



Ancient Architectural Structures of The Karabakh Tribes as Precursors of Early Proto-Towns (3rd–2nd Millennia Bc)

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Abstract. In the 2nd millennium BC, in many regions of Azerbaijan, fortified settlements, that is, settlements with defensive walls emerged in addition to undefended settlements. These include so-called cyclopean structures. They were built along nomadic routes, in lowland regions, and on high-altitude pastures. Such structures first appeared in the Early (Garakopek- Tepe) and Middle (Uzerlik-Tepe, Chinar-Tepe) Bronze Ages (3rd-2nd millennia). The largest number of these structures is located in the lowlands and foothills of Karabakh, as well as in the alpine meadows of the Gedabey and Dashkesen districts, and partially in Kalbajar. Incidentally, Karabakh pastoralists have historically chosen the beautiful alpine meadows of Kelbajar for summer grazing. At the same time, in the second half of the 2nd millennium, the emergence of large settlements with defensive walls reached a more advanced stage. An example of such a large settlement is the Gara-Tepe settlement, located near the Shikhabaly village in Aghdam district. The settlement, covering an area of over 5 hectares, was located on a high, elongated hill on the right bank of the Gargarchay River. A second settlement of this type (Misir Gishlagy) was recorded near the village of Papravend in Aghdam district. In connection with this question, I would like to stop on another architectural structure discovered near the village of Khojaly. This complex, labyrinthine structure, known as a stone fence, begins near a large standing menhir, 40 meters from the grand Khacha-Tepe kurgan, and extends for a considerable distance. Thus, despite the limited number of fortified points, based on the available data, we can nevertheless estimate the degree of fortification development in the studied area during the Bronze Age.

Keywords: Azerbaijan, Karabakh, history, archaeology, fortification, settlements, artifacts

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1. Introduction

The lack of written sources hinders a comprehensive study of military affairs. However, available material evidence and comparative materials from adjacent regions make possible to reconstruct the general state of military affairs among the tribes of ancient Karabakh.

Analysis of archaeological data proves that, beginning from the Early Bronze Age, the development of transhumance necessitated the protection of increased numbers of livestock and pastures. Along the entire route of livestock to and from the mountain meadows for the winter, forces for security had to be increased. In this connection, the number of not only herdsman but also armed guards increased. Fortified settlements appeared in the foothills and later in the high-mountain alpine meadows. Examples include the Early Bronze Age settlement in Garakopek-Tepe (Ismailov, 1983, p. 9) (foothills) and the fortified structures in the high- mountain pasture of Kalbajar (Ismailov, 1983, p 7).

In this regard, the multi-layered settlement of Garakopek-Tepe, located on the outskirts of the Fizuli Mountains, deserves special attention. Here, Professor K. Ismailov studied a seven-meter-thick Early Bronze Age layer containing two types of building remains. The lower cultural layers revealed



circular dwellings, while the upper layers revealed quadrangular dwellings.

2. Architectural examples of the Early Bronze Age

The discovery of defensive walls in the Early Bronze Age layer of Garakopek-Tepe is of significant interest from the perspective of studying early fortification in ancient Karabakh. The defensive walls were constructed from large stone blocks (Ismailov, 1983, p 7). To the point, similar structures from this period were recorded in the settlements of Daire (Gobustan (Muradova, 1999, pp. 12-15, p. 5), Goy-Tepe, and Yanig-Tepe (in Southern Azerbaijan (Kushnareva & Chubinishvili, 1970, p. 9). The width of the walls at Garakopek-Tepe reached 2 m.

The construction of such structures at the earliest stage of the Bronze Age indicates a disruption to the initially orderly life of ancient society, an increase in the frequency of military incursions, and the emergence of the need to protect the lives and property of the population.

3. Fortified settlements of the Middle Bronze Age

The construction of such structures reaches a significant development in the Middle Bronze Age. Among the archaeologically studied Middle Bronze Age settlements of Karabakh, the remains of a defensive wall have been cleared in Uzerlik-Tepe. The defensive walls, built of large-sized, 2 m wide mud bricks (38 x 38 x 8 cm, 40 x 40 x 8 cm), have been traced over a length of 35 m (Kushnareva, 1957, p. 130; 1965, p. 7, 77). The preserved height is up to 1 m. Not far from Uzerlik-Tepe there is a similar settlement, Chinar-Tepe, with an area of over 5 hectares (Jafarov, 2020, pp. 99–101). A prospect-hole dug in the lower outskirts of the settlement revealed the remains of walls (possibly fragments of a defensive wall).

