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# New archaeological investigations of Kara-Bom Palaeolithic site: spatial organization and lithic technology

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## Résumé

Multi-layered Kara-Bom site plays a pivotal role in the research of the most ancient Upper Palaeolithic industries in Northern Asia. Kara-Bom is located at one of Central Altai intermountain basins, it represents a small shelter at the foot of the rocky ledge near the source of spring water. The best in the Gorny Altai stone raw material, functional specificity and unique preservation of the deposits make Kara-Bom site a rich source of information about technological, adaptation and cultural processes, which occurred in the region at Initial Upper Palaeolithic (hereafter IUP).

The research of the spatial and taphonomic context of the lithic assemblages occurring in six Upper Paleolithic habitation levels made it possible to adjust the previously accepted stratification for the cultural deposits of the Kara-Bom site. In the sediments of lithological layers 4–6 from Excavation Area 4 we have identified two artifact-bearing levels – the uppermost Upper Palaeolithic horizon 1 (UP1) and the lowermost Upper Palaeolithic horizon 2 (UP2). The results of spatial analysis based on the integrated use of refitting studies and method of the raw material unit allowed us to attribute lithic artifacts according to separate two cultural units. We may conclude that the identified cultural horizons could be the evidence of two habitation phases at the site, separated by an interval of several thousand years.

Lithic techno-complexes of the UP2 cultural horizon are considered as a reference in determining the technological characteristics of the Kara-Bomian IUP cultural tradition of Altai. The UP2 stone industry was based on the production of the large blades with unique sizes (up to 30 cm) and bladelets from prismatic, bidirectional flat-faced cores and core-burins. The cultural markers were retouched point on blades with ventral base thinning, the retouched point on blades and bladelets, truncated-faceted pieces, leaf-shaped bifaces. The UP1 industry involves two main methods of reduction – production of large blades and bladelets from prismatic and subprismatic cores. Comparison of UP2 and UP1 stone industries determine the nature of changes in lithic technology in the Initial and Early Upper Palaeolithic of Altai.

New data allowed to determine the occupation dynamics of Kara-Bom site areas at the Beginning of the Upper Palaeolithic, to reconstruct a number of production processes, to identify specialized production areas and to study the pattern of spatial distribution of flaked stone artifacts from individual blocks of raw material.

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**Mots-Clés:** Gorny Altai, The Initial Upper Paleolithic, stratigraphy sequence, spatial organization, stone knapping technique, Kara, Bomian cultural tradition