Modern Stone Age of Armenia
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Abstract:

The research studies the archaeological remains dating back to the Neolithic period in the Republic of Armenia; Through a review of the architectural remains, pottery, Lithic industry, burials, and the fauna and flora that were spread in during the End of Mesolithic/Epipaleolithic - Early Neolithic Era in Armenian highlands which were characterized by Lithic industry; and the Agricultural sites that belong to the middle and the end of the Neolithic which spread in the Ararat plain and constitutes the Southern part of Shulaveris Shomutepe culture.

Today, the South Caucasus region includes three Republics (Georgia, Azerbaijan, and Armenia). It is bordered from the East by Caspian Sea, from the West the Black Sea, from the North by Federal Russian and the Greater Caucasus Mountains, and from the south by Iran and the Lower Caucasus Mountains. This region is considered as a passageway between Asia and Europe.

Mesolithic is the first step towards stability, which followed by the Neolithic or the "agricultural revolution" which brought changes in different aspects of life as a result of stability. The Neolithic was divided into two phases, the pre-Pottery phase (in which man achieved all this period activities except pottery production) and the pottery phase (include all activities and the pottery production). Many archaeological sites in the South Caucasus, in general, lack accurate chronological dating, which added difficulty to determine the exact Neolithic age. It is noted that although the archaeological excavations in Armenia still need a lot of examination and dating, it was possible to identify two types of sites; The first belongs to the early Neolithic era and spread in the highlands of Armenia, and the second is the agricultural villages in the “Ararat” plain, which is considered the southern part of the “Shulaveri Shomutepe” culture.

Key Words: Armenia, Neolithic, Architecture, Lithic Industry, Pottery, Burials
Introduction:

The South Caucasus region today includes three republics (Georgia, Azerbaijan, Armenia). It is bordered by the Caspian Sea to the east, the Black Sea to the west, Russia and the Greater Caucasus Mountains to the north, and Iran and the Lesser Caucasus Mountains to the south. The region is considered a bridge between Asia and Europe (Figure 1).

The Middle Stone Age/Neolithic period marked the first steps towards stability, followed by the Neolithic period or the "Agricultural Revolution" and the accompanying changes in various aspects of life due to settlement. The Neolithic period is divided into two stages: Pre-Pottery (during which human activities were present except for pottery production) and Pottery (which witnessed the production of pottery). Many archaeological sites in the South Caucasus lack precise chronological dating, which adds difficulty in accurately determining the Neolithic period. Although archaeological excavations in Armenia still require further scrutiny, examination, and dating, it has been possible to identify two types of sites. The first belongs to the early Neolithic period and is widespread in the highlands of Armenia, while the second type includes agricultural villages in the Ararat Plain, which is the southern part of the Shulaveri-Shomu culture. This period in Armenia is characterized by the presence of a civilization, as follows:

Architectural Remains:

1.1. Early Building Attempts: The first building attempts in Armenia came from sites dating back to the early Neolithic period. In the rock shelter "Kuchuk 1" (Figure 2), a severely damaged and poorly preserved stone structure was found in front of the cave. Another site, "Lernagog 1" (Figure 2), revealed a ground construction made of burnt mud in grid square H15. It consisted of a series of connected lines of mud blocks forming a slightly curved wall (possibly part of a circular building) measuring 4m in length and 30-40cm in width. This is followed by buildings in the agricultural villages of "Tall Masis," "Aratashen," and "Akhnashen."

1.2. Building Layout: Most buildings in Armenia adopted a circular layout, which is the easiest layout to shape. It first appeared in curved walls at the "Lernagog 1" site and later in the agricultural villages in the Ararat Plain at "Tall Masis" (Figure 4), "Aratashen" (Figure 5), and "Akhnashen" (Figure 6). Additionally, rectangular layouts of buildings emerged (which is considered a new feature in the architecture of the Neolithic period in the South Caucasus region in general, not just in Armenia) in the upper layer of the completely destroyed "Tall Masis,"
dating to the Pottery Neolithic period (some walls reached a height of about 4m) (Figure 3). However, what is noteworthy is

As other unfamiliar forms of buildings appeared: two buildings in "Aratashen" Level 1 had long and straight walls shaped like the Latin letter U, with lengths ranging from 9.50m to over 11.00m respectively, a width of approximately 1.8m to 2.00m, and the remaining height of the walls was 0.25m. They were surrounded by a fence and are believed to be for agricultural activities. Building materials: Mud blocks and panels were the main building materials in "Lrnajogh," "Tal Masis," "Akhnashen," and in "Aratashen." The use of mud bricks (thick and coarse) along with mud started from Horizon 2 in Aratashen, and only a complete wall made of bricks was found in Level 1 (consisting of three perpendicular rectangular brick walls with dimensions of 45x25x8cm). Stones were also used in one case in "Kuchuk 1." The thickness of the walls ranged between 26-28cm in Level 1 in "Tal Masis," 35-40cm in "Akhnashen," 25-30cm in Horizon 5, and 25-50cm in Horizon 4.

