

# ***ZORATS KARER***



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# ZORATS KARER

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The brochure is dedicated to one of the unique Bronze-Iron Age megalithic archaeological monuments of Armenia, Zorats Karer archaeological site located in Syunik province, RA. This is one of the exceptional monuments in the region that has preserved traces of a well-built and fortified settlement, as well as a large cemetery occupying over 10 hectares, which may provide new, important information on the Armenian history of II-I millennium BC, and enable identification and interpretation of a number of military-political and sociocultural processes of the period. The preliminary results of excavations in the territory from 2014 to 2018 and their conclusions are presented in the following piece.

The brochure is designed for professionals, comprehensive school teachers, students of humanities departments, tourists, and representatives of various circles interested in issues related to the rich historical and cultural heritage of the Armenian Highland.

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## ZORATS KARER

Among the archeological complexes of the modern southern Armenia a megalithic monument stands out, known with various names like "*Diq-Diq Karer*", "*Tsits-tsits Karer*", "*Zorats Kar*", "*Karezork*" and recently as *Karahundj*. The monument is located 3 km north of the town of Sisian in the Syunik province (marz), on a plateau 1,770 m high above the sea level on the left-bank-outcrops of the deep rocky canyon of the Vorotan River tributary Dar.

Geographical coordinates of the site: N39°33'02.52", E46°01'42.96".

For over a century, the location, the area, the general appearance, the structural details, the remains of the material culture uncovered on spot, and, in particular, the large number of vertically-erected giant rocks of this monument remain in the spotlight of the experts and a vast number of interested people in this field. According to the folk legends, in the depths of the stone piles of the monument warlords and commanders are buried, while the soldiers rest beneath the giant vertical rocks. Therefore, the local people call the monument **Zorqi Kar, Zorats Kar** (Stone of the Warriors or Stone of the Troops).

Yet at the end of the 19th century the educational inspector of Arstvanik, E. Melik- Shahnazarov was interested in this area. In the early 20th century the area was investigated by Yer. Lalayan, in the 1920-1930es by St. Lisitsyan and S. Barkhudaryan, in the 1950-1960es by M. Hasratyan and S. Esayan, in the 1970-1980es by O. Khnkikyan, E. Parsamyan, G. Areshyan, B. Sadoyan, by the end of the 20th century and the early 21st century by P. Heruni, H. Martirosyan, V. & M. Vahradyan, A. Hayrapetyan, and in 2010-2017 by the archaeologists A. Piliposyan, A. Bobokhyan, H. Avetisyan, A. Gnuni, G. Sargsyan and others.



However, until now, the site did not undergo professional complete and complex investigations, that gives rise to numerous illogic, improbable, contradictory and sometimes even openly unscientific conclusions and interpretations.

The earliest written records on the territories in question are preserved in the cuneiform inscriptions of the Van Kingdom (Urtu) rulers Sarduri II (764-735 BC), Argishti II (714-685 BC) and Rusa II (685-645 BC). Although the inscriptions do not provide direct information on the megalithic complex of Zorats Karer, however, they contain essential data on the social-political processes of this region in the 8th-7th cc BC.

According to the Urtologist G. Melikishvili, in the corresponding part of the cuneiform chronicles on the quadrilateral stela erected by Sarduri II in Van, the events of 751-750 BC are represented referring to the campaign of the King towards the Country of Etiuni (Etiukhi) (i.e. the northern and north-eastern regions of the Van Kingdom, and also particularly Syunik, in particular) and to the subjection of rulers of the cities of Ediani, Iruia, Irdua, Buinialkhi (Puinialkhi).

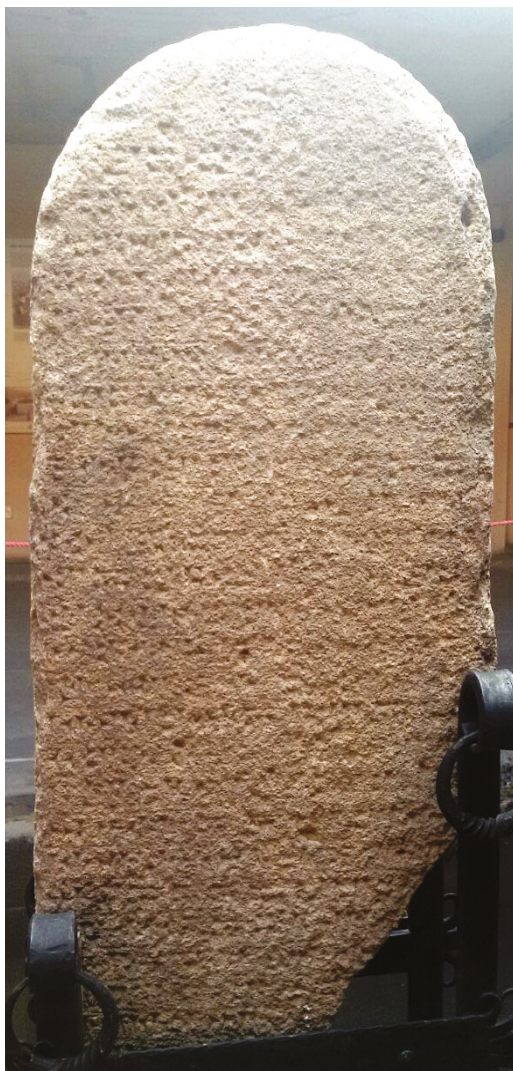


*Photo of Sardur II Chronicle*

The data on this region became more accurate when in 1975, around 17 km west from Sisian, not far from the village of Arevis, in the vicinity of Tanahat monastery, the cuneiform stela erected by Argishti II either by the end of the 8th c. or the early 7th c. BC was uncovered. It is a classic example of Urartian *pulusi* (vertically erected, often inscribed monuments of ritual character). It has quadrilateral structure, bearing cuneiform inscriptions over the wide frontal and rear sides. In the 11th and 12th cc. AD, the medieval stone carver in order to create a *khachkar* ("cross-stone", Armenian Christian symbolic monument) on one of the faces had carved a cross, thereby damaging the main part of the cuneiform text of that face. The cuneiform inscriptions preserved on the frontal and rear faces of the stela provide details of the campaign of Argishti II to the eastern regions of the Etiukhi (Etiuni) tribal confederation. According to them, although the ruler of Etiukhi presented himself to Argishti II, payed the confederation tax and declared his subjection, some rulers of the southern cities under his rule at that time, led by Zazinu – the ruler of the Land of Tsuluku, did not submit to the Urartian king and revolted. In an unequal battle, the opposers suffered defeat, and the council of elders of Tsuluku had to face Argishti II in front of the city of Irdua, accept his terms, and beg for mercy.



