

Azerbaijan National Academy of Sciences
Archaeology and Ethnography Institute

COMPREHENSIVE SCIENTIFIC REPORT

**Excavation of Zəyəmçay kurgans III and IV at KP 336.6
SCPX pipeline**

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1 SUMMARY

The report gives information on results of the archaeological excavations carried out on Zayamchai kurgans 3 and 4, located at KP 336.600 in the SCPX pipeline corridor. The kurgans are located on the left, or west bank of the Zayam river. The site description of 3 and 4 was given as two burial sites (1 and 2) were previously discovered on the right bank of this river along the SCPX route and a further two (5 and 6) were found. An interesting structure of burials, burial customs and a small number of artefacts were revealed at Zayamchai 3 and 4 during the excavations.

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2 INTRODUCTION

2.1 SITE DISCOVERY

Round spreads of stones were recorded on the SCPX project at KP 336 of the pipeline route during topsoil stripping. The discovered heaps were presumed to indicate a kurgan cover and further excavations confirmed this assumption. Given the previous discovery of two kurgan graves not very far away on the on the right Zayamchai bank in the SCPX corridor, these kurgans were numbered consecutively No.3, 4, 5 and 6. The discovery of these kurgans led us to believe that ancient residents of this basin carried out their burials in this territory during the Bronze Age and the early Iron Age.

2.2 BRIEF DESCRIPTION OF THE SITE

This territory is located close to the riverbed upon a high rocky area on the left-hand bank of the Zayamchai river. This is a plain area, while the soil there contains gravel, with a small amount of clay mixed with black soil. The local population is mostly engaged in sowing such grain crops as grain and barley. Columns of a mediaeval bridge remained in the nearby river valley.

2.3 WHO CARRIED OUT THE EXCAVATIONS AT THE SITE AND WHEN

An archaeological expedition group of the Institute of Archaeology and Ethnography of the Azerbaijan National Sciences Academy carried out the excavations on Zayamchai 3 and 4 between October 10-28, 2016, overseen by PhD in History, senior research fellow Vagif Asadov, with the participation of the Institute's employees, PhD in History, senior research fellow Dmitry Kirichenko, junior research associate Jeyhun Aliyev and senior laboratory assistant Farhad Farmanov. BP (SCPX) representative, archaeologist Justin Bedard contributed to the excavation work as an observer.

3 RESULT OF EXCAVATIONS

3.1 GENERAL DESCRIPTION OF THE SITE

Zayamchai kurgans 3 and 4 are located at the N-4534422; E-8574114; N-4534437; E-8574158 coordinates, 301 metres above sea level. The site was numbered 3 and 4 due to the previous discovery of kurgans of the same type dating back to a more ancient epoch. In total, six kurgans were found on the right and left-hand Zayamchai banks in the SCPX corridor. Two of these were located on the right bank, while the other four kurgans were situated on the left bank.

The Zayamchai kurgans were located on both banks of the Zayam river within the boundaries of the Tovuz and Shamkir districts. Considering the two kurgans discovered on the Zayam river's right bank in the Duyarli village of the Shamkir district, the two burial sites located on the left bank (1 and 2) , i.e. in the area of the Ashaghi Eyyublu village of the Tovuz district, were numbered 3 and 4. The kurgans were covered with rocks.



Figure 1. Kurgan 3, stone cover after cleaning. View to west.

3.2 GENERAL DESCRIPTION OF OCCUPATION LAYERS

Kurgan 3 is located on the Zayam river's high and precipitous left bank at a distance of 20 metres from the riverbed. As for signs pointing to the availability of a burial site above the ground, these included a spread of random river rocks. The upper spread which was about 0.10 metres high and very dense, consisted of large and average size stones. This kurgan, located in a plain area, was not previously known to scholars.

No occupation layers were revealed due to the lack of habitation in the monument area. The discovered graves merely served as a burial site. The diameter of *Kurgan 3* was 6.25m and its height was 10 cm. The edges of the kurgan cover were encircled neatly by elongated river rocks (Figures 1, 4).