Plastering of walls and floors: Some buildings in Armenia had plastered walls, floors, or both. A hardened mud floor (resulting from firing) was found in "Lrnajogh 1." In "Tal Masis," the floors of the upper level buildings and the walls and floors of buildings (S006-S004) in the lower levels were plastered. The walls of the curved buildings (U-shaped) in "Aratashen" and the floors in Level 1 were also plastered. Plastered floors were discovered in "Akhnashen" (the southern part of a circular building in Horizon 4).

2.5. Building Attachments:

External attachments: These included fireplaces with diameters ranging from 30-40cm and wall thicknesses of 26-28cm. In Horizon 1 of "Tal Masis," there were storage rooms with walls measuring 10-12cm thick. In Level 1 of "Aratashen," there were gravel-filled pits and two brick storage areas. Additionally, in Horizon 5 of "Akhnashen," there was an outdoor area outside the buildings that contained storage rooms and food preparation areas. Internal attachments: These consisted of ovens in the middle of buildings S017 and S018 in "Tal Masis." Small circular structures, possibly ovens or grain and tool storage areas, were found in "Aratashen." In the sub-level 4 of Horizon 5 in "Akhnashen," there was a circular mud construction and remnants of a hearth with dimensions of 50x120cm.

2.6. Function of the Buildings:

The buildings were primarily used for residential purposes, although a few had special functions related to economic activities. The circular building S004
in "Tal Masis" with a diameter of approximately 2.70-2.90m had plastered floors and walls. It was suggested by the discoverers that it was a workshop due to the numerous findings within it, including a quantity of large gravel, obsidian cores, shaft straighteners, a large quantity of obsidian and bone tools, and a stone axe. Additionally, an important find in the building was a rectangular seal (measuring 5.5cm in length) made of serpentine material. It was suggested that the building was abandoned due to a fire, supported by the quantity of findings and the presence of hardened mud floors resulting from fire exposure. In Level 1 of "Aratashen," there were U-shaped buildings that were possibly used for crop processing or as a market for trade and circulation. They were surrounded by a fence. There were also mud floors in "Aratashen, Layer IIb" that were likely used for social activities, food preparation, or perhaps livestock shelters (due to the presence of charred plants and animal dung).

2.7. Distinctive Construction Features:

Some buildings had distinctive features in their construction. The mud block buildings in "Tal Masis" were covered with mud panels (over 3cm thick) on both sides to enhance thermal stability and prevent water leakage into the buildings. In "Tal Masis," some aesthetic features were also used, such as alternating rectangular mud panels in two different colors (light and dark) in building S001 to give it an aesthetic appearance. In Level 2 of "Aratashen," different colors of mud were found in the form of horizontal and vertical strips or irregular strips, which gave them an aesthetic look. In Horizon 4 of "Akhnashen," two semi-circular supports (with dimensions of 65x55cm and 125x65cm) were found on the façade of a circular building (on the sides of the entrance).

Burials: Burials were not common in the South Caucasus in general and were found in very limited sites. The number of burials does not necessarily indicate the population size, and it is possible that the inhabitants buried their dead outside their residential villages and kept burials of individuals with important status within settlements, or perhaps the burials were within the residential villages but have not been discovered yet or were destroyed. Burials were found in only two sites in Armenia, "Tal Masis" and "Akhnashen." In "Tal Masis," a well-preserved burial of an adult woman was discovered. She was buried in a flexed position on her left side with her arms next to her body, and her skull was covered with red ochre. A obsidian blade and fragments of blue mineral (azurite) were found with the burial, along with a piece of red ochre inside the mouth. She also wore a beaded necklace around her neck. Another burial in "Tal Masis" was found, with the male separated from the head and body, flexed on the right side. The rib bones
were covered with ochre, and numerous obsidian blades and pottery sherds were found with him.