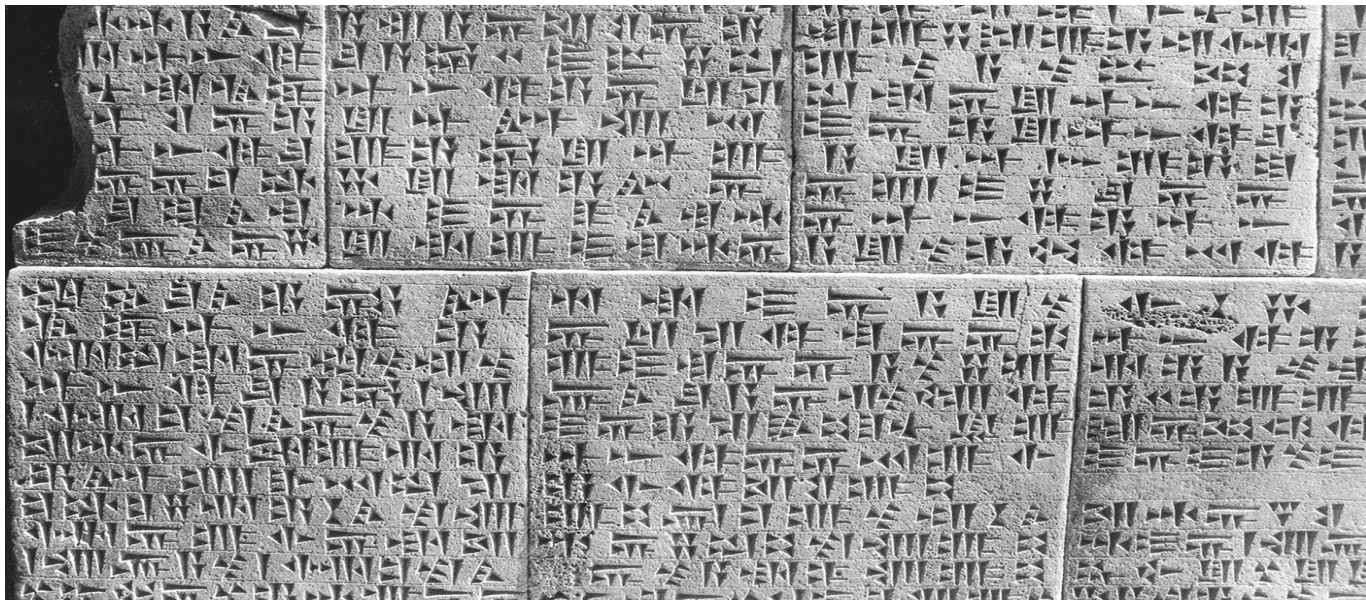
*The cuneiform inscription left at Tanahat by Argishti II*



Zazinu subjected and assumed the obligation to pay taxes. The text also reveals that even after all of these events, the inhabitants of Amusha, another city of the Land of Tsuluku, continued the resistance, fought a battle and only at the expense of significant losses Argishti II succeeded to subjugate them. He exiled some of them to slavery to the Country of Biaina, and then erected his triumphant inscribed monument in the area of the present-day Village of Arevis, nearby the Tanahat Monastery.

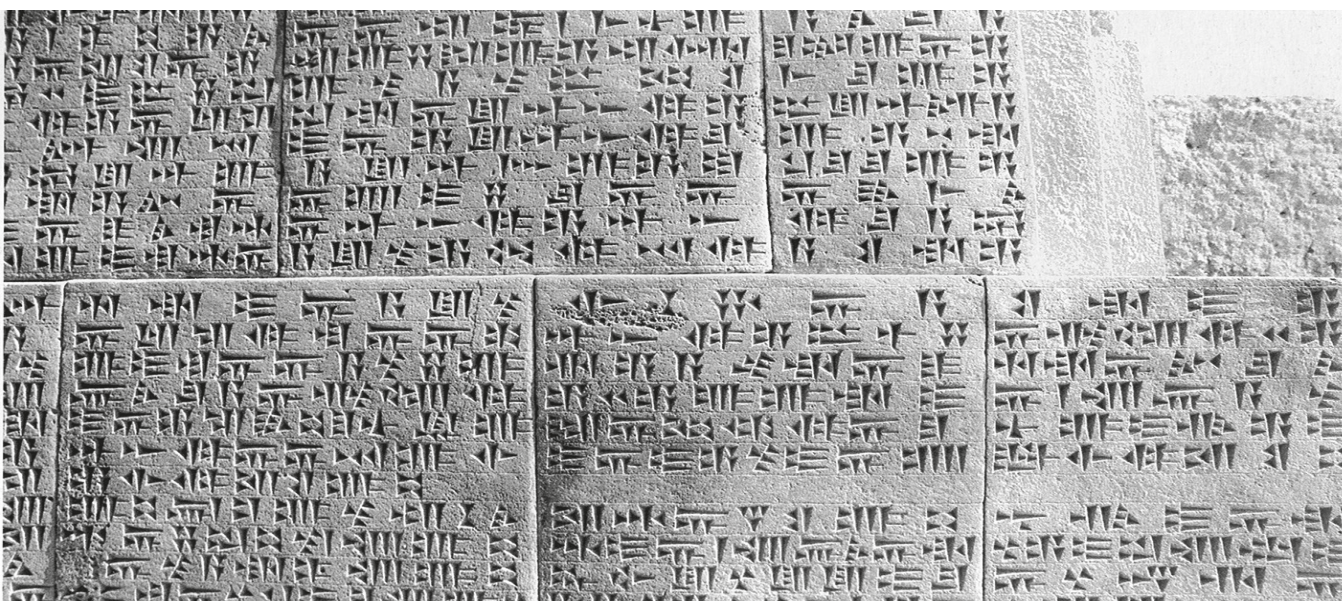
The Tanahat inscription doesn't only contain extremely important information on the events occurring in historical Syunik, the modern-day City of Sisian and its surroundings by the end of the 8th c. and the first quarter of the 7th c. BC at the reign of the Van Kingdom (Urartu). It allows also realizing toponymical reconstructions. So far, the mention of the country name Tsuluku of the Etiuni (Etiukhi) confederation, which is located in the Sisian region, according to experts, has an exceptional significance and is directly linked to the name of the Tsg huk province of medieval Syunik. The reflections of the names of the cities Irdua and Amusha of the Tsuluku land mentioned in the inscription, according to Urtologist N. Harutyunyan, are present also in the names of settlements Mutsq, Arit, Arteq, mentioned by the 14th c. historian St. Orbelyan.