A square-shaped spread of rocks emerged in the central part of the kurgan cover after the upper layer of stones was removed. The area was sized 1x1m. The rocks were large, round-shaped and elongated. Three sides of the spread were enclosed, while the eastern part was open (Figures 2, 8, 9). The rocks started to be taken apart after a conclusion was made that the stone spread could have been a cover of a kurgan chamber. Further excavations confirmed that the site was a burial chamber (Figure 7). The burial chamber was encircled by large river rocks in the semi-circular shape (Figures 8, 9). A yellow, reinforced (pressed) piece of ochre (Figure 12) and a part of a small vessel with a wide orifice element (Figure 13) were found at the depth of 40cm amid the third layer of rocks in the chamber (Figures 10, 11). A model ornament was applied below the orifice element. The brown coloured fragment had sand admixture in the clay composition.

The stone spread over the burial chamber was comprised of six layers. Interestingly, the soil structure inside the chamber contained gravel and sand, just like the soil around it. Bone fragments of a teenager were found 1.1m below the ground. These mainly included little parts of ribs and cranial bones, as well as four lower jaw teeth. The round-shaped burial chamber's dimensions were 1.4x1.3m (Figure 14). Although the chamber's bottom part was excavated until the depth of 1.5m, no burial equipment was found there except human bones. A thin walled vessel's body fragment was the only item found amid the rocks when the kurgan cover was being taken part. The pink coloured fragment had a semi-circular shape.



Figure 2. Kurgan 3, upper spread of stones in chamber. View to east.

Kurgan 4 was located 11.1m south-east of kurgan 3. The distance between the central of Kurgans 3 and 4 was 17m. The diameter of the kurgan cover, which was comprised of river rocks of different sizes, equalled 6.75m in the north-south direction and 8.4m in the west-east direction, while its height was 10cm (Figures 3, 5).



Figure 3. Kurgan 4 after initial cleaning. View to north.

The burial chamber, which was located in the middle of the kurgan, was encircled by large river rocks (Figure 15). Some of the rocks had an elongated shape. Six layers of stones were recorded inside the burial chamber (Figures 16-18). Soft soil was piled inside the chamber, which was 90cm deep. This kurgan chamber's dimensions equalled 1.4 by 1.3m (Figure 19). A medium size, biconic pitcher with a wide orifice element was found in the northwest part of the chamber (Figure 20, 21, 24). A large oval limestone (Figure 29) and a wide and flat flake made of a transparent obsidian splinter (Figure 25) were discovered near the pitcher. A bronze bracelet with edges resembling a snake head twisted in the spiral-like shape (Figures 26-27) emerged in the southeast part of the burial chamber. Tiny parts of rotten bones pertaining to a human skeleton (probably, a child's remains) were found in the chamber. A slight trace of an arm or a leg bone was left only in the northern part of the discovered pitcher.

It is noteworthy that traces of burning were recorded in the chamber's southeast section. Such a trace was also seen close to the pitcher. An insignificant number of small fragments of various ceramic vessels were found amid the rocks while the kurgan cover was being taken apart, along with several obsidian cutters. One of the rocks used in the cover was a large grindstone fragment (Figures 23, 28).

Thus, preliminary analysis of the burial traditions, as well as the shape and structure of the vessels and their fragments discovered in the Zayamchai kurgans 3-4, lead to a conclusion that these burial sites date back to the early period of the late Bronze Age or more precisely, the 14th-13th centuries BCE.

4 ARCHAEOLOGICAL FINDS

Pottery fragments were the only archaeological materials found in the cover of Kurgan 3 and its burial chamber. A larger list of material was found in the cover of Kurgan 4, including parts of a quern stone and tools made of obsidian. A clay pitcher, a bronze bracelet, an obsidian scraper and a chalk-stone were found in the mound's burial chamber.

