



# The rock art of the Mt. Aragats system

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## ABSTRACT

*The majority of known rock art in Armenia consists of engravings, which are widely distributed along the slopes of volcanic mountain systems. Main concentrations of engravings can be found on the peaks and the slopes of the Aragats, Gegham, Vardenis, Djermouk and the Syunik mountains.*

*In this paper we are introducing the results of the studies of rock art at Aragats volcano complex.*

*Until 2002 there was no exact documentation of rock art, especially concerning rock paintings in Armenia. Recent scientific studies and surveys were carried out by the Armenian-French joint archeological mission, together with the Institute of Archaeology of the Armenian National Academy of Sciences and Maison d' Orient (France), as well as the Armenian branch of the Gfoeller Foundation of USA (project directors Boris Gasparian and Christine Chataigner). As a result a series of open-air rock engravings were discovered at Voskehat, Aghavnatun, Lernamerdz, Amberd, Vardenut etc. on the Western and Southern slopes of Mount Aragats, as well as a shelter with new rock paintings in the canyon of the Kasakh River.*

## RIASSUNTO

*La maggior parte dell'arte rupestre armena è costituita d'incisioni situate lungo i pendii delle catene montuose vulcaniche. Il maggior numero d'incisioni si trova sulle sommità e sui pendii dell' Aragats, del Gegham, del Vardenis, del Djermouk e del Syunik.*

*Nell'articolo abbiamo inserito i risultati tratti dallo studio dell'arte rupestre del complesso vulcanico dell'Aragat. Sino al 2002 non vi era un'esatta documentazione, specialmente relativa alle pitture rupestri armena. Recenti studi ed indagini scientifiche sono state condotte dalla missione archeologica franco-armena con la collaborazione dell'Istituto di Archeologia dell'Accademia Nazionale delle Scienze Armena, la Maison d' Orient (Francia) e dalla sezione Armena della statunitense Gfoeller Foundation (direttori del progetto Boris Gasparian e Christine Chataigner). Durante la missione sono state scoperte una serie d'incisioni rupestri en plain air sui monti Voskehat, Aghavnatun, Lernamerdz, Amberd, Vardenut etc., sui pendii occidentali e meridionali del monte Aragats, insieme ad una serie di ripari sottoroccia con delle nuove pitture rupestri nel canyon del fiume Kasakh.*

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## ROCK PAINTING IN THE KASAKH VALLEY

The Kasakh Valley, situated in the province of Aragatsotn, is contained within the massive volcanic shield of Mount Aragats (formerly Alagyaz) whose main cone rises 4090 meters above sea level). A tributary of the Arax River has deeply cut into the valley's basalt layers. In its north-south course, half way the foot of Mount Arailer (2,577 m), a huge bubble or blister of the last basalt flow provides a shelter open to the south-west at around 70 metres above the Kasakh Valley, on the left bank of its canyon (Fig.1). The Geghamavan-1 shelter has an altitude of 1,738 meters. It can be accessed from the plateau through a path

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on the cliff edge, which winds between erratic basalt blocks and herbaceous vegetation. The access route is interesting as it reveals several medieval ruins and an anthropomorphic petroglyph, deeply incised on a rock facing the canyon. The shelter is easily spotted in the landscape from inside the canyon. Its dimensions are relatively large (11 m wide, 4 m high, 8 m deep at its opening). In the interior the ceiling is continually peeling off in decimetre slabs that could have been the backing for paintings. A spring runs at the back of the shelter, running over layers of basalt and tuff. The tuff, laden with iron oxide, would be a possible source of colouring matter. All the shelter walls are exposed to daylight, but only those in the front get direct light. In the summer the sun light hits perpendicularly the porch roof in the early afternoon. It seems unlikely that the shelter was a living site, due to the peeling from the ceiling and the important summer heat which would have made the refuge uncomfortable.

#### DESCRIPTION OF THE PAINTINGS

The paintings were carried out on the smooth surface of the basalt slabs, which can be found inside and outside the shelter. The decorations consist entirely of red designs. They spread over some twenty metres with smaller panels at the centre and larger panels placed laterally. They are located at heights ranging from 40 cm to 6.50 meters above the floor. The folded basalt layers create a set of vertical slabs cut like the canyon, and inside the shelter the figures are on the faces of the cleavage of the slabs, while the panels outside the shelter face the canyon. Frontal anthropomorph and profiled zoomorph figures face towards the south or towards the floor. The panels at the site are morphologically defined by breaks, fissures or major ruptures of the slope of the rocks.