A third burial was found for a male aged between 30-40 years. The body was extended (Figure 7) on his back, and the bones were severely fragmented. Obsidian blades were placed around the body, above the head, and on the left thigh. Two graves filled with burial deposits were found in this grave. The first contained bone tools, obsidian cores and flakes, a pendant, and stones. The second contained stone fragments, a large bone awl, and a grinder. In addition, scattered and severely fragmented bones, likely belonging to a destroyed burial, were found, associated with animal bones.

In "Akhnashen," four burials were found. The first was a child aged between five and seven, placed on the left side (Figure 8), with a fractured skull and only the right arm distinguishable. A metal ring (copper or bronze), two obsidian pieces, and a few pottery sherds were found with the child, along with animal bone fragments. A set of bones (left ulna, upper quarter of the left radius, leg and thigh bones, complete left ribs, some right ribs) were identified as the skeletal structure of a fetus, estimated to be 38 weeks old at the time of death (approximately 8 months). A skull (Figure 9) was also found, belonging to a person who died between the ages of 20-39. The skull was placed on the left side, without the lower jaw, and possibly the left jaw bone as well. It showed signs of "trepanation" and was associated with animal bones, bone tools, obsidian, and pebbles. It is likely that this skull was deposited as an offering or belonged to a disturbed burial. There are indications of an old fracture on the skull, caused by a sharp tool, but the blow was not fatal as the bones were reshaped. The last burial is the lower part of an adult's body (the age and gender could not be determined), without any accompanying deposits, indicating a disturbance in the burial, possibly due to the missing upper part.

. Stone Tools:

4. 1. Instrument forms:

The instruments found in Armenia's Neolithic sites are similar and indicate fishing activities, which differ from those found in agricultural villages that indicate agricultural activities. The stone tools found at the Gigaqrot sites are similar. () "Kuchuk 1" (figure 10, 11) with the tools found on the Kamlu site which has been termed "kamlu instruments" (figure 12) as well as in the two locations, geometric dwarf tools were "arrows nassal", "different rib and stiff" nussals, terminal scrapes, fellows, instrument denominator "from serpentine" and dwarf discussant. In the site "Ranaju 1" (figure 13), regular shape and side edges
and dwarf instruments (aboard, crescent, semi-skewed shapes) were found. In "Tsajkonk" (figure 14), fellows, imposed tools, terminal scrapers and drills were found. Stone tools were similar in the three agricultural villages (shapes 15-17), and the tools included manicured blades, chisels, machetes, side and peripheral scrapers, large circular scrapers, drills, machetes, stone mousses, "polished" ingredients, stones inscribed with stoves and imposed tools, as well as few geometric dwarf tools found in "Messe hill" and ".

4. 2. Industry technology:

Different techniques have been used in sites belonging to the Early Modern Stone Age where pressure technology has been used in "gigarote" and "squeezed", pressure techniques and direct methods in "Kamlu" and "Rnagoj". Three techniques (indirect roads, crutch pressure and crane pressure) were used in the farming villages of "Tel Messe", "Aratachen" and "Akenchen".

4. 3. Tool uses:

Tool uses in early sites have varied in "gigarote" (mining), fishing purposes, as evidenced by the abundance of dwarf tools as "kmlo", farming in agricultural villages as harvesting machines (by listing in a handle) or crop study by installing them in the Aratachen and Aknchen skis.

4. 4. Raw material:

Armenia's stone industry relied on Obsidian ore, the sources of which were available in addition to some other stones in very small proportions, the most important of which were flint, as follows: In "Gigarot" Opcidian plus flint, quartzite, basalt, dasset In Kamlu Obsidian as well as Waldasset In the Obsidian and Sawan (Sawan built my beloved, Sawan my beloved grey and Sawan Salisi my light grey) In Tel Messe, Obsidian, Endsie, Basalt and Dasset (), in "Aratachen" Opcidian and very little flint, serpentine, quartz and limestone (), in the Opclidian "Acchen" and a very small proportion of flint, quartz, dacit and chip.

