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ON ANCIENT MAN IN THE VOLCANIC MOUNTAINOUS REGION OF SOUTH GEORGIA

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A large number of sites of ancient Stone Age is unequally distributed on the territory of Georgia. Six regions of their distribution are known (Kalandadze, 1969:13), of which two - the low mountainous stretch of the right bank of the Mtkvari-Kvemo Kartli and the Javakheti Plateau - are within the range of volcanic highlands of south Georgia. It can be said that the latter has been most poorly represented by the old Stone Age sites until now.

This state of affairs has radically altered over the last dozen years. The growth of interest may be due on the one hand to the fact that the region had barely been investigated at all, and on the other to the discovery of the now well-known Old Stone Age site of Dmanisi (Gabunia *et al*., 1988:36-46; Bosinski *et al*., 1989:93-107). According to its isotopic age (1.8±0.1 Ma) and paleomagnetic data (the so-called Olduvai episode, 1.9±0.1 Ma) the site of Dmanisi can be attributed to the early Pleistocene (Bosinski *et al.*, 1989:93-107; Gabunia *et al.*, 1988:36-46; Gabunia *et al.*, 1996:36-46, Gabunia *et al.*, this volume).

Fossil remains found here belong to the hominid group *Homo erectus*, and evidently to one of the oldest groups in Eurasia. These remains allow scholars to regard this region as possibly an original settlement of hominids (Gabunia *et al*., 1993:3-5; Gabunia *et al*., 1996:36-46). In addition to this, the known sites distributed on the Javakheti Plateau directly adjacent to the Dmanisi region Akhalkalaki I, II, III, IV, Diliska (Murdjl), Chikiani, etc. - were represented only by surface finds, and thus lacked lithographic - stratigraphical characteristics (Grigolia, 1965:5-9; Gabunia *et al*., 1980:2-3; Gabunia, 1994:3-19). Here, however, we have discovered ancient sites rich in biostratigraphic data, such as Amiranis-Gora in Akhalkhalaki, which was known as a site rich in Early Pleistocene mammalian remains (Vekua, 1962:5-176).

Javakheti Plateau is a vast geomorphological region with a highly complicated structure. Its western and central parts are comprised of the Akhalkhalaki Plateau, built up by eruptions during the Postpaleogene volcanic cycle. These include Mio-Pliocene range pyroclastolyths and lavas of sour and moderate composition; and relatively young basalt effusives of a formation whose geologic age is identified as Pliocene-Lower Pleistocene (Maruashvili, 1971:358-363; Gamkrelidze, 1957:135; Tsereteli, 1958:124-151; Paphengolts, 1951:19; Tchernov *et al*., 1969:3-16).

Absolute heights within the borders of the Javakheti Plateau range from 1130-2500m. The somewhat dull relief of the plateau is disturbed by the extrusive tower of Amiranis-Gora, springing up east of the town of Akhalkalaki. This mountain is composed of andesite dacites of the Goderdzi Miopliocene. Its absolute height is 1883m, and it rises 150m above the level of the river Paravani (Akhalkalaki-Water)(fig.1).

In the early 60s, the paleontologist A. Vekua excavated and investigated a complex rich in fossil mammals and dated it to the lowest stage of the Pleistocene (Vekua, 1962:174-176), equivalent to the base of the Middle Pleistocene on the modern European scale.

The overview of the Akhalkalaki fauna and the topographic conditions of its location permitted the assumption that it could have been a site of ancient man.

It is noteworthy that the very first section excavated confirmed this assumption (Gabunia *et al*., 1994:237-239). In 1992, a scraper made of basalt flake (fig. 2:3) was found with mammalian fauna, at 0.85m below modern surface level and 1.25m below datum. In succeeding years, including 1997, minor archaeological excavations were carried out near the east foothill of the Amiranis-Gora. An area of 48m² was excavated. As the profiles found there are identical, a description of one of the sections