It is known that settlements with defensive walls, as well as fortresses from this period, have been registered in great number of places in Nakhchivan.

This includes the well-known, clearly stratified settlement of Kul-Tepe II (Middle Bronze Age), where strong defensive walls have been cleared, as well as Galajig, Oghlan-gala (Aliyev, 1991, pp. 25–28, 31–32, 35, 127–128, 139), and others. According to researchers, such settlements laid the foundations for the early urban culture of Azerbaijan (Aliyev, 1991, p. 23).

Well-defended centers simultaneously served as the socio-economic and political centers of a particular tribal union. In such centers, separate quarters emerged, inhabited by the tribal elite and ordinary residents, and handicraft quarters emerged, such as in Kul-Tepe II of Nakhchivan.

All this and other examples (Galajig, Chalkhan-gala, Oghlan-gala, etc.) prove that at the indicated time the emergence of such fortified settlements was associated with the growing threat of military operations.

4. Architectural examples of the Late Bronze Age

In the second half of the 2nd millennium, transhumance became widespread. During this period, along with permanent settlements so-called cyclopean structures emerged in many regions of Azerbaijan. They were built both along the nomads' routes and in high-mountain pastures. Constructed of large rocks, mostly unhewn stones, they were located on peaks inaccessible to enemies.

The largest number of these structures is located in the alpine meadows of Gedabey and Dashkesen districts, and partially in Kalbajar. Besides, Karabakh cattle-breeders have historically chosen the beautiful alpine meadows of Kalbajar for summer grazing.

A number of fundamental works by Russian and Azerbaijani scholars are devoted to cyclopean structures.

In different years, individual researchers expressed different opinions regarding the purpose and



function, as well as the construction techniques of cyclopean structures. These include Academician I.I. Meshchaninov (Meshchaninov, 1937) and I.M. Jafarzadeh (Jafarzade, 1938), who stood at the origins of the study of monuments of this type, as well as H.P. Kesemenly (Kesamanli, 1999, pp. 30–41, 152), who discovered many cyclopean structures in the territories of the Dashkesen and Gedabey districts. Following them, J.A. Khalilov, G.A. Abilova, V.G. Aliyev, V.G. Kerimov, T.R. Aliyev (Aliyev, 1993, pp. 3, 6–8, 16, 144) and others made a significant contribution to the study of the defensive structures of Azerbaijan in their works. In fact, it was the above-mentioned authors who, in various years, were closely involved in the study of these, in many ways, still mysterious structures of our distant ancestors. Despite some differences of opinion among these researchers regarding typology, purpose, and the use of technical methods, their opinions clearly reveal a nearly unanimous conclusion regarding the primary function of these structures. This opinion is that these structures provided shelter for residents and livestock during enemy incursions. In this regard, the statement of V. Kerimov (Kerimov, 1998, pp. 34–35) is noteworthy; as a specialist in defensive structures, he provides a clearer interpretation of these monuments.

It is regrettable to note that, with the exception of the still-disputed structure in Khojaly, no cyclopean structures of the classical type (as in Dashkesen, Gedabey, etc.) have yet been discovered in the region under study.

It is logically impossible that, existed in the similar natural environment with the neighboring Nakhchivan and Gedabey-Dashkesen districts, similar structures would not have been built in ancient times in Karabakh. After all, Urartian written sources frequently report invasions of the northern regions, the capture and destruction of fortified settlements, and the driving away of people and animals. These settlements were possibly not like the fortresses in Nakhchivan.

An inscription made in the name of the Urartian king of Rusa I (730-714 BC) (Melikishvili, 1950, p. 266) notes that he defeated a coalition of four large, powerful tribes – the Adakhuni, Uelipuhi, Luerukhi, and Arkupini and nineteen kings of countries (followed by a list of regions) who came to their aid from the other side, from the high mountains.