The information on the conquest of the four cities of Etiuni and the oppression of their leaders preserved in the relevant part of Sarduri II's chronicle should be also interpreted in this context. Among those cities, about half a century before the events described in the Tanahat text the royal city of Irdua of the ruler Uerda is also mentioned. Thus, this part of Sarduri II's chronicle talks also of an invasion to Syunik and particularly to modern-day Sisian, the country of Tsuluku, without mentioning the latter's name. Instead, the names of three other cities (Erida, Iruia, B / Puinialkhi) located in the Sisian region (perhaps in the adjacent areas) are listed. The above-mentioned texts of Sarduri II and Argishti II also give us the names of two leaders of the Tsuluku country, Uerda and Zazinu, who ruled here half a century apart. There is no exact evidence to substantiate the latter's shift of power (there should be a difference of 2-3 generations between them) or the kinship-hereditary relationship.



*The cuneiform inscription left at Ayanis by Russa II*

At the same time, it seems most likely that both after the campaign of Sarduri II in 751-750 BC and during the reign of Argishti II by the end of the 8th c. or in the late 7th c. BC (when the foreign and domestic affairs of the Van Kingdom were complicated) the internal governance of the country of Tsuluku remained in the hands of the local elite. Moreover, the overall number of 8525 cattle and 18000 sheep/goats, captivated 3500 youngsters, 15000 women and 4000 soldiers taken out by Sarduri II from this area hints at the strong and sustainable economy and the significant human and military capacities of a powerful tribal union formed here around 8th-7th cc. BC, and probably of an early state organization. The circumstance seems also to be confirmed by the inscription of Rusa II, most probably dated back to the second quarter of the 7th c. BC, uncovered on the right side of the entrance to the *susi* temple of the god Khaldi at the fortress of Ayanis on the eastern shore of the Lake Van. Here Tsuluku (in the text referred as "Tsiluku"), as an opposing country is mentioned alongside with the powerful enemies of the Van Kingdom (Urartu), Assur (Assyria), Etiuni, Khate, and the land of Mushks (in Ancient Greek sources called Moskhoi-Μόσχοι).



In this context, it is very attractive to link the Iron Age settlement of Zorats Karer, which once possibly made part of the Tsuluklu land, to one of the cities mentioned by Sarduri II and Argishti II, namely to Irdua or Amusha. However, this is only an assumption so far.

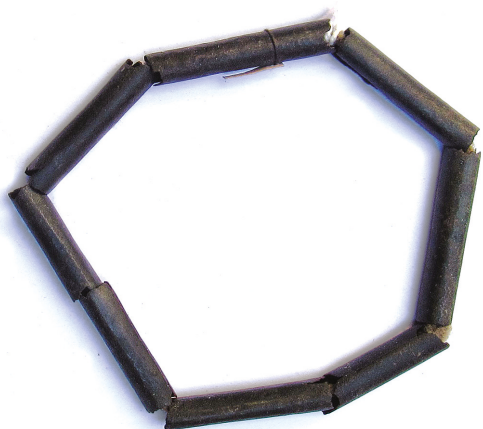
Concerning the sociocultural processes at Zorats Karer site in II-I mill. BC reliable information is obtained also through the archaeological materials of various epochs collected from the monument itself and the vicinity. In this respect, yet in the 1930es ethnographer St. Lisitsyan had collected interesting materials in Zorats Karer and the surrounding areas and handed over the to the Museum of History of Armenia.

The obsidian arrowheads, the bronze spear with a tubular handle, the rapier, two double-bladed daggers with shanked upper parts, 11 pierced pins with conical heads, 8 separators made of antimony relate to the Middle Bronze Age and can be dated to the 21/20th – 18/17th cc. BC. The bronze pipe-shaped adornments and earrings are more typical for the transition period from the Late Bronze to the Early Iron Age (13th-12th cc. BC), while the iron pike with a tubular handle should be dated to the 10th-8th cc. BC.





*Materials collected by St. Lisitsyan*



In 1980s, over a dozen of burials were excavated by archeologist O. Khnkikyan. Most of them are orientated north-south, consisting of stone cists, poorly preserved human remains, and archeological materials dated back to the 10th-8th/7th centuries BC. In the meantime, the poor state of preservation and the irregular position of the skeletons, allow assuming that the rituals of dismemberment or cremation were practiced during the funeral ceremonies at the site in the period of Early Iron Age.



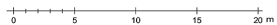
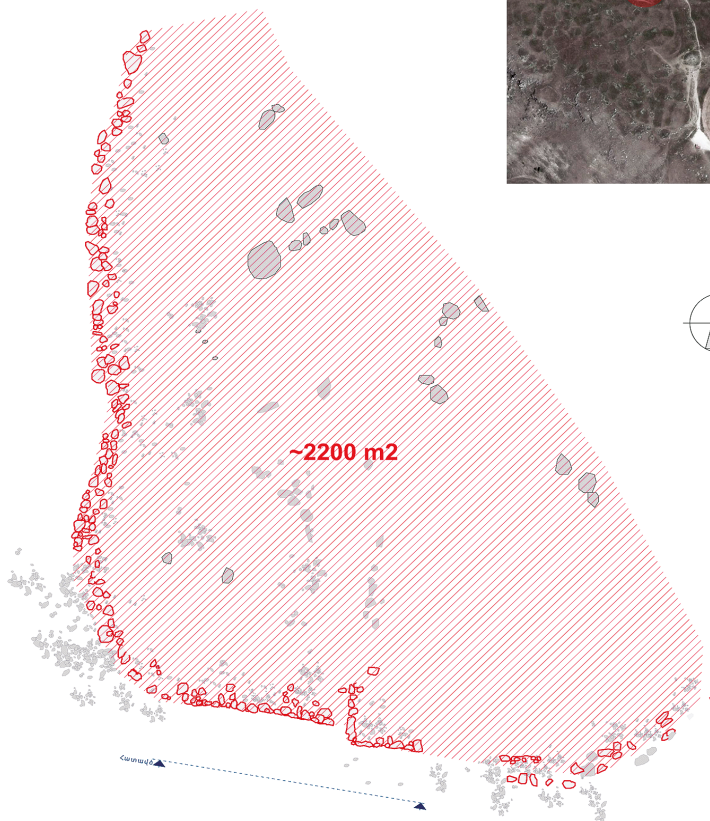
*Materials excavated by O. Khnkikyan*