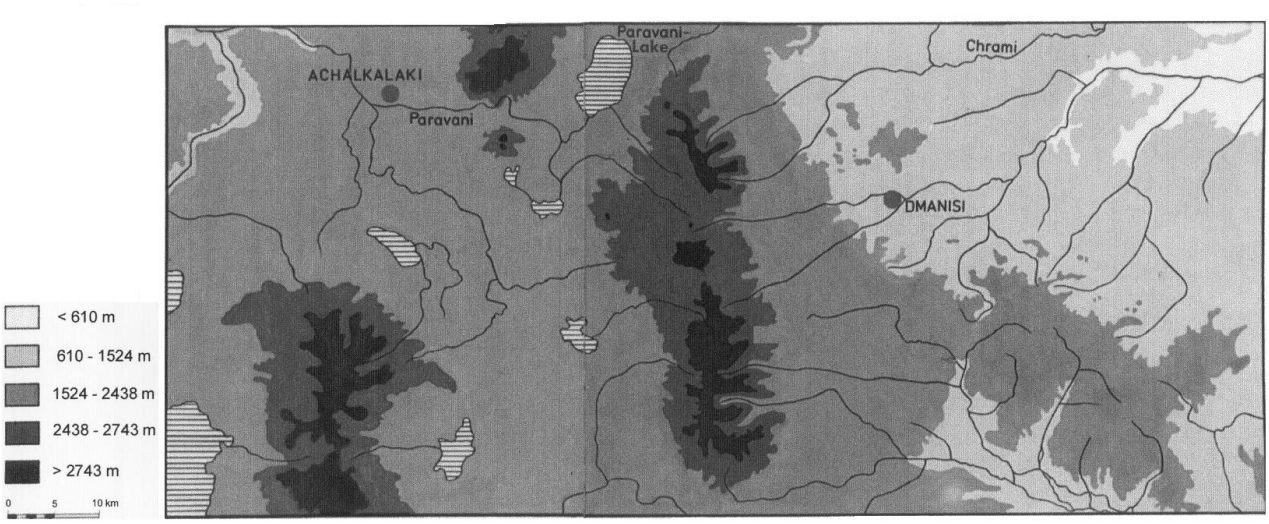

Figure 1. Map.

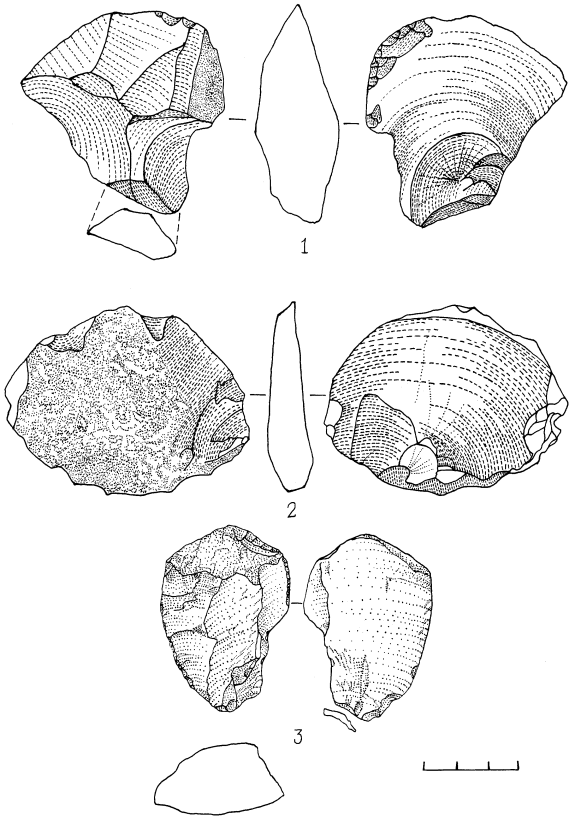

Figure 2. 1, retouched flake; 2, unretouched flake; 3, scraper.

serves to form an overall picture. The succession of layers is as follows: I-humus, black ground (thickness is 10-15 cm); II-light yellow loams, color changes slightly in some cases. Among these are encountered andesite-dacites of different sizes, and square cornered stones (1-5 cm, rarely, bigger ones are 30x40 cm). The capacity of the loam is more than 1.75 to 2.20m. The floor excavated at this level is covered with rocks. Encountered in the sections are dark spots of powdery clay, undoubtedly of secondary development, constituting rodent holes (Gabunia *et al*., 1994:327-329). At about 50 cm, the loam becomes very solid. At about 0.85-0.91m to 1.10-1.15m below datum this layer yields fossil bones and, much more rarely, archaeological remains.

Mineral and chemical analyses of the loam surrounding the cultural remains reveal its deluvial-proluvial origin and its development as a result of weathering (Tvalcrelidze, 1992:1-5; Tvalcrelidze, 1993:1-3; Tvalcrelidze, 1995:1-4).