Even in his time, I.I. Meshchaninov (Meshchaninov, 1937, pp. 66–67) noted that these tribes lived east of Lake Sevan (Goycha) in the Lesser Caucasus Mountains and partly on the territory of Soviet Azerbaijan (present Republic of Azerbaijan). B.B. Piotrovsky (Piotrovsky, 1944, p. 10), G.A. Melikishvili (Melikishvili, 1954, p. 68), and even the Armenian author N.V. Harutyunyan (61, 282) shared this opinion. B.B. Piotrovsky believed that after this battle, Urartian troops freely advanced into these lands, unprotected by natural obstacles, all the way to Karabakh. S.A. Yesayan (Esayan, 1976, p. 215) localized these lands as the modern Krasnoselsky, Ijevan and Shamshaddin districts of Armenia, as well as the Dashkesen, Gedabey, and other neighboring districts of Azerbaijan.

There are also other written data regarding Urartu's campaigns in the northern regions (meaning Transcaucasia, especially its eastern part). For example, the inscription of Sarduri II (760-730 BC) on the Van rock indicates that as a result of the campaigns in Transcaucasia, Urartu took 110 thousand cattle and 200 thousand small cattle, 2 thousand horses, and 115 camels from the country of Eriahi (Piotrovsky, 1949, pp. 77, 100; 1955, p. 9). Besides, other data regarding the payment of contributions in the form of horses is also of interest. Thus, the Assyrian king Tiglath-Pileser 1st (early 9th- century BC), after defeating the kings of the Nairi countries, forced them to give 1.200 heads of horses as a contribution, and Salmaneser III (860-825 BC) received horses from the Lake Urmia region (Piotrovsky, 1959, p. 151).

Perhaps the second episode, related to the relations of Assyria with the Urartian kings, has no direct relevance to our topic. However, the very fact that the property seized by the Urartians during their military campaigns in Transcaucasia was, in turn, expropriated by the Assyrians, is interesting.



Despite repeated assertions of scholars regarding the presence of Urartians in the territory of Karabakh, this fact has not yet been archaeologically (or actually) documented.

However, this does not mean that it is impossible to find future arguments in favor of the Urartians' unconditional presence in Karabakh. Perhaps these campaigns were so flash-like and fleeting that the Urartian kings, like all ancient Eastern rulers who always ordered their military successes to be immortalized on rocks, tablets, and all manner of laudatory odes in their honor, did not have time to leave behind any written records in Karabakh or other regions of Azerbaijan. Although, if we are to believe the report of S.V. Ter-Avetisyan (Ter-Avetisyan, 1934, pp. 5, 11), cuneiform inscriptions were once discovered near the villages of Qushchu and Kchokhut in Mardakert district (present-day Aghdere) of Azerbaijan. This information was then verified by J. Gummel, as well as by emissary scientists (Esayan, 1976, p. 215) from Yerevan, but no traces of the inscription were found. It seems to us that those scientists are right who believe (Jafarov, 2023, p. 18) that at the specified time all regions of Transcaucasia were at approximately the same level of socio-economic development, natural conditions were also identical, as a result of which the information from the Urartian inscriptions can to a certain extent be attributed to Azerbaijan, in particular to Karabakh. That is, the local tribes had something to protect, and with what to protect it.

Don't get the impression that local tribes waged war only against the Urartians and other eastern countries (for example, the Assyrians). They also had to defend themselves against their neighbors (within the territory of Azerbaijan itself) and also against more distant neighbors (the rest of the South Caucasus). We have no doubt that military operations became regular during this period. This is based on the numerous factual arguments discussed above. Moreover, while in some cases these were defensive battles aimed at protecting lives and property, in others they were attacks on neighboring territories for the same purpose.

The absence of monumental cyclopean structures in the studied area does not mean that there were no settlements with defensive walls, i.e., no fortified settlements.

It was noted above that in the Late Bronze Age, due to changes in the economic structure, especially the increase in the number of small cattle, the transhumance form of cattle breeding occupies a leading position. This is probably why the number of exclusively Late Bronze Age settlements on the territory of Karabakh sharply decreases. Scientists have repeatedly noted that the layer relating to this period in multi-layered settlements is generally insignificant (for example, Rasul-Tepe, Namazaly Tepesi, Beyuk-Tepe, Bashir-Tepe, Goy-Tepe in Aghdam district; Su Tepesi, Janavhar-Tepesi, Binnet-Tepe, Uch-Tepe in Aghjabedi district; Tokhmag-Tepe in Terter district; Shor-tepe in Barda district) (Jafarov, 2020, pp. 125–130).