The archeological excavations at Zorats Karer were resumed in 2013 by the joint archaeological expedition of the “Service for the Protection of Historical Environment and Cultural Museum-Reservations” SNCO of the Ministry of Culture of the Republic of Armenia and the “Center for Restoration of Monuments” CC (the head of the expedition - doctor-professor of historical sciences Prof. A. Piliposyan).

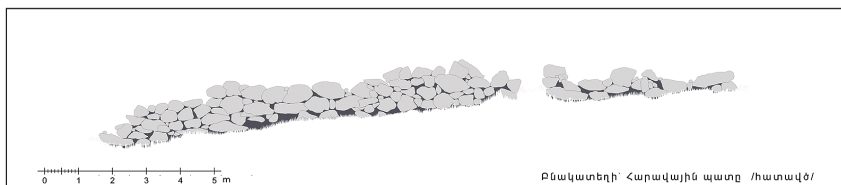
The outcomes of the investigations once again proved the existence of a settlement and an immediately adjacent cemetery in the area of the archeological site. It should be mentioned that the settlement that occupies the northern part of the site was surrounded by a defense wall with rough masonry up to 2.0 m high at certain places, and had an entrance in the southern part.



*Fragments of Zorats Karer settlement rampart*

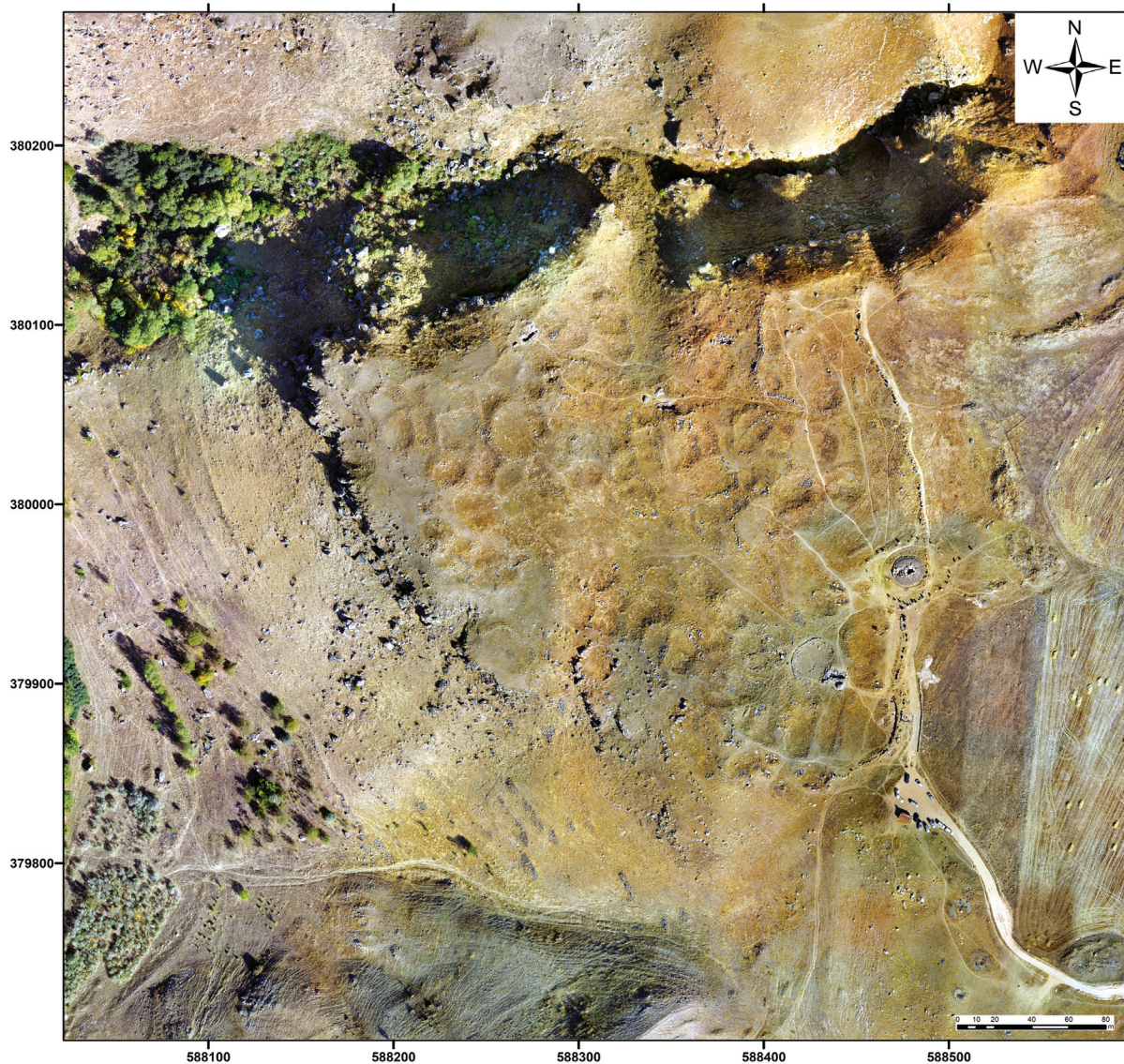


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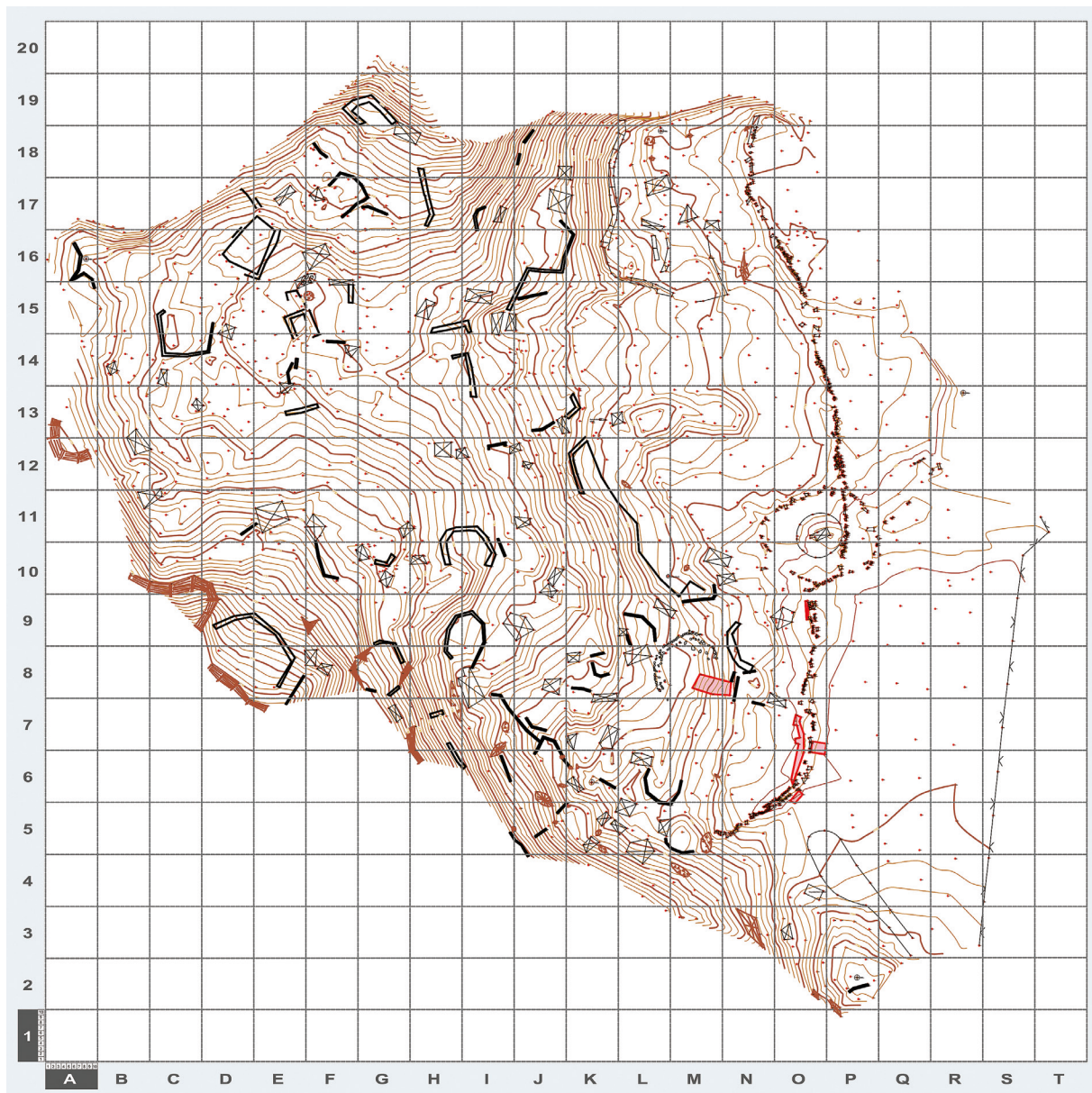


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*The section of the settlement rampart and the plan of the orthostatic stones edging the site from the East*



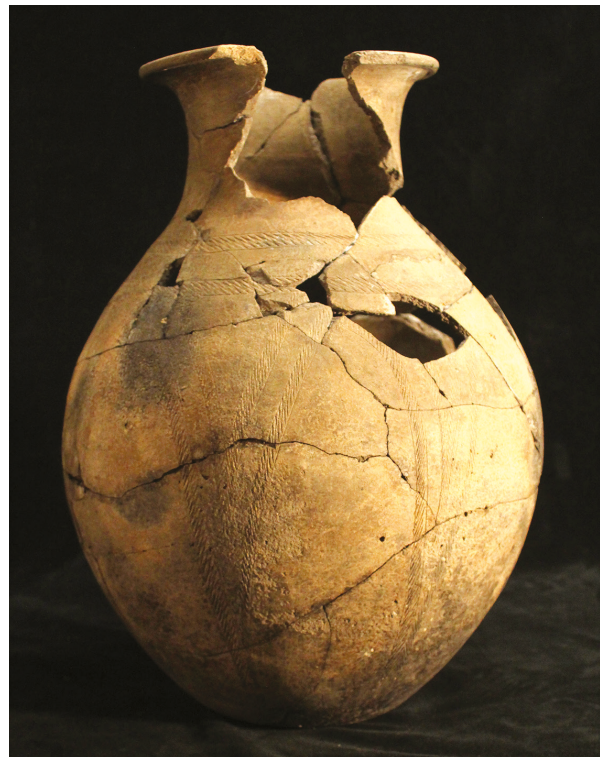
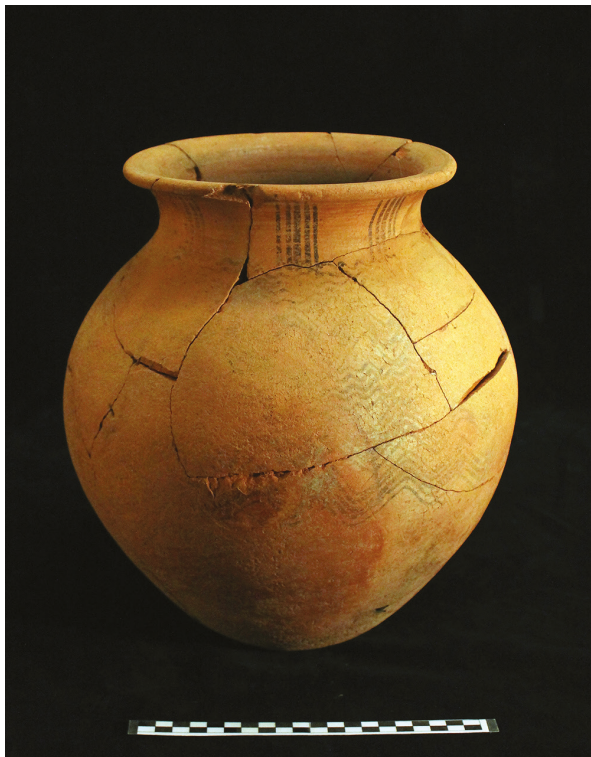
*General view of Zorats Karer settlement*



