsamor structure may be dated to the same period on the grounds of pottery recovered from the wall foundation layer.

The underlying stone architecture turned out to be the eastern part of building NSB 1. Finds from a thin clay floor (squares B16 and B17) included abundant potsherds from the Iron I period (12th–9th century BC) as well as numerous animal bones. Unexpectedly, an almost fully preserved agate and carnelian necklace, including two relatively big golden beads [see Fig. 2], was discovered in situ in an ash and charcoal context, which can be associated with a sudden abandonment of this building. The context shows evidence of a heavy conflagration that destroyed the settlement, corresponding to a similar layer discovered in 2013 inside chamber NSB1/1.

Six large storage jars had been discovered previously inside chamber NSB 1/1, crushed by the collapsing roof; they and other artifacts from this context are not older than the beginning of the 8th century BC (Piliposyan et al. 2015: 48–51, Pl. XXVII, Fig. 1–3, Pl. XXVIII, Fig. 1–4; Jakubiak et al. 2016: 566). Sherds presently collected from the floor of the adjoining rooms represent the Lchashen-Metsamor 5 and 6 pottery horizons. Of greatest significance from the chronological point of view are fragments

---

Fig. 5. Buildings NSB 2 and NSB 4  
(PCMA Metsamor Project/photo M. Truszkowski)
of pots and jars decorated with vertical flutes or with applied bands with multiple-row linear decoration [Fig. 7]. Such pottery is usually dated to the 9th–8th century BC (Avetisyan 2009: 63), but in the case of Metsamor it may be even later, dating from the Iron II/Urartian period (8th–6th century BC) (Khanzadyan, Mkrtchyan, and Parsamyan 1973: Pl. XIV). Moreover, many unusual ceramic fragments in the shape of flattened tubular objects with openings at both ends were found in the same context. Similar finds come from the shrines of Metsamor and Gegharot (Kalantaryan 2007b: 20; Smith and Leon 2014: 554, Fig. 5) where they were interpreted as so-called manghals, a type of brazier. Their true function is still uncertain.

Architecture underlying building NSB 1 consisted of a stone-built structure; its layout was repeated by the later structure [see Fig. 4]. There were some remains of a stone-paved platform, badly damaged by the later building. It was originally aligned north–south and was attached to the west wall of the eastern oval chamber (NSB 1/3). Taking into consideration numerous parallels from early Bronze Age sites in Transcaucasia and Eastern Anatolia, such stone structures should rather be interpreted as the remains of a paved corral for sheep or cattle (Martirosyan 1974: 114).

Chamber NSB 1/3 to the east was excavated down to a layer of charcoal interpreted as evidence of a fire that destroyed the settlement at the beginning of the 8th century BC. Layers corresponding
In the northwest extension of the excavated area, the relations between architectural structures NSB 2 and NSB 4 were investigated, contributing new observations to the study of the stratigraphic sequence of layers and building construction in this area [see Fig. 5]. A probe by the west...

Fig. 7. Selected pottery from the 2016 season
(PCMA Metsamor Project/ photos T. Zaqyan, drawing M. Iskra, )
side of wall 1003 revealed its structural connection with wall 1005. Inside structure NSB 4, remains of an irregular and poorly built stone wall (1028) were recorded. It appears to have partitioned the original chamber into two. A relatively thick layer of stones was recorded along both sides of the wall. Interspersed among the stones were some human bones and a child burial (see below). The pottery from the debris filling the structure is not helpful for the dating, as it is quite mixed, representing a chronological horizon from the Middle Bronze Age until early medieval times. It cannot be excluded that the burial was dug into the ruins of structure NSB 4 and suffered from the same erosional processes that have damaged the entire site.

The child burial, made in a shallow grave pit, belonged to a six-year-old. Post-depositional processes effected severe damage: the lower part of the skeleton was completely decomposed, while several bones from the upper body were scattered; the hands were relatively well preserved. A small bronze bracelet was the only personal adornment found with the skeleton and there were no other artifacts to date the burial. However, an earlier discovery of an adult male burial from the 7th century BC in neighboring square S16 (Mkrtchyan and Simonyan 2015; Jakubiak et al. 2016: 561) suggests a similar dating for this child burial.

Another stone structure, designated as NSB 6, was uncovered in square R16. The remains were just below the surface. Only the southeastern corner of a large building fell within the excavated area, but it is certainly younger than structure NSB 4 and can be dated roughly to the post-Urartian period (based on just a few potsherds from the fill). Taking into consideration the northeast–southwest alignment of the building, the structure could have functioned parallel to structure NSB 5 in the southwestern part of the excavated area. Based on the dimensions of the uncovered part of structure NSB 6 and its distance from the fortification wall, it is reasonable to assume that it was attached to it, but for now its specific function cannot be determined.

The largest extension in the southwestern part of the excavation uncovered the northeastern corner of a large stone structure NSB 5, built of large well-dressed ashlars. Several architectural elements, mainly fragments of lintels, were found reused in the wall structure and it is reasonable to assume that they came from an older building that had been either destroyed or dismantled. NSB 5 was built on a leveled layer of compacted clay that was 0.40 m thick. This layer was also recognized near the enclosure wall situated a little farther to the west and northwest and in squares R18, S18 and T18, where the compact clay layer partly covered wall 1000. Pottery from below this layer resembles late Urartian ceramics. It is plausible that the settlement was briefly deserted in the post-Urartian period, following which the northern terrace of the Mets Blur hill was rearranged and new architecture introduced.