Interesting samples were obtained during the excavations conducted at the Zayamchai 3 and 4 kurgans, though the number of finds was limited. These included a vessel made of clay, vessel fragments and a bronze bracelet. The discovered clay samples include pottery fragments with different shapes and composition (Figure 13). Traces of processing on a potter's wheel are seen inside some of these samples. The surface of the vessels was mainly polished in grey or black colours. Pink coloured vessels were encountered as well. The bronze bracelet's edges resembling a snake head are intertwined. The cross section is round. The surface is divided into parts by dashed lines (Figures 26-27). Finds of other types include a quern stone, an obsidian comb and cutters (Figures 23, 25, 28).

4.1 GENERAL ANALYSIS OF RESULTS OBTAINED AT THE SITE

Interesting scientific conclusions were made during the excavations carried out in the Zayamchai 3 and 4 kurgans. First of all, it is worth mentioning that the entire archaeological excavations planned and carried out in the Zayamchai basin necessitated repeated and comprehensive comparative researches of the region's Bronze Age-era archaeological monuments. The abundant archaeological materials obtained from the monuments located in the Zayamchai basin allow scholars to conduct more extensive researches and write a generalizing monographic piece of work on this matter.

The tradition of erecting mounds over both stone boxes and ordinary soil graves observed in the Zayamchai basin took hold much earlier than the late Bronze Age and the early Iron Age. This observation was made with regard to the plains located between the Zayam and Shamkir rivers, the plateau between the Jayir river and the rivers in the west, as well as in the kurgans located in the vicinity of the Chinarli and Chardaqli villages in the Shamkir district. Such kurgans were also discovered in the upstream part of Zayamchai, i.e. in the Gadabay district. The kurgans, which are rather low, are located apart from one another [8, p. 161-162].

A kurgan cemetery comprised of burial sites with the diameter of 10-12 metres is located in an area spanning 1.5 sq.km at the altitude of 1-1.5 metres between Chinarli village and the city of Shamkir.

The clay vessels found in the kurgan graves in the Zayamchai basin reflected high skills of the craftsmen. Some metal items do not differ substantially from the finds recorded in outside areas. Undoubtedly, a separate version of the Khojaly-Gadabay culture, not an independent culture differing from the neighbouring regions, existed in the Zayamchai region during the late Bronze Age and the early Iron Age. The similarity between the metal and ceramics items found in

Gadabay, Mingachevir and the Ganjachay basin proves that the Zayamchai basin was an integral part of the Khojaly-Gadabay culture (the second half of the 2nd millennium-early 1st millennium BCE) in the mentioned period.

5 ANALYTICAL RESULTS

5.1 COLLECTION OF RESULTS

Both stone-covered and soil kurgans in the Zayamchai basin have been comprehensively studied. It is known that the kurgans in the Zayamchai basin are sparse. They are usually located close to the river and around residential areas. The kurgans in this area were built with the use of a single construction material, i.e. river rocks. Some of the burials were piled using a mixture of rocks and gravel, which was definitely due to local relief features. The upper surface of some kurgans researched in the region's mountainous and plain territories, as well as foothills, was paved with stones in a round shape. In rare cases, the foothills of the kurgans were encircled by one or two rows of stones. We observed this feature while researching the Zayamchai kurgans 3 and 4, which were excavated on the SCPX route. No more than 10 graves were usually discovered in the region's kurgans.

Although a slightly different structure of burials was tracked during the excavations carried out at Zayamchai 3 and 4, the discovered burial traditions and the archaeological samples were inherent to most of the late Bronze Age kurgans revealed in this region.

5.2 DATING EVIDENCE

The structure of the kurgans and the comparative analysis of the finds are grounds to conclude that the burial site dates to the early stage of the late Bronze Age (the 14th-13th centuries BCE).