4. Raw Material Sources:

The inhabitants of the Neolithic period obtained the main raw material in the industry (obsidian) from several sources, including Arteni, Gotansar, Hatis, and Gigasar in "Kamlu, Lernagog, Tlamesis, Aratashen, and Aknashen." Additionally, there was a source in Kars in "Kamlu, Aratashen, and Aknashen," and Mount Medan in "Tlamesis and Aratashen," as well as Tsaghkunyats in "Lernagog" and Sarikmish in "Tlamesis," and Shbitaksar in "Kamlu" ( ).
5. Pottery:

Pottery was not found in the earliest levels of Neolithic settlements in the Ararat Plain. However, pottery appeared in small quantities in the layers dating back to the late Neolithic period. In Level 1 of "Aratashen," a few fragments of coarse pottery (made from clay mixed with straw and mineral materials) ranging from reddish-brown to black/gray were found. Sometimes, these fragments were decorated with simple patterns. One complete vessel was discovered, which was reddish-brown in color, had a circular rim, irregular sides, and showed signs of burning. It was also possible to identify a jar with a neck. The distinctive feature was the discovery of colored and smooth fragments resembling Samarra pottery (from northern Mesopotamia) ( ).

In "Aknashen" (Figure 18), a large amount of pottery was found, divided into three types. The first type consisted of pottery mixed with organic materials (carefully crafted, polished, and poorly fired) with circular and flat bases, decorated with patterns below the rim and geometric motifs. The second type was mixed with mineral materials (including cylindrical barrel-shaped vessels without decoration or polishing, often with cracks and sometimes featuring impressions of baskets on the bases and lower parts). Generally, this type was primitive and lacked any technical skill in manufacturing. The third type was mixed with organic and mineral materials, carefully polished, and consisted of vessels and jars with hole mouths and flat bases ( ).

In addition to the discovery of colored fragments in the "Aratashen and Aknashen" sites, resembling the pottery of the Samarra culture in the northern Mesopotamia region ( ), circular-shaped pottery discs, possibly spindles and burnishers, were also found. Bone tools: Bone tools from animal and bird bones as well as instruments from pods were found: In Tel Messe (Figure 19), drills, pointers and serrated tools were found (comb, needles, pins, scrapers, spoon spoons and flat spoons spatula, tools used in leather and basket work, wood work and food preparation In "Aratachen" (figure 20), flat spoons of spatula, machetes, shovels, drill tools, hammers, wide plates and machete handles were found and used in the manufacture of baskets and works (Industry) skins of horns and bones, cylindrical and pointed tools of both sides used in agricultural business as well as food preparation And the tools in Akenchen (figure 21) included drills and drilling tools with a hole (to be placed with a handle), wide plates, pins, smoothing tools and a super blade.

7. Ground stones: A number of stone tools were found in Armenia. A grinding stone of tove and a saddle-shaped basalt and a basalt knife were found in Rannagoj. And you found stone haunts of basalt and grinding panels. A large
quantity of mortars, hand grinders, polished axes and grooved stones was found in "Aratachen" (figure 22). (with Zoose), polished tools and pestles (basalt, toffee, silicon stones "green, black, sandstone and serpentine") (), and in Ackenchen (shape 23) there were hand shovels (in the form of a saddle), flat mills, hand stones, perforated tiles, cylindrical pestles, mortars, stone axes of basalt stones, toffees, sandstone, granite and serpentine, as well as polishing tools and scrapers with zoos and a basalt mace head and a green stone seal with inscriptions (figure 24).

8. Ornaments:

In Armenia, a number of ornaments were found in various locations, two sardolite beads in Kuchuk. Stone beads and a bone ward in "Ranaguj 1" (Figure 25) beads and stone coats of different materials, animal bone and shell, as well as white, dark gray beads and diameter-shaped coats (tear) in addition to a sweat of pearls nacre in "Messe Hill" (figure 26). At all levels of the modern stone age in Accen, beads of white antigorite were found, an incomplete stone cascade, slabs of animal teeth, super beads (from bird bones and fish vertebrae) and a coincidental cascade. Animal remains: In early locations, the remains of wild animal species, in Gigarot, found the remains of cholan bones, in Kamlo, bone residues of domesticated sheep and wild animals (bulls, pigs and red deer), and in Rnaguj, on the remains of horses.

In agricultural villages, there is a small proportion of wild animals and an increase in the proportion of domesticated animals: the bone remnants of "Messe Hill" included wild pellets, cattle, wild boars, wild bulls, red deer, wild rabbit, fox, stumps, turtles and fish. Animal residue in "Aratachen" illustrates the dependence on animal husbandry. Sheep and goats accounted for the largest proportion. Fish and a few birds also found evidence of dog eating. Wild remnants were deer, foxes, hares, bears, wild boars and bulls. The economy of Akshun also relied on animal husbandry and fishing played no significant role. Domesticated animals included sheep, goats, cattle, pigs and dogs. Wild bulls, wild boars, red deer, horse, bunny birds, mountain tess, wolf, pods and stumps, as well as birds in small quantity and fish.