The excavations conducted here have exposed mammal types identical to those identified earlier in the Akhalkalaki fauna (Gabunia *et al*., 1962:5-176). They are as follows: *Mammuthus aff. Trogontherii, Archidiscodon meridionalis, Equus süssenbornensis, Equus hipparionoides, Dicerorhinus etruscus, Felis silvestris, Praemegaceros verticornis, and Bison sp*. Besides these, new elements have been discovered: *Homotherium sp. and Vulpes vulpes sp*. (Gabunia, 1994:3-19). Most frequently represented in the given complex are *Equus süssenbornensis* - 76.5% and *Bison sp*. - 13.5%. All other species of animals constitute 10%. This new find, like the complex discovered and investigated by A. Vekua earlier, confirms the fact that primarily half-steppe landscapes prevailed in the Javakheti Region of Georgia during the Lower Pleistocene and the beginning of the Middle Pleistocene. This is shown by the ecological peculiarities of most mammalian species, the frequency of terrestrial molluscs characteristic of a relatively arid environment, and the scattered regions covered with light forests and bushes (*Mammuthus aff.*

Trogontherii, Meles sp. etc.). The climate must evidently have been moderately hot, as was characteristic of the greater part of the Mediterranean (Vekua, 1962:174-175; Gabunia, 1994:3-19).

It is of interest that the formation of similar natural environments was noticeable at the very beginning of the Pleistocene. The Dmanisi ancient Stone Age paleontological site complex (Gabunia *et al*., 1993:3-53) bears some ecological similarities to the Amiranis-Gora fauna. For example, *Archidiscodon meridionalis*, *Dicerorhinus etruscus*, *Homotherium sp*. etc are found in both the complexes. But that the Akhalkalaki fauna also comprises *Equus süssenbornensis* and *Mammuthus aff. trogontherii* makes it significantly younger. In both complexes, the inhabitants of forest/steppe ecosystems prevail: *Strutio sp., Orses sp., Antilopes sp., and Rodentia Achotona sp., Marmota sp., and Meriones sp. in Dmanisi, and Cricetus sp. in Dmanisi and Akhalkalaki* (Gabunia *et al*., 1996:36-46).

This similarity of natural environment is also observed in the paleontological data. In the diverse spectra of pollen, as at Amiranis-Gora, the remains of *Celtis sp*. and *Lithospermum arvense L*. point to the existence of savanna-type landscapes (Gabunia *et al*., 1996:36-46; Gabunia and Vekua, 1980:56-5 7; Avakov, 1960:3-5).

In general, by the close of the Pliocene and the Lower Pleistocene, a paleolandscape similar to the Javakheti Plateau was widespread all over Asia Minor (Vereshchagin, 1959:1-80; Coon, 1951:3-5; Fiuron, 1955:1-90; Vekua, 1962:174-175; Gabunia, 1994:3-19; Gabunia *et al*., 1996:36-46). Thus, it is quite natural to suppose that at that time, Asia Minor and the Caucasian Near East, including at least its south-east territory, formed a single zoogeographical zone (Vekua, 1962:174-175; Gabunia *et al*., 1996:36-46; Gabunia, 1994:3-19), and that suitable paleoclimatic and landscape conditions already prevailed in its individual regions. This is attested to by the respective paleogeographical data of the above-mentioned territories, particularly for such archaeological-paleontological and paleontological complexes as Dmanisi, Akhalkalaki, Bethlehem, Ubeidiya (Gabunia and Vekua, 1993:3-53; Gabunia *et al*., 1996:36-46; Hooijer, 1958:9-10; Tchernov *et al*., 1986:351-398) and some others, the analysis of which shows that, despite many similarities (the so-called Villafranchian faunal elements) they relate to different stages of the Early and Middle Pleistocene (except for Dmanisi, which is known to belong to the Villafranchian in its own right).

After a brief survey of the paleolandscape conditions, let us return once more to Amiranis-Gora, where, as we have already mentioned, in 1992-1997, along with fossil vertebrates, a few stone artifacts of andesite-basalt were obtained. The collection is now comprised of 20 artifacts: a scraper, sharp-hack tools, pointed-tools, cores, and retouched and un-retouched flakes. Besides those enumerated, a fragment of red ochre and obvious manuports were also obtained (fig. 2-5).