*The Plan of Zorats Karer archaeological site*

On the inner surface of the settlement remains of rectangular buildings, perhaps of some strategically important structures, refuges and household pits can be noticed, which were probably periodically rebuilt from the Middle Bronze Age to the Middle Ages (20th/19th centuries BC – 13th/14th centuries AD). This fact is also supported by the surface archeological materials found on the territory of the site.

The cemetery, in fact, is almost adjacent to the settlement and occupies the southern part of the site extending lower (to the south and west), on the left-bank slopes of the Vorotan River tributary Dar (Dare). The tombs belong to different periods. There are structures related to the Middle Bronze Age, Late Bronze Age, Iron Age, and Classical periods.



In 2014, a Middle Bronze Age ground burial was accidentally destroyed during the in the adjacent area of the monument. The archaeological expedition of Zorats Karer excavated the preserved part of the tomb in November 2014.

Most of the Zorats Karer tombs (over sixty) were damaged, destroyed or looted yet in the ancient times. Partially preserved structures, in our days, are enclosed by complete or incomplete cromlechs and have mainly underground, stone cists in the center, oriented east-west. Some cists are 13.0-15.0m long and 3.0- 4.5 m wide. In the result of destruction of the burials, some of capstones were moved and others had fallen into the tombs over time.



*Middle Bronze Age potteru*



*Images from the destroyed burials of Zorats Karer*



Judging from the results of the investigations of the site, the material needed for the construction of the tombs was either obtained on spot or brought from the quarry around 1.0km to the east. The covers of bigger cists were built in a special way (applying the method of a “false vault”). Therefore, large rocks with broad, massive, heavy base and a relatively narrow and thin upper part were chosen and separated in the quarry. Then, for the purpose of transportation the most convenient and relatively easy way, a 5.0–10.0 cm hole was drilled by the method of bilateral perforation in the narrow and thin section of each rock.

*Pierced megaliths at Zorats Karer*





This was done intentionally in the relatively thin section of the rock for two main purposes: a) it is easier to perforate a hole in the narrow section; b) the narrow and thin part is easier to orientate in either degree of the direction during the transportation. The internal surfaces of the openings have been refined and smoothed as much as possible. This was done in order to prevent the ropes passing through the holes from quickly wearing out and cutting due to internal roughness. Later, the ropes were tied to beasts of burden (probably bulls), short logs were installed under the rocks, and during the movement the released ones were brought to the front, thus with the help of a hole delivering the rock to the required place (this method of transportation was used in the Middle Ages and later as well). Till this day, there are rocks in the area of today's quarry, that were defected during the described preparatory work (the part of the hole was broken) and they were left in place. Semi-circular marks of the holes are still visible on them.

The "pyramidal" structure of the stones had another important significance. The thing was that in order to reduce the upper surfaces of the large burial chambers and to place relatively small capstones, it was necessary to build a unique roof – a "false vault". For this purpose, on the longitudinal parallel sides, long (up to 3,5-4,0 m), massive (not less than 3,0-4,0 tons) rocks with narrow upper parts and massive bases were placed facing each other. Due to such a structure, they reduced the upper part of the chamber to be covered, and, on the other hand, did not fall inside under the weight of the capstones. In this respect, the "pyramidal" perforated boulders were indeed very convenient for the longitudinal, parallel sections of the base of the "false vault", with massive bases turned outwards and with relatively thin and narrow parts turned inwards. The holes enabled giving them a more favorable position with the help of cords in order to better locate the capstones to be held. This way the huge burial chambers were later covered with relatively smaller and lighter slabs. In addition, the excavations prove that such tombs were covered with "false vaults" beforehand, prior to the funeral ceremonies and burying the deceased and placement of the funeral materials. Only then, through the narrow, yet open side with the dromos (mainly on the narrow western wall), the deceased was taken into the burial chamber together with the bodies of the "accompanying" staff, the flesh of offerings of the sacrificed animals and birds, and other necessities, and only then the entrance was closed. This is why during the excavations of such (non-ordinary) tombs we immediately observe that three walls of the tomb are relatively smooth, arranged from inside, while one of the narrow sides (often the western one) is uneven inside and more regular outside.

This is the way the famous tomb located in the central part of the cemetery was built, which was excavated during 2013-2017 by the Zorats Karer archeological expedition, and which is still related by a group of non-specialist amateurs to the phenomenon of an "observatory" (moreover to a Neolithic-Chalcolithic ??? one).



In fact, the burial complex in question is surrounded with a cromlech of diameter of about 18.0 m, with a 7.0 m long and 3.0 m wide (over 20 m<sup>2</sup>) burial chamber oriented from west to east. The inner area of the cromlech, up to the walls of the tomb, is completely covered with armor of small stones. Exactly from the western edge of the circular masonry of the latter a 1.0 m wide and around 7.0 m long underground *dromos* (an underground entrance) begins, that extends eastward and joins the burial chamber oriented west-east. In antiquity, it underwent looting, disturbance and reburying.