10. Plant residue:

varied vegetation and included wild and cultivated plants. In "Kamlu", hackberry and wild cherry wild cherry trees were found in western mays ("Messe Hill" found wheat, barley and bitter leftovers, and grape seeds were found (likely to make wine on site). The plant residue in "Aratachen" relied on pulses, wheat, barley, lentils, bitter leftovers, tooth and kamelina (extracted from the tooth and
kamelina oils), brown happiness and sea dees (used in the manufacture of baskets and animal feed and seeds were edible), while the trees were maple, oak and almond. In Akshun, wheat, barley, lentils, beqiyah, lystum and linen were found (used in the production of oils), as well as seed stone, acid, marigold, grave, shuaqara and bebqa.

11- Mining:

Although the emergence and use of minerals began in the following era (copper stone age), there were beginnings of the use of minerals during the modern stone age in Armenia in agricultural villages. In Tel Messe, parts of Malachite, Azurite and Hematite were found (), in "Aratation" parts of azurite and thread, as well as brown metals of iron hydroxide, and copper metal in the form of a bracelet consisting of 57 pieces of copper foil weighing about 12.5g. And copper was found in a loop. (Placed below deceased head), part of his love brass in the oven "Horizon 5", and many parts of green thread, as well as blue azurite.

12. Stone pots:

Stone pots were very few but rare during this era, only half a pot of perulite stone was found in Aratachen and a foliage of Felicite stone.

13. Commercial links:

Many of the conferences indicate links with neighbouring areas, including a ceiling of colorful pottery similar to the pottery of Samarra/NATO culture in North River Mesopotamia, which demonstrates the possibility of importing them or trading exchanges. The seals found in Tel Messe and in Akenchen are also known to be a document of ownership in the old periods and an indication of external links or trade exchange.

14. Rock inscriptions:

The South Caucasus region is generally characterized by a lack of rock inscriptions, and in Armenia the Gigamavan 1 cave or "red cave", as called by the local population, has been found because all the drawings in it are carried out in red, which is likely to be obtained from toffees loaded with iron oxides in the back of the cave. The fees cover an area of 20m. Animal forms dominate the views of the modern stone age in which they exist (figure 27) and are small and difficult to determine, but some forms have been clear, such as pellets, horses and antelopes (deer), and animal forms have been carried out with simple lines and with few anatomical descriptions. Human shapes were few, and they were also carried out in a simple way, bearing hunting instruments (bow), animal
anthropomorphism views (a person holding a rope tied around an animal's neck) and a view (shape 28) of a person milking a cow.

15. Observatory:

One of the best archaeological sites in the region belonging to the modern stone age has been found and the discoverers are likely to be an observatory for observing stars and fleas, the site of "Zorats Carrer" or "Karahong". It contains stone columns ranging in height from 1 to 3 m (about 223 stone columns), some of which (about 84 columns) have circular holes with a diameter of 1.9 to 2.7 inches. Although many columns have fallen, the largest number remains in place (figure 29). The site consists of a central area containing 40 stone, to the north of the north wing and consists of 80 stone (49 of which contain circular holes at their top), located south of the South Central District and consisting of 70 stone (49 of them contained holes at the top), the Northwest Road with 8 stones and directed towards the sunrise point on the day of the summer solstice, and the tension, a corridor passing through the Central Region connecting the North Wing to the South and consisting of 20 stones (6 of them contained holes), as well as some scattered stones. Heroni is estimated to be about 7,500 years ago, i.e. belonging to Armenia's modern stone age, and is even older than Stonehenge Observatory in England. Scientists have found that the site is an astronomical observatory (perhaps even an astronomy school). Stones are the astronomical tools for detecting and monitoring the movement of stars, planets, sun and moon, and short and medium stones for measuring and observing the movement of planets. This was supported by a mission from the University of Oxford and the Royal Geographical Society in 2010 after a comprehensive study of the site because the alignment of stones is in line with sunrise, moon and many bright stars.