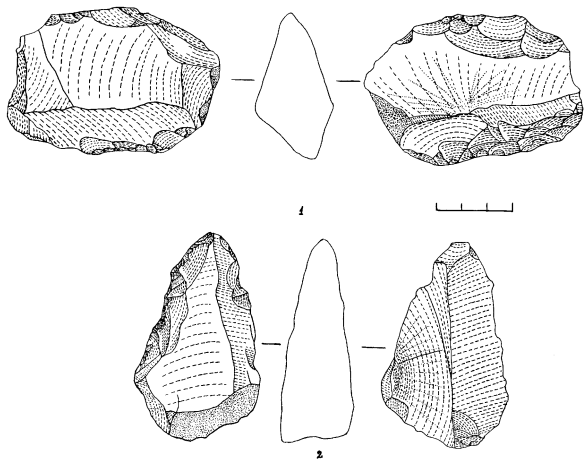

Figure 3. Sharp-hack tools.

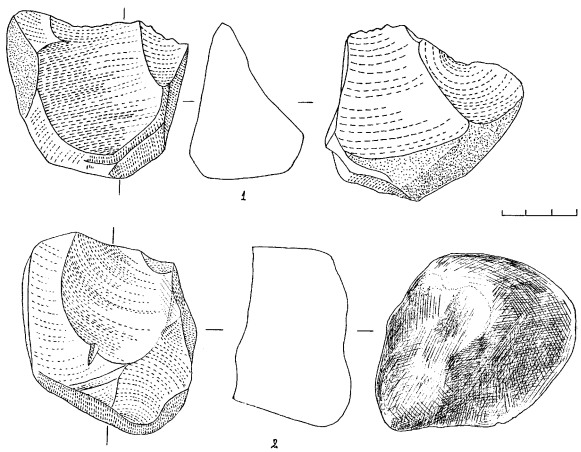

Figure 4. Sharp-hack tools.

Most of these artifacts are is covered in a deep grayish patina, with lime deposits here and there. The tools are worked by wide facet retouch from one or both sides; the retouch is clear-cut, without any trace of rolling, which suggests that the material has not been transferred too far from the site of its fossilization.

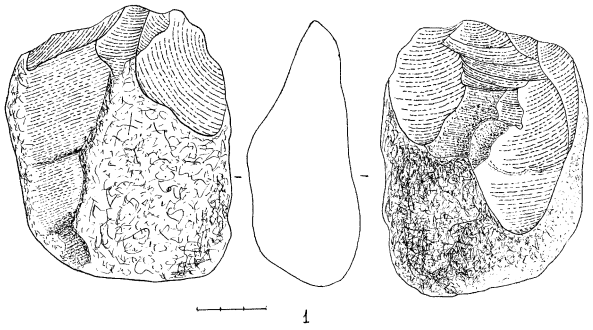

Figure 5. Cores.

Although the archaeological data obtained is as yet limited, it is nevertheless rather significant, as it bears obvious archaic traits, both in reduction technique and in the lines of its secondary processing, typology, which is characteristic of the Early Paleolithic.

As regards the dating of the site of Amiranis-Gora, it should be noted that the stratigraphy of the south Georgian volcanic deposits is based on the vertebrate fauna found in the deposits spread primarily here. Their geologic age is the end of the Lower Pleistocene or the beginning of the Middle Pleistocene, and this means that the archaeological material discovered must be related to the early Acheulean.

Diverse materials obtained in the northeast, the southwest, and various levels of the south and east slopes of Amiranis-Gora are worth noting. They are as follows: sharp-hack tools, choppers, scrapers, bifaces, cores, flakes, etc., artifacts made on basalt. This material is also covered with a gray patina and has clear-cut edges.

On the volcanic highlands of Georgia certain materials are easily obtainable. Among these are almond-like basalt bifaces processed on both sides obtained near the village of Persati in the Akhaltziche region, and a rough, ax-like tool processed on both sides found in the village of Ude in the Adigeni region, in the layer of feudal age.

These materials and the aforementioned open sites of Javakheti (Chikiani, Akhalkalaki I-IV, Diliska etc.), which, according to their technical and typological features must be attributed to different stages of the Acheulean, allow us to investigate the scale and intensity of the settlement of ancient man on the south Georgian volcanic highlands during the Lower and Middle Pleistocene.

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