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EARLY PALEOLITHIC OF EURASIA: NEW DISCOVERIES

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EARLY PALEOLITHIC OF GEORGIA (Based on the Materials of Dmanisi)

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The discovery (in the 1980es) and excavation of the Early Paleolithic site of Dmanisi, situated 85 km south of Tbilisi, on a rocky promontory at the confluence of the Pinezauri and Mashavera rivers (90 m above the water line and 1000 m above sea level), gave new and reliable geological, paleontological, and archaeological data shedding an important light on the question of the earliest peopling of Georgia.

The basalt lavas, which underlie cultural deposits, have a series of dates ranging from 2.04-1.80 mya. The Early Pleistocene deposits can be subdivided into two units: lower unit A (layers VI-IV) and upper unit B (layers III-I). Layers VI-IV characterized by direct polarity are dated to the end of the Oldowan

paleomagnetic event, while layers III-I must have been formed during the subsequent period of reverse polarity Matuyama.

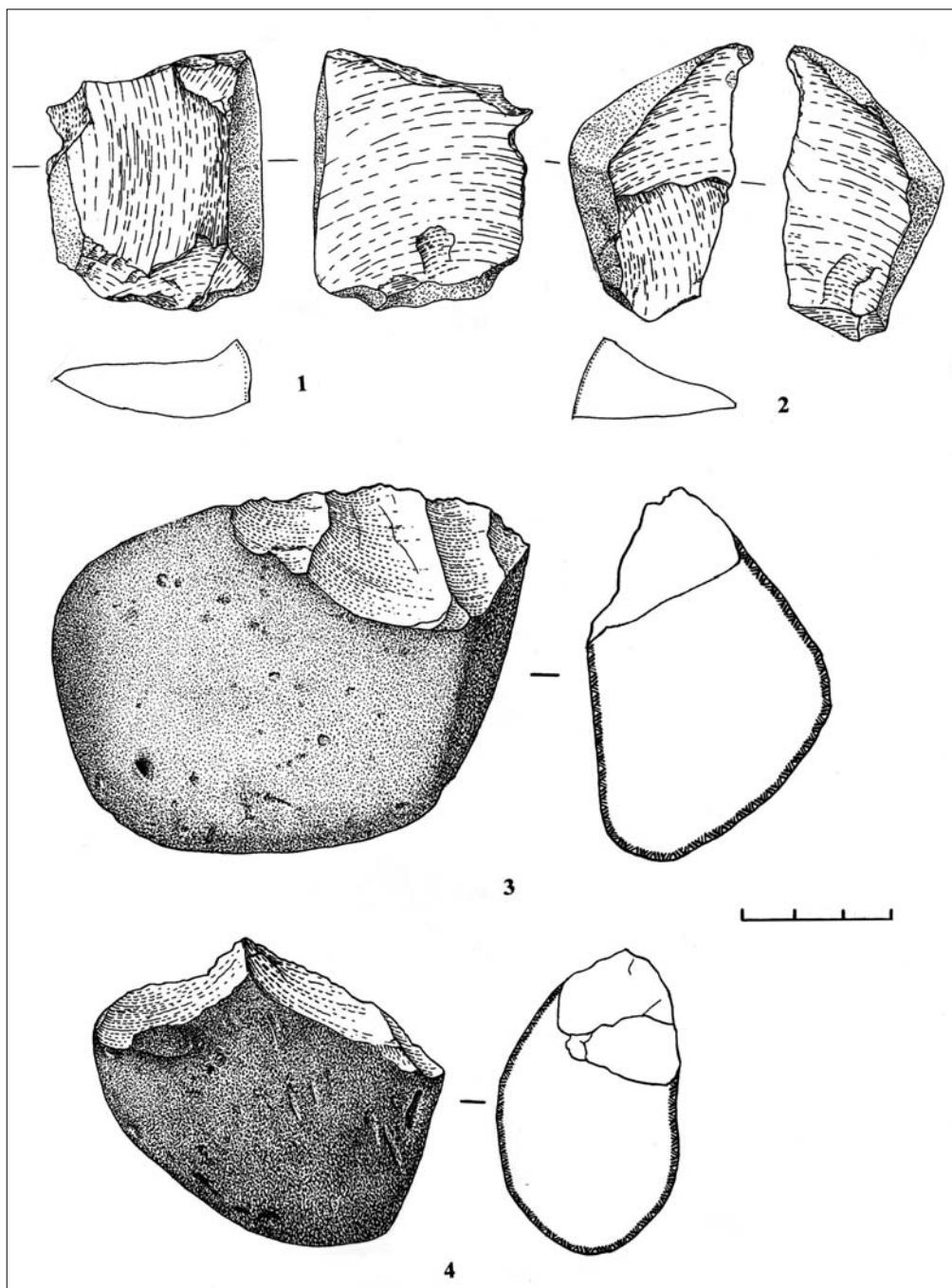


Fig. 1. Stone tools from Dmanisi: 1-2 – flakes (layer II), 3 – pebble tool (layer II), 4 – pebble tool (layer IV)

The faunal collection from the site includes over 4000 animal bones, belonging to southern elephant, *Etruscan rhinoceros*, saber-toothed cat, Etruscan wolf, Etruscan bear, Stenon's horse, deer, ostrich, giraffe, ox, terrestrial turtle, various rodents, and so on. Most bone comes from the lower unit (layers VI-IV). Some of them are strongly fragmented, some lie in anatomical order. In its composition the fauna of Dmanisi is similar to the Villafrancian faunas of Africa and Eurasia. The lowermost layers (VI-IV) contain skeletal remains of early hominids, identified as *Homo ergaster* (early *Homo erectus*): 5 skulls, 4 mandibles, isolated teeth, and over 50 postcranial bones. The total area of the site exceeds 5000 m², while the area exposed by now is about 300 m². The excavation yielded