6 DISCUSSION

6.1 INTERPRETATION OF RESULTS OF EXCAVATION ON THE SITE

The excavations carried out in the Zayamchai 3 and 4 kurgans were successfully completed and relevant scientific conclusions were made. Researchers concluded that the kurgans located mostly in the region's foothills and plain areas have different dimensions. The late Bronze Age-early Iron Age burial sites were relatively small in terms of their structure and stood out for the abundance of artefacts. The Zayamchai 3 and 4 kurgans reflect the tangible culture of the late Bronze Age. Each of the kurgans had a single burial chamber with bone fragments of human skeletons inside. An interesting burial custom was recorded on the site. These kurgans were very interesting both in terms of the revealed burial traditions and the significance of the archaeological finds.

7 INVENTORY

No.	Object	Description	Location	Dimension
1	Neck	A small vessel neck fragment. The neck smoothly transforms into the shoulder. The walls are thick. The colour is pink. Figure 13	Kurgan 3	wall thickness-0.7cm
2	Shoulder	A fragment of a small vessel's slanting shoulder. The colour is pink.	Kurgan 3	wall thickness-0.5cm
3	Base	A small vessel base fragment. The base is flat. The colour is dark pink. Traces of burning remained on the surface.	Kurgan 3	wall thickness - 0.8cm
4	Body	A small vessel body fragment. The colour is pink.	Kurgan 3	wall th.-0.5cm
5	Handle	The base part of a little vessel handle. The handle's cross section is tape-shaped. The colour is pink.	Kurgan 3	
6	Body	A small vessel body fragment. The colour is pink.	Kurgan 3	
7	Handle	A small vessel handle fragment. The cross section is oval. Scratched spike-like patterns were applied throughout the handle. The colour is pink.	Kurgan 3	cross sect. width-1.2cm
8	Flake	Flake of black coloured obsidian. It is shaped like a hand fan. The item is three-faceted. The scraping side is sharp. Figure 25.	Kurgan 4	
9	Flake	Flake of black obsidian. It has a semi-circular shape. It is three-faceted. The item's upper part is flat, while its working side is sharp.	Kurgan 4	
10	Bracelet	A bronze bracelet with edges resembling a snake head. The cross section is round. The edges are intertwined. The item has a barbed surface. Figures 6, 26, 27.	Kurgan 4 chamber	
11	Quernstone	Two parts of a boat-like shaped quernstone made of a white coloured rock. Figure 23.	Kurgan 4 stone cover	
12	Pot	A little biconic earthenware pot with a wide orifice element. The orifice is slightly bent sideways. The low neck goes into the body, which broadens until the middle and further narrows toward the base. The base is narrow and flat. The grey coloured vessel was polished. Figures 20, 21, 24..	Kurgan 4 chamber	
13	Cutter	A cutting tool made of black coloured, transparent obsidian. It is round-shaped and one-faceted. One of its sides is convex, while the working side is thin and sharp.	Kurgan 4 chamber	
14	Body	A small vessel body fragment. The walls are thin. The clay composition is clean. The colour is grey on the outside, while the inner surface is pink.	Kurgan 4	wall th.-0.5cm
15	Body	A small vessel body fragment. The walls are thin. The clay composition is clean. The colour is grey. Two little closed holes were made upon the item.	Kurgan 4	
16	Base	A little vessel base fragment. The base is narrow and flat. The colour is dark grey.	Kurgan 4	
17	Body	A little vessel body fragment. The colour is grey. The clay composition is clean.	Kurgan 4	wall th.-0.5cm

8 APPENDICES

8.1 REFERENCES

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8.2 ILLUSTRATIONS

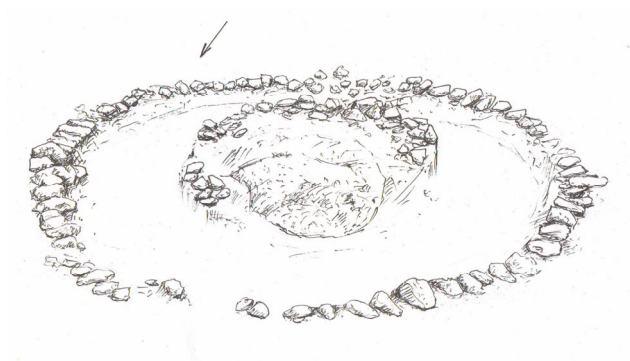


Figure 4. Kurgan 3 upper layers of stones. View to southeast.