There are over 60 panels with a total of 112 figures, also three Arabic inscription and graffiti, which covered the earlier paintings. Zoomorphs are the dominant representations (43%), followed by anthropomorphs (28%), signs (24%), and some undetermined lines (5%). In general they have small or medium size, while very few of them reach 50-56 cm.

#### TECHNIQUES AND STYLE

All observed paintings were made with a red monochromic solution obtained from a natural paint extracted from the red volcanic tuff formations inside of the cave.

From differences in the preservation of the ochre, the quality and colour tones suggest a usage of tuff in straight and mixed ways.

Various application techniques were used. There are simple lines done with a block of tuff and lines done with a finger soaked in a colouring liquid. This showed many different consistencies, more or less liquid or paste-like. The authors of more recent graffiti made use of the red tuff, which can be found in the shelter. However there exist a whole range of tones of red and it is difficult to distinguish whether this is due to varying sources of supply, to the addition of binders or to differential preservation.

According to the perception of the image and stylistic peculiarities one can distinguish three groups of paintings with different approaches:

1. In the first group the figure is obviously isolated, with no compositional connection with other figures. Paintings of profiled animal differ from other iconography for their better proportion of forms, static position, usage of volume, solid style, more detailed realistic treatment and greater dimensions (Fig.2).

2. The second group has two subgroups:

- a. One subgroup of paintings has simple compositional scenes, with partial large-size figures that have both stylistic and static solution, as well as solid style.

- b. The paintings of the other subgroup represent schematic and stylized figures of comparatively small sizes. They have contours (e.g. a figure below a bovine with long horns in twisted perspective reminiscent of milking scenes in African rock art), linear design which dominates in the iconography (Fig.3). In this group one can notice obvious attempts of describing on a two-dimensional plane, the evenly distribution of the figures in the composition, compositions with a complicated structure and various thematic solutions (hunting, figures with weapons, horsemen). Similar features can be found petroglyphs at Gegham and Syunik Mountains.

3. The third group include three Arabic inscriptions and contemporary graffiti, which covered rock paintings and destroyed them.

#### POSSIBLE CHRONOLOGY

Excavations inside the shelter in the hope of obtaining a cultural attribution for the art were in vain: only numerous fragments of medieval wheel-turned pottery were identified. Another small test excavation was made on the slope in front of the shelter with no result. Without archaeological evidence, chronological attribution can thus be done only by stylistic and thematic comparison of the designs.

The artistic analyses of the paintings show that they have features characteristic of both ancient and later periods and confirm that Geghamavan -1 shelter had been visited and used continuously. The fun-

damental subject of the *first group* of paintings is cognition and representation of the real animal's image, which suggests their ancient age. In addition there is the fact that panel N20-1 (Fig.2) is related to the same cultural context of the Kmlo-2 cave site situated nearly 2 km north in the same canyon. The drawing of the horse-like animal most likely refers to *Equus hemionus* (Pallas 1775), the bones of which were found during the excavation of the lower layers in Kmlo-2. This is an additional evidence to suggest that the earliest paintings of Geghamavan-1 shelter belong to the art of the Late Mesolithic-Early Neolithic population that lived in the cave Kmlo-2 and they could be dated back to the same time period, that is the 10-9th millennia B.C.

In the *second group* the interconnected disposition of figures already emerged and one can detect an attempt of passing information. Here the concept of a generalized image of animals can be seen, with the consequent importance of rendering an ideological content through schematic solution. All this is inherent of thinking men of the middle and late periods.

By analogy the *second group* of paintings, with their similarity to Transcaucasian art, can be dated to the Late Neolithic, that is 7-6th millennia B.C. Another subgroup with highly schematic representations – linear technique and themes similarity to petroglyphs known from different parts of Armenia (Gegham Range, Vardenis Range and Syunik) – could be dated back to the 4th - 1st millennia B.C., while it is not inconceivable that part of them (stylized goats, crosses) were carried out in the Middle Ages.

The *third group* of paintings carry three Arabic inscriptions, that are dated back to 1680, contemporary graffiti with oil and tuff, that spoiled most of the drawings. A natural processes of decay also caused the best part of the drawings to disappear.

#### AGHAVNATUN -LERNAMERDZ -VOSKEHAT GROUP

The keen scientific interest demonstrated recently contributed to the finding of petroglyphs distributed along the Southern slopes of Aragats, with its conversion to the Ararat plateau at 1,010-1,058 m above the sea level.

Rock engravings extend from Aghavnatun until Voskehat in the context of Early Bronze Age-Iron Age archeological sites – cemeteries, towers, wall structures etc. The area is covered of decimeter-size andesite-basalt rocks as a result of a cryoclastic flow. Vegetation is scarce. All these groups of rock-engravings are very similar and one can see a regular distribution of them around small natural hill-structures, with a chaotic concentration on the top, where engravings are distributed from the peak of the hill down to the slopes.