A better preserved section of wall 1008, recognized earlier in square R18, was traced in squares P18 and P19. It runs towards the northern part of structure NSB 5 and disappears under its north wall. A compact clay installation was uncovered along the east face of wall 1008, covered with a thick layer of soft ash and enclosed by a short stub wall. The northern side of this installation is badly eroded making it difficult to
establish its original size. It resembles in appearance the clay basins found in shrines at Gegharot (Smith and Leon 2014: 553–555), but at Metsamor it probably served a domestic function, for cooking or heating food. The installation was part of a Late Bronze Age or Early Iron Age building, which has yet to be investigated in the excavation. However, it seems likely that the empty area in squares R18 and R19 was the interior of a dwelling chamber associated with this installation.

Isolated artifacts from the southwestern extension included numerous beads made of sardonyx and bronze, an alabaster pendant and a bone ring with circular decoration. Ordinary objects, like pumice tools and fishing net floats, numerous obsidian arrowheads and a flint sickle blade, attesting to the everyday life of the inhabitants of the settlement, were also unearthed.

Small probes were dug in squares M16, M17, N16 and N17 on the opposite sides of a line of stones observed on the surface and presumed to be an enclosure wall. Remains of this wall were recorded in the previous season; the sequence of layers recorded in the probes has confirmed the same chronological and stratigraphic context of the enclosure wall and building NSB 5. More importantly, the sequence reached the late LBA phase.

**CEMETERY**

Renewed exploration of the cemetery started with the clearing of Kurgan XVIII, part of which had been uncovered in the 2013 season.

A layer of pebbles was found above the burial chamber (5.00 m by 4.40 m) and filling the whole interior [Fig. 8]. Stone slabs moved from their original position indicated ancient looting. Numerous black-burnished sherds were found in the pebble layer. Some horse bones, including three mandibles, were discovered in the same context, just underneath large stones originally closing the chamber. A fragment of a bronze horse bit was the only artifact found in the deposit. Two concentrations of human bones were discovered, suggesting two separate burials. The horse remains could have constituted a symbolic horse burial. Examples of such practices have been recorded elsewhere and are typical of Early Iron Age burial customs (Keti: Petrosyan 1989: 88–90; Artik, Spandaryan: Khachatryan 1975: 258–259).

However, a study of the stratigraphy suggests that the stone chamber itself was older and had been reused for these burials. A layer of mixed archaeological material was recorded at the bottom of the chamber. It contained numerous pottery fragments and pieces of jewelry, the latter including 22 golden beads and a pendant [Fig. 9]. The golden beads represented four different types; the most unique forms are a heart-shaped bead with a tubular midrib string hole and two open-work melon-shaped beads. Similar beads were found in tomb 60 at Metsamor (Khanzadyan 1995: Pl. VII.3), as well as at the Lori Berd and Lchashen sites (Kalantaryan 2007a: 401f.) and in Marlik (Negahban 1996: Pls 50, 160). The objects from these excavations are conventionally dated between the 15th and 12th century BC, and they provide an excellent parallel for the present finds.
Unique in this set is a crescent-shaped pendant made of golden sheet. It is the third object of its kind discovered in the Metsamor cemetery (Piliposyan et al. 2016: 11). The other two have not been published yet. No parallels exist from Armenia. Hundreds of other beads, made of carnelian and agate, but also of metal alloys, such as tin and bronze, were also found in the layer at the bottom of the chamber. They would have made up a number of different necklaces. The metal beads find no parallels in the region. Perhaps they were manufactured locally. Emma Khanzadyan discovered similar pieces of jewelry in other Metsamor tombs, but her discoveries were never published.

These artifacts, by analogy with material recorded earlier from the cemetery and from other excavation projects in the region (Shirakavan: Torosyan, Khnkikyan, and Petrosyan 2002: Pl. XXXII.18, XXXIII.13,14, LXXXI.6; Lori Berd: Devedjian 1981: Pl. IX.6), can be dated to the 12th–11th century BC. In other words, the tomb should be associated with the last phase of the Late Bronze Age III period or with the beginning of Iron Age I. Since only small objects have been recovered from this layer, it is likely that all the bigger objects made of gold or bronze, which may have formed part of the original deposit, were looted or taken out in antiquity, possibly even in the Early Iron Age. Indeed, the fact that no bones belonging to the original burial or burials were discovered could suggest that the tomb, rather than being looted, was reopened and cleared to make place for new burials.

The last element to shed light on usage practices was discovered in the northeastern part of the burial structure. It was another

![General view of Kurgan XVIII](PCMA Metsamor Project/photo M. Truszkowski)
burial located under the stone wall of the chamber. A single individual had been buried in a pit, furnished with several pottery jars that were assigned to the Middle Bronze Age III period. Burials from this period are well known from various Armenian archaeological sites (Karmir Berd, Karashamb, Arich, Verin Naver, Lchashen, Sisian, etc.) where they are dated to the 19th–16th centuries BC (Simonyan 1996: 58–62; Smith et al. 2009: 65–68; Simonyan 2013). Thus, it appears that the cemetery at Metsamor was used as a burial ground already in the Middle Bronze Age and continued in this function through the Iron Age period, clearly corresponding to the three phases of activity identified in the excavation of the settlement area.

Fig. 9. Jewelry and beads from the bottom of the burial chamber of Kurgan XVIII: top, golden beads; bottom left and right, reconstructed necklaces composed of carnelian and tin beads from the Metsamor Museum; center, the most frequent forms of tin beads (position indicated in the reconstructed necklaces) (PCMA Metsamor Project/photos T. Zaqyan)
REFERENCES