Scientists have also found that the northerly route refers to sunrise at the summer solstice, the southwestern entrance was used to observe sunset at the solstice, the stone rows were parallel to the height of the stars and some stones were directed towards the star Denip's group. Some stones are still doing their job, for example, the beginning of the year on March 21 can be determined by the old Armenian calendar through the 62 stone hole directed to the top of the 63 stone on which the sun is right vertical at noon at a certain time of the year And maybe 63 stone was used as a sunclock, 17 stone was used to observe the Sun, 65 stones, 161 and 187 to observe the summer coup d 'état, Stones 97-98-100 to follow the winter coup d 'état, stones 52-99 to monitor the summer coup d' état, stones 108-169-177 to calculate winter. Stones No. 40 - 55- 63 64 67 79 were to monitor sunrise and sunset during spring and autumn days. Many columns also
carried inscriptions of animals and human views of men who raised hands (figure 30).

**Conclusion and results:**

- Although the buildings revealed by the excavation work demonstrate that they were used for housing purpose, some of them had an economic nature, such as the building S004 in Tel Messe and the buildings (47, X) in Arratation, who used Corsch for industry, as well as the building (concave) in Arratation and used for agricultural purposes (crop lesson). There were also spaces for social activities that may have prepared food and contained warehouses or perhaps livestock sheds in Arratation.
- The population notes the exploitation of materials available in the environment (plains and collapses) for construction in the form of blocks of grain or slabs, as well as the use of milk bricks in a very narrow range and in late periods of the era "Level Iia in Arratachen" and characterized by thickness and roughness.
- Man's innovation in this ancient period is likely to be a distinctive technique in construction as a buffer enabling him to maintain the temperature inside the building as in Tel Messe, affected by the climate and trying to cope with its conditions.
- Notwithstanding the prevalence of the circular scheme in construction, the rectangular scheme was found in Akshun at its earliest level and prior to the advent of the circular scheme there were links with Mesopotamia where this scheme prevailed (D7-6 BC). Inhabitants have not inhabited and developed this village but have come to it with their civilization and have settled this place.
- Although there are few burials detected in Armenia, it has been distinguished: perhaps the practice of separating skulls through the burial separated head (without head) in Tel Messe, as well as the skull uncovered at the Akenchen site, which is likely to be affected by the Old Near East. The skull also refers at the Aknchen site to the development of medicine because there is a sewing of the wound in it, as this skull refers to battles between them or with external groups. The presence of certain funeral facilities in burials as well as the placement of red ochre on them are also likely to result in the existence of religious beliefs of the population and their desire to protect the dead.
- The lack of dwarf tools, as opposed to many used in agricultural work in agricultural villages, indicates a decline in fishing activity and the
dominance of agriculture. On the contrary, it is observed in early locations where the tools used in fishing activities are frequent.

- The large few in the number of cores in the sites are likely to prepare them and prepare them outside the sites and bring them ready.
- The tools with stones found in agricultural villages "Hill Messe - Artashen - Accenture" are similar to those found in Anadolu and Iraq.
- Some of the encounters found in Armenia are likely to be the presence of commercial exchanges or transactions by the population, such as the presence of seals in the sites of "Tel Messe" and "Aknchen", which demonstrate this, as well as the presence of a few colored pottery (which was not a feature of pottery in Armenia) that resembles the pottery of Samaras culture in northern Mesopia.
- During the modern stone age in Armenia, very few or rather scarce stone pots are observed, as well as the total absence (yet) of statues.
- The existence of ornaments (such as bracelets, beads, slabs and necklaces) and the use of various materials therein indicate man's interest in the arts and possibly decoration, as well as his belief in adding protection to him to place them as belongings with the deceased.
- The presence of a basalt mace head at the Aknchen site is likely to be the existence of a governance system in the village and possibly to belong to the Governor.
- The rock inscriptions discovered in the rock shelter Gigamavan 1, as well as on the stone columns at the Zorat Carrer site, illustrate the practice of some magical rituals (ritual dancing), possibly to facilitate hunting. It also illustrates the species of animals that prevailed in the modern stone age in Armenia, including horses, elk, deer, dogs and cows, as well as attempts to capture (in Gigamavan), as well as the tools used in hunting and included arches, ropes and arrows. The rock inscriptions in the two locations illustrate the different execution style: the red drawing style is used in "Gigamavan". The stone columns in Zuratz Carrer were used in the slitting method. The presence of the Zorac Carrer Observatory illustrates the evolution of astronomy and stars in Armenia in this time period.
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