Engravings are mainly organised in groups and rarely found separately (as for today three large groups have been defined). As a rule, engravings are executed on surfaces of andesite-basalt rock formations. The surfaces are weathered resulting in a black shiny patina and it can be seen that those patinas were chosen for engravings as a “canvas”. There are a few examples with two engraved stone-surfaces. The size of rocks spans from 30cm to 2m.

The main part of the engravings has a Southern orientation, towards the Ararat valley. There are however images that are directed upwards toward the sky.

The iconographic content is basically dominated by zoomorphic figures (goats, deer, dogs, bulls, seldom panthers, birds, snakes), while a smaller proportion is made up of anthropomorphs, signs, non-figurative figures, and unfinished vague lines.

The techniques adopted for engraving the examined petroglyphs are various. Both single and mixed techniques have been used, the last case being dominant. The following kinds of techniques were used:

- pecking
- rubbering
- a combination of these two techniques (the majority of engravings)
- liner incision (these images are rare and relate to a late period)
- scratching
- polishing (these images are rare)
- the above techniques in various combinations

The stylistic analysis of rock drawings showed that the majority of figures are represented in linear style. Solid and contour styles are rare.

With regards to themes, there are various scenes: groups of people and animals together and separately, dancing (Fig.4), hunting, water drinking goats, a goat with baby, bulls, ploughing scene with harnessed bulls (Fig.5), flock of goats (Fig.6), fantastic images (anthropomorphic figures with bird legs, orants), female signs.

Importantly, rocks have been found where natural reliefs (cracks, hole, concavity) were used as parts of the figures. For example, a bent anthropomorphic figure was engraved simultaneously on two surfaces



of the rock: a two-sided corner of a stone was used for a more realistic representation of the bent position. The form of a rock surface was also used as a frame for the figures.

One of the most important features that we have noticed in three sites is an arrangement of rocks that suggests structure of an altar: a vertical engraved rock is assembled with an other horizontal block that carries traces of water. Some of the rocks are also remarkable for their artificial deep concavity and a groove connected to them, which probably served for draining water or other liquids. It is quite probable that they had a ritualistic use.

With regards to composition, figures are generally located chaotically. Very rarely figures are organised in regular arrangements, such as quadrupeds placed along an arc, goats symmetrically located side by side. Several figures in the same composition are also very rare in all three sites. Several of them have superimpositions, to which we will possibly assign a chronology.

Preliminary results allow to date the petroglyphs in the time range of the 4th - 1st millennia B.C. and referring them to the context of the above mentioned nearby archaeological sites (Agarak Early Bronze Age settlement, Aghavnatun, Voskehat Bronze Age cemeteries, etc). This dating is also possible considering the stylistic, thematic, technical comparison of the designs and the analogy with petroglyphs found from Gegham Mountains and Syunik (4th - 1st millennia B.C.). All these pieces of evidence suggest that these sites are a part of a whole complex distributed from the villages of Aghavnatun and Lernamerdz up to area of the villages of Voskehat and Agarak.

From these preliminary results it is possible to conclude that the particular features of these rock drawings differ from those observed in many sites of Aragats and, as a whole, they represent a most interesting case of Armenian rock art dating back from the Mesolithic period to the Iron Age (11th - 1st millennia B.C.).

#### ILLUSTRATION

*Fig.1 Geghamavan-1 Shelter*

*Fig.2 Image of Equus hemionus Pall. on panel N20-1*

*Fig.3 Stylized image of a stag*

*Fig.4 Dancing scene*

*Fig.5 Ploughing scene*

*Fig.6 Flock of goats*



fig. 1



fig. 2



fig. 3



fig. 4

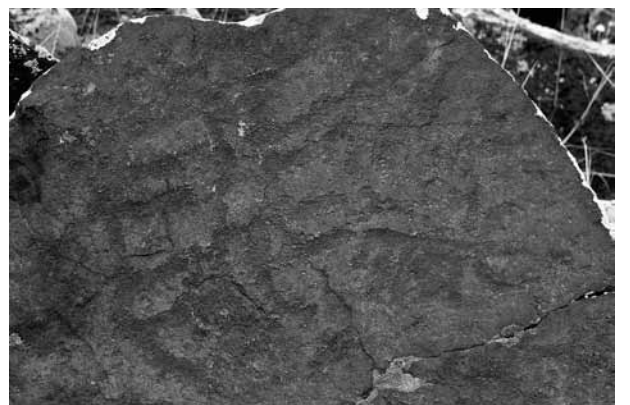


fig. 5



fig. 6

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