over 9500 lithics, of which 85 % belong to layer II. The collection of stone artifacts consists of 2400 objects, while the rest of lithics are unworked pebbles and their fragments, pieces of basalt lavas, etc. Artifacts are made of tuff, basalt, porphyrite, granite, quartzite, quartz, sandstone, limestone and some other rocks, all of which are readily available in the environs of the site in the form of river pebbles.

Flakes and their fragments dominate the assemblages of all layers. Flakes with intentional retouch or notches are rare, while those bearing utilization retouch are somewhat more frequent. Cores are diverse, mostly unifacial, but there are also spherical and polyhedral forms with multidirectional scar patterns. Pebble tools (choppers) constitute an important component of the industry. Artifacts from different layers seem to be rather homogenous, showing no difference in technology, typology, or raw material.

For the time being the Early Paleolithic industry from Dmanisi, dated to 1.8-1.7 mya, represents one of the oldest cultural assemblages known beyond Africa. It has much in common the industries of Kada Gona EG10 and EG12 (about 2.55 mya), Lokalelei 1 (about 2.34 mya), Fejej FJ1 (about 2 mya), etc. It shows also numerous analogies to the archaic stone industries of the Oldowan gorge (Bed I and Lower Bed II) and Koobi Fora.

Numerous finds from the European part of the Mediterranean basin have shown that South Europe was populated by hominids as early as 1.3-0.78 mya (Baranco Leon, ~1.3 mya, Fuente Nueva 3, ~1.2 mya, and Elefante, ~1.1 mya, in Spain; Vallonet, ~1.0 mya, in France; Belveder and Monte Poggio, ~0.9 mya, in Italy, and so on).

The pre-Acheulean stone industry of Dmanisi is the earliest assemblage in Eurasia. Some other materials of comparable age are known from the Near East. These and other data testify to the migration from Africa through the Near East and Caucasus and further to Europe and Asia. As evidenced by Dmanisi, Southern Georgia was one of the passageways for the first migratory wave of early hominids.