*General view of the Zorats Karer stone-cist burial no. 1 and the entrance*

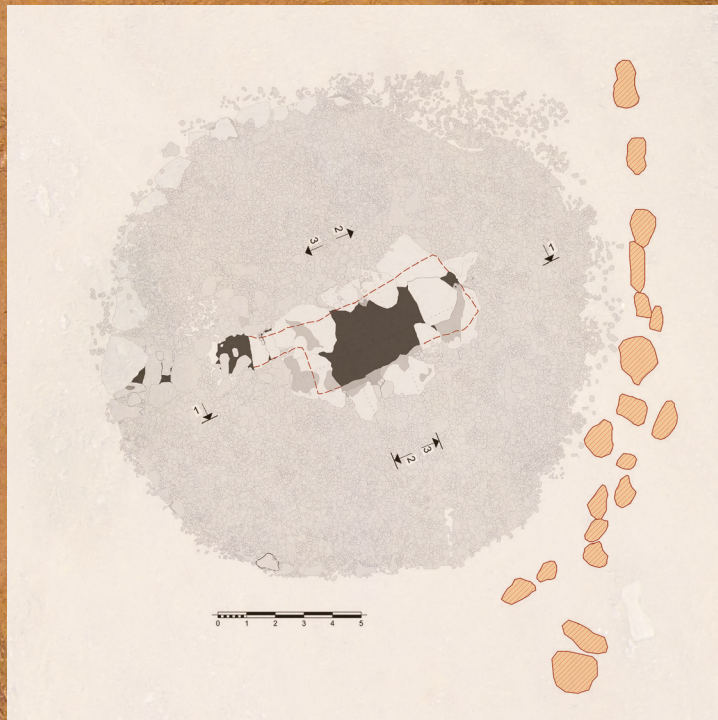


*Middle Bronze Age "Sevan-Artsakh" pottery fragments and  
Late Bronze Age materials*

During the excavations of the latter, five huge fragments of broken and fallen capstones were uncovered (one of them also had a hole on the top). Fragments of black, gray, buff pottery shards related to the 1st half of the 1st millennium, as well as remains of iron spears and a hooked dagger dated to the same period (9th -7th cc. BC) were also uncovered. The 2017 excavations in the tomb revealed parts of bronze bracelets, pincers and various metal objects dated to the first half of 1st millennium BC. The final excavations uncovered pottery shards, cornelian beads and a large number of paleoanthropological materials (according to the preliminary studies, belonging to 6 persons) at the depth of 3.15 m, which can be dated to the end of the 2nd millennium and the first half of the 1st millennium BC. Judging from the preserved painted pottery, in 6th-4th cc. BC another reburial occurred on the floor of the tomb as a child's body was inhumated in the burial chamber. The excavated funerary materials contain interesting information on cultural interactions as well. In particular, the remains of some pottery shards uncovered indicate direct connections with the Iron Age sites of the western part of the Iranian Plateau.

The structure of the burial has another important feature. It is surrounded with an irregular second cromlech with an average diameter of about 50 meters. Burials with double and even triple cromlechs are known also from other Armenian Late Bronze – Iron Age sites (Nerkin Getashen, Qanagegh, Verin Naver, Gavar, Talin, Noratus, etc.). This can be explained by the fact that a relatively later reburial occurred in the same chamber, and a new cromlech was set for the latter. In this case, the exterior of the old tomb appeared as a structure with a double cromlech. This phenomenon was probably due to both scarce funeral areas, complexity and laborious process of construction of a new burial, and also, most probably, the urgent need for a burial at a given period of time.

We can assume that such a process took place for the discussed burial at Zorats Karer as well. Moreover, the structural and technical differences between its two cromlechs indicate that the latter constitute the result of diachronic operations. The first cromlech with a diameter of 18 m, was constructed earlier (probably in the Late Bronze Age), while the second, the bigger one, should be related to the last funerals of the 6th – 5th cc. BC.







*Late Bronze Age vase found from Zorats Karer burial no. 1*



In this case, we can conclude that the structure was established in the Late Bronze Age; in the Iron Age it was used for the funerals of an individual of high social rank, and in the 6th – 5th cc. BC, it was reused for an infant. In general, remains of 6 individuals (2 men, 3 women and 1 child) were uncovered from the burial chamber. They are related to different time periods.

Another important information was also obtained during the cleaning and excavation of the burial chamber. The thing is that under the capstones removed from the cist fragments of pottery and dark blue glass bracelet of the developed Middle Ages (11th – 13th cc.) were found in the mixed soil layer.







In this respect, the only presumption, so far, is that during the Middle Ages, probably during the Seljuk or Mongol invasions, and perhaps even afterwards, such large, underground burial chambers (less visible from outside) could probably serve as a temporary shelter for local inhabitants. Therefore, it is hardly a mere coincidence that these structures are still called by the locals "a house of a giant" or "giants' houses".

There is yet another interesting peculiarity about Zorats Karer. The point is that all along the eastern side of the settlement and the cemetery starting from its southern end, right from the edge of the cliff (from the south) a range of orthostatic stones of various heights (0.5 – 3.5m), volumes (0.2–2.6 m<sup>3</sup>) and weight (0.5–4.5 tons) extends to the North almost in a straight line up to the cyclopean fence of the settlement, and then to the northern edge of the cliff.





*Iron Age pottery from the burial no. 1*



*Iron Age materials from the burial no. 1*

On the relatively thin upper parts of the latter there are, again, openings realized by bilateral treatment.

In October, 2017, the excavations began also in the area of these orthostatic rocks. This resulted in uncovering of a well-preserved masonry of a 2.50 m high wall stretching from the South to the North along the eastern edge of the site.

The fragments of pottery found inside and around it mainly refer to the 7th – 6th cc. BC that allows us to get a preliminary idea on the period of its construction. Moreover, the wall stretching from the North to the South, judging from the excavated retaining wall, was furnished with adjacent extensions which probably made the masonry stronger and more sustainable.