The decrease in the number of settlements is explained in various ways: climate change, the drying up of reservoirs, transhumance, and the unification of individual tribes into large tribal unions. These tribal unions lived in larger settlements than in previous periods.

An example of the existence of such a large human settlement is Gara-Tepe, located near the village of Shikhabaly in Aghdam district (Jafarov, 2020, pp. 130-134). The settlement, with an area of over 5 hectares, was located on a high, elongated hill on the right bank of the Gargarchay River. The height of the hill, including cultural deposits, reached up to 25 m in the southwestern part and up to 10 m in the northern part. The settlement was protected on the northern side by the natural steep bank of the Gargarchay River. In 1987, prospecting shafts were dug in the northeastern part of the settlement. As a result, the settlement's chronological dates were established: the 12th–9th centuries BC (The first layer dates back to the 12th–11th centuries BC; the second layer – to the 10th–9th centuries BC).

The clearing of the remains of a defensive structure is noteworthy. Archaeologists managed to clear 20 meters of walls (the remainder was buried under unexcavated layers). The walls are constructed of large mud bricks on a stone plinth. The plinth's height has been preserved to a height of 1 meter and its width to 4 meters. The dimensions of the mud bricks are as follows: length from 43 cm to 53 cm, width



18-20 cm, height 15 cm.

Along with the wall, the remains of a rectangular-oval tower were cleared (Jafarov, 2020, pp. 130- 134). The mud bricks were laid with clay mortar, the color of which differs sharply from the brick material. Remains of buildings of various purposes were also discovered in the inner part of the settlement. The construction techniques and materials are identical to those of the defensive wall.

A second settlement of this type (Misir Gishlagy) was recorded near the village of Papravend in Aghdam district (Jafarov, 2020, pp. 134-135). Here, too, in an area destroyed by farm work, the remains of a defensive wall were cleared. It was constructed of roughly hewn limestone and large river pebbles. Gypsum mortar was used as a bonding material. The surviving width of the wall reaches approximately 1 m. Remains of rectangular stone structures were also discovered there. Thus, unlike the settlements of lowland Karabakh, where the layers of the corresponding period are insignificant and, probably, they were of a seasonal nature (an example is the settlement of Uch-Tepe (Iessen, 1965, pp. 103–126), near the village of Salmanbeyli in Agjabedi district), the aforementioned settlements (Gara-Tepe and Misir Gishlagy) represented the center of a large cultural and ethnic massif. Perhaps those scholars (Aliyev, 1991, p. 23; Valiyev, 1992, pp. 24–28) who saw in such large settlements the beginnings of an “early urban culture” are right.

Undoubtedly, such settlements were inhabited by a population large in number, which led a primarily sedentary lifestyle, engaged in various sectors of the economy (agriculture, cattle breeding and handicrafts). Incidentally, ethnographic observations show the proximity of these settlements to roads leading to and from the mountain pastures. Among other things, settlements such as Gara-Tepe and Misir Gishlagy allow us to study the state of fortification in Azerbaijan at the end of the 2nd – beginning of the 1st millennia BC.

5.An architectural “masterpiece” - a labyrinth in the Khojaly complex

In connection with this issue, I would like to dwell on another structure discovered near the village of Khojaly. The structure is located near the famous largest earthen kurgan, Khacha-Tepe. Menhirs were also located there at one time. Numerous stone cists, composed of large rocky blocks, have been found nearby and around them. These monuments were the objects of study at various times by I.I. Meshchaninov (Meshchaninov, 1926, p. 220), K.Kh. Kushnareva (Kushnareva, 1957, pp. 372–376, 6), and H.F. Jafarov (Jafarov, 1997, pp. 153–162).

This complex, labyrinthine structure, known as a stone wall, begins near a large standing menhir, 40 meters from the Khacha-Tepe kurgan, and extends for a considerable distance. The wall is a continuous ridge of stones, rising 1 meter, and in some areas up to 1.5–2 meters. Rough, unhewn, elongated limestone blocks typically line the sides, while the center is filled with smaller stones. The walls were up to 4 meters wide. At the base of the walls are large limestone blocks, laid flatwise on top of each other in 2–3 rows.

