

On to the issue of the oldest population of North Asia

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According to modern data from archaeology, paleoanthropology and paleogenetics, *Homo erectus* left Africa about 1.9 million years ago and began to settle in Eurasia. The first wave of ancient migrants moved in two main directions: the first is through the Middle East to the south of Europe – to the Caucasus and the Mediterranean regions, the second – is through the western regions of Asia to the east. It is assumed that the early hominins moved east in two ways. One of them probably ran south of the Himalayas and Tibet through Hindustan to East and Southeast Asia. Another, northern migration route probably passed through the Central Asian Highlands to Central and North Asia.

The oldest evidence of the appearance of man in the territory of Northern Asia is the materials of the Early Paleolithic site of Karama, located in the north-west of Altai [1]. At Karama, in the sediments of the first half of the Middle Pleistocene, a cultural sequence of four horizons of the Early Paleolithic pebble-chip industry was recorded, the age of which was determined in the chronological range of 800–600 ka BP. Judging by the materials of paleobotanical studies, the process of settlement of Early Paleolithic people in Altai took place in fairly favorable climatic conditions. At that time, the surrounding landscapes were characterized by pine and birch forests with the participation of dark coniferous species, as well as species exotic to the modern Altai flora – elm, hornbeam, hop, linden, maple, oak, Manchurian walnut and hazel [2].

Currently, it can be said that the initial settlement of the territory of North Asia occurred, most likely, from the southwest, or rather from the low-mountain and foothill regions of the Altai, where, in addition to Karama, two other Early Paleolithic sites are known – Ulalinka and MK 1. The archaic pebble industry of Karama indicates the appearance of early hominins here, who were most likely at the stage of *Homo erectus*. Erectus came to the territory of the Altai with the oldest migration wave from Africa, moving in a northeasterly direction through the Middle East, the Central Asian Highlands and the western regions of Central Asia.

Karama's chronostratigraphic column indicates that representatives of the oldest migration stream lived in southern Siberia for almost the entire first half of the Middle Pleistocene, with the exception of the relative cooling phase corresponding to the Mansi horizon (MIS 18). After the cold maximum of the next glacial (MIS 16), due to the general deterioration of the natural environment, early hominins most likely moved to areas with a more temperate climate. The remaining part of the population, apparently, could not adapt to the changed landscape and climatic conditions and ceased to exist.

The next documented period of the ancient history of North Asia is associated with the appearance of Denisovans on the territory of the Altai in the middle of the Middle Pleistocene – carriers of technical and typological traditions based on the Levallois and parallel principles of stone splitting [3]. These processes are the result of the migration of part of the late *Homo heidelbergensis* about 400–350 ka BP from the Levant in an

easterly direction through South and Central Asia, and then to the south of Siberia. This was the second stage in the formation of the modern human species – the division of one ancestral form of the late *H. heidelbergensis* into Neanderthals and Denisovans. The population of late *H. heidelbergensis* settling in the second half of the Middle Pleistocene to the east, came into contact with the descendants of Asian erectus and gave rise to a new taxon – Denisovans, who appeared in the Altai, in the Denisova Cave about 300 ka BP. The fact that the Denisovans are associated with the migration of the late *H. heidelbergensis* to the east can also be evidenced by the earliest industry of the Denisova Cave, which has common features with the Ashelo-Yabroudien materials of the Levant [4]. The Denisovans, with the periodic participation of Altai Neanderthals, developed an original stone industry during the Middle Paleolithic, which served as the basis for the autochthonous formation of the Upper Paleolithic culture about 50 ka BP. If the formation of Middle Paleolithic cultural traditions begins in the Altai from the middle of the Middle Pleistocene, then in other regions of North Asia this period, up to and including the first cooling of the Upper Pleistocene, is associated with the spread of pebble industries of Early Paleolithic appearance. Such specificity in cultural manifestations is, apparently, a regional reflection of the general patterns of development of the Early Paleolithic Ecumene in the eastern part of Eurasia. The appearance of the pebble industries in the eastern regions of Siberia may have been influenced by Early Paleolithic traditions that developed in the east and southeast Asia.

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