*Iron Age spears and a pike*



*Materials from the upper burial dated to the 6th-4th cc. BC*

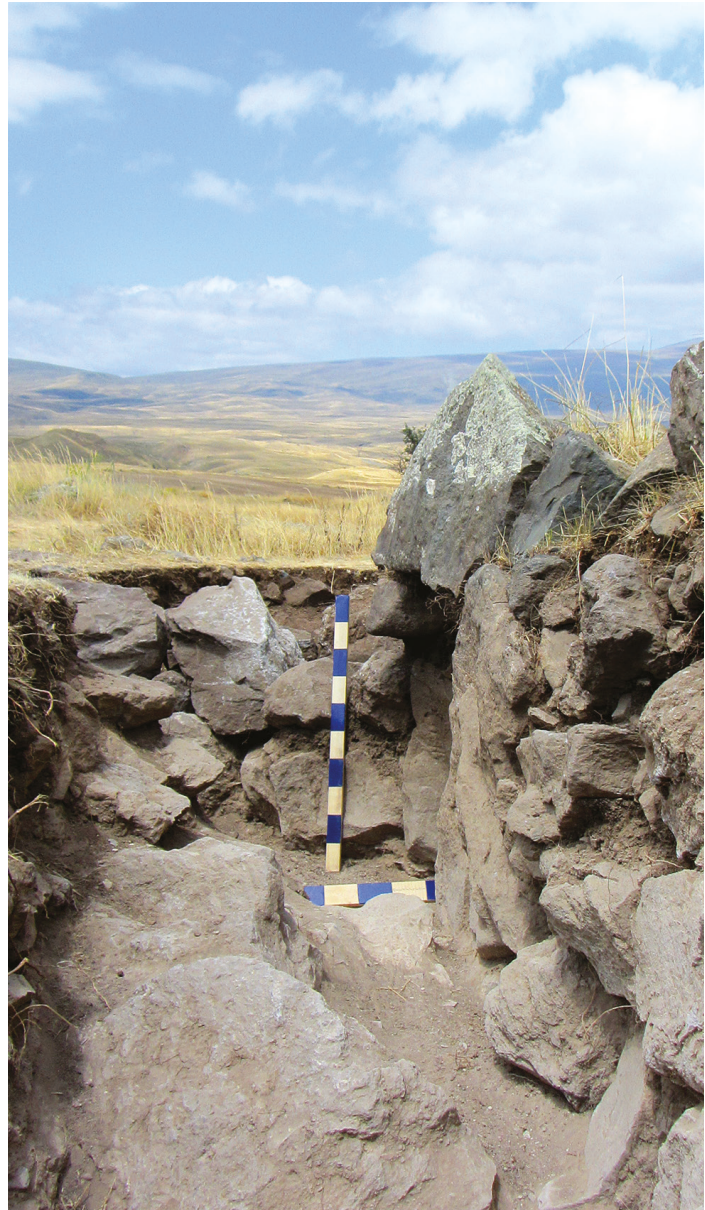


*A painted jar from the upper burial dated to the 6th-4th cc. BC*





However, it is still hard to clearly state the purpose of this construction. The initial impression is that the wall was constructed for defensive or urgent strategic purposes and the orthostatic stoned played a certain role. Most probably the hollow sections between the latter were built with small stones, and the general structure stretching from the North to the South actually had become a defense wall. It is still hard to say what this wall was protecting or separating, stretching along the most accessible part for the enemy – the whole eastern section of the site. It is not excluded that it might be built very quickly and hastily on the eve of the Argishti II invasion, in order to protect the settlement from the Uartian king and/or to provide an adequate response. It is also worth mentioning that the huge perforated boulders from the burial structures were placed exactly here on this wall.



*The photography of the uncovered masonry*

If this assumption is truthful, it is not excluded that the site of the Zorats Karer could be the same Amusha settlement mentioned in the Tanahat cuneiform text, that even after the surrender of Tsuluku's governor Zazinu continued the fight against Argishti II's troops, resisted and was defeated. Further excavations will give the positive or negative answers to these issues. It should be just noted for now, that after some time since the erection of the wall, reparations were realized both on the latter and in the area of the cemetery.

In particular, it is not excluded that new houses were built here, the role and the significance of which is not yet fully understood. However, both in terms of time and architectural solutions, the existence of a circular construction in the central part of the cemetery remains problematic. Therefore, purely archaeological data analysis shows that in the 9th – 7th cc. BC and/or immediately afterwards, a part of the Zorats Karer cemetery was transformed into a residential area (in particular, the remains of rectangular and circular structures observed in some parts of the cemetery, which are certainly not burial chambers, hint at this).

So far, we can assume that the range of Zorats Karer perforated rocks, extending from the South to the North, should have been erected not earlier than in the second half of the 1st millennium BC. It had a certain practical significance, which has nothing common with the concept and phenomenon of the "observatory", moreover, with the imaginary interpretations of its "7.000 years of existence." Otherwise, the arrangement of the perforated stones should have been at least circular rather than rectilinear: a circumstance that would, perhaps, in terms of "stellar observations" enable encompassing the whole firmament to follow the order and motion of the stars, instead of focusing unilaterally on a limited piece of sky.

Similar diachronic, perforated megaliths have also been preserved in the sites adjacent to other settlements in the region (Metsamor, Harzhis, Brun, Aghitu, Vorotnavank, Sisian, Yelpin, Chezare-Sulema, Ishkhanasar, Noratus, Nerkin Getashen, etc.). Therefore, even with the greatest desire, it is still very difficult to imagine that they were all related to the stellar observation processes. Otherwise, taking into consideration the imagination of non-specialist amateurs interested in these perforated stones, we have to admit that our Bronze-Iron Age ancestors of Syunik had so much spare time and such an irresistible desire to construct "observatories" no matter when and where (even next to each other).



*The reconstruction of the uncovered masonry according to Richard Holmgren*

Furthermore, this process became “so appealing” to the inhabitants of other parts of the Armenian Highland that they created “observatories” in adjacent areas of their settlements (Göbekli Tepe – Portasar, Nevali Chori, in the foothills of the Great Masis – in the area of the settlement of Akori, etc.) at various epochs (both many centuries before Zorats Karer and many years after).

The site of Zorats Karer is one of the most unique examples of the historical and cultural heritage of the Armenian Highland and still has many hidden obscurities. The revelation, investigation and interpretation of all of them is certainly an issue for no single generation. Therefore, it is crucial to continue the process of investigations thoroughly, step by step, applying fundamental and strictly professional principles. Only then, indeed, the archeological site can become a substantial anchor in the study of Bronze-Iron Age megalithic monuments not only for the Ancient Armenia but also for the whole Near East and neighboring zones.

Taking into consideration the fact that the complex of Zorats Karer monuments requires special investigations and preservation, as per the decree N 853 of the Government of the Republic of Armenia, as of June 26, 2009, the branch of “Zorats Karer” settlement” Historical-Cultural Preserve” was created under the “Service for the Protection of Historical Environment and Cultural Museum-Reservations” SNCO.







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