Figure 5. Kurgan 4 stone cover after cleaning. View to north.



Figure 6. Kurgan 4, bronze bracelet. Inv 10.

8.3 PHOTOS



Figure 7. Kurgan 3, burial chamber exposed. View to south.



Figure 8. Kurgan 3, enclosing stone setting. View to southeast.



Figure 9. Kurgan 3, enclosing stone setting. View to north.



Figure 10. Kurgan 3, 3rd layer of stones in chamber. View to east.



Figure 11. Kurgan 3, 4th layer of stones in chamber. View to north.



Figure 12. Kurgan 3, yellow coloured piece of ochre.

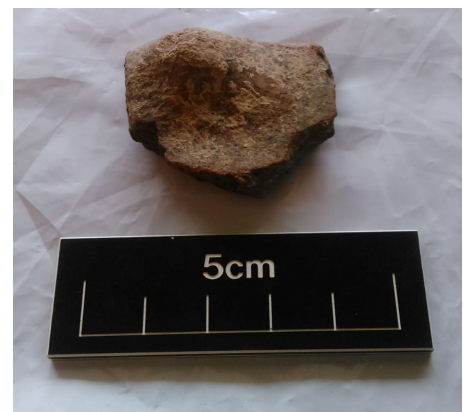


Figure 13. Kurgan 3, vessel neck fragment. Inv 1.



Figure 14. Kurgan 3, grave chamber. View to south.



Figure 15. Kurgan 4, grave chamber in central area after initial cleaning. View to north.



Figure 16. Kurgan 4, 2nd layer of stones in chamber. View to north.



Figure 17. Kurgan 4, 3rd layer of stones in chamber. View to west.



Figure 18a. Kurgan 4, 5th stone layer in chamber. View to west.



Figure 18b. Kurgan 4, 6th stone layer in chamber. View to east



Figure 19. Kurgan 4, grave chamber. View to southeast.



Figure 20. Kurgan 4, vessel rim in chamber. Inv 12.



Figure 21. Kurgan 4, vessel rim in chamber. Inv 12.



Figure 22. Kurgan 4, chalk piece in chamber.



Figure 23. Kurgan 4, quernstone fragment in stone cover. Inv 11.



Figure 24. Kurgan 4 chamber, biconic pitcher. Inv 12.

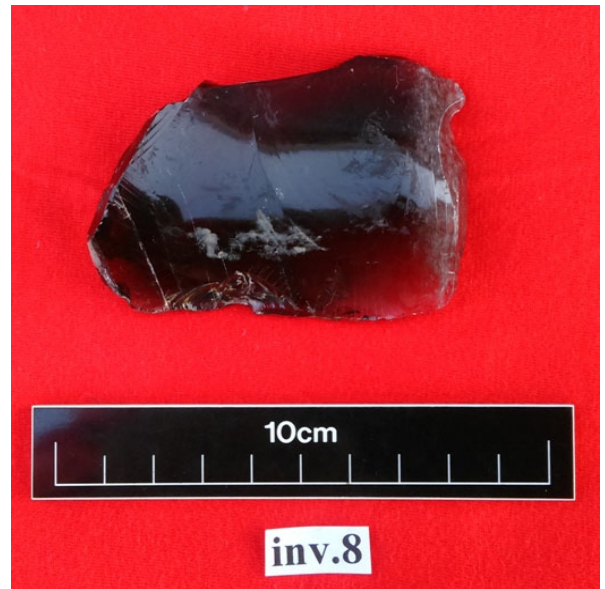


Figure 25. Kurgan 4, obsidian flake. Inv 8.



Figure 26. Kurgan 4, chamber, bronze bracelet. Inv 10.



Figure 27. Kurgan 4, chamber, bronze bracelet. Inv 10.



Figure 28. Kurgan 4, quernstone. Inv 11.



Figure 29. Kurgan 4, chamber, chalk lump.