The entire structure is located on a flat, slightly sloping eastward part of the field and has a highly elongated plan, covering an area of approximately 9 hectares. In the western part, a structure extends inward from the main outer wall: a series of walls forming various configurations. In the center is a fence of irregular elliptical shape (Kushnareva, 1957, pp. 5–6, 372).

A corridor-like entrance leads to this enormous structure from the southwest side. The entrance is 40- 45 m long and up to 6 m wide.

Stone fences also exist outside the described structure. One of them runs parallel to its northern wall, separated by a depression resembling a flooded ditch. This parallel masonry, at its eastern end, encircles a square elevation, also surrounded by a stone fence, and extends, winding, to the right bank of the Khojalychay River (Kushnareva, 1957, p. 374; Jafarov, 1997, pp. 153–162). In some places of the large structure, vertically standing stones – menhirs are clearly visible. However, they are smaller than the large menhirs standing near the Khacha-Tepe kurgan.



There are a number of theories regarding the purpose of this grandiose structure. For example, considering its construction to be contemporaneous with the kurgans and stone cists, N. Kushnareva (173, 376) believed that it was a religious building. But as she herself admits, even during the discussion of her report at the plenary session of the Leningrad Branch of the Institute of History of Material Culture, B.B. Piotrovsky and A.A. Iessen suggested that this structure could have been a cattle pen. The hypothesis of H.F. Jafarov; Jafarov, 1997, pp. 153–162), who believes that this structure, destroyed by the passage of time, served as a refuge for people and livestock during enemy attacks, is closer to the truth. In other words, it served the same function as the cyclopean structures.

Indeed, the very location of this structure on the high right bank of the Khojalychay River, next to a necropolis containing various monuments (kurgans, dolmens, menhirs, stone cists), suggests its practical nature. The plan of the structure is ingenious. Besides the impressive walls, which could once have withstood lengthy sieges, it also features a number of features (such as labyrinths on the outer wall, a long corridor-like entrance, separate buildings within, etc.) that could have misled the enemy during their attacks, they could have been ambushed. Certainly, caught off guard, the enemy would have had to fight back desperately. Unfortunately, other than small prospecting pits, no excavations have been conducted here. Incidentally, with the exception of some cyclopean structures, large-scale excavations have not been conducted in Azerbaijan.

To the point, in almost all cyclopean fortresses, the builders paid particular attention to the construction of the entrance. Typically, towers were erected directly next to the entrance, or the entrance was constructed at the junction of two walls, the corners of which also formed similar towers. Along with this technique, there were others, such as the construction of two, sometimes three, semicircular walls in front of the entrance, a kind of spiral entrance, between which the enemy would enter a stone corridor (Esayan, 1976, pp. 221–222). In many fortresses, as in Khojaly, narrow corridors several dozen meters long were constructed in front of the gates, giving the enemy no room to maneuver. These were the so-called “stone sacks”.

The description of the Khojaly stone structure shows that the aforementioned details characteristic of other cyclopean structures were also present here: large stone blocks used in construction, intricate planning, the construction of labyrinths, the entrance in the form of a long (40 m) corridor, etc.

We believe that this grandiose and complicated complex was built over a long period of time. Perhaps it originally had a smaller site, but later, with population growth and increased enemy incursions, it became necessary to expand the area of the structure to shelter numerous tribesmen and livestock.

6. Conclusion

The construction of a large-scale and complex structure during the period under study required a significant amount of manpower, skilled builders (and perhaps even architects), and the institution of coercion. An authoritative figure must have overseen this work. This individual (or perhaps several) likely occupied a very high social position. This same leader or leaders likely oversaw the construction of the grand kurgans and other monuments located around and near the stone structure.

It has been repeatedly noted that fortified settlements such as Uzerlik-Tepe, Chinar-Tepe (Middle Bronze Age), Gara-Tepe, Misir Gishlagy (Late Bronze Age), the unique Khojaly structure, as well as kurgans (stone and grand earthen kurgans, dolmens, stone cists, etc.) fit entirely into the final stage of the collapse of the primitive communal system. As scientists (H. Jafarov, D. Jafarova) noted in their research, this was a period of “military democracy”.

Thus, despite the quantitative limitation of fortified points, based on the available data, we can nevertheless judge to some extent the degree of development of fortification in the studied area during the Late Bronze Age.



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