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# Evolution of the tool kit using for the processing of ornamental stone in the Upper Paleolithic of Southern Siberia

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## Résumé

In Southern Siberia more than 50 stratified objects, containing cultural layers of the different stages of the Upper Paleolithic are known to occur such as Denisova Cave, Anui, Malaya Syya, Gerasimova, Khotyk, Kamenka, Mal'ta, etc. The chronology interval covers 45 000-50 000 – 12 000-16 000 ka. The total collection of personal ornamentation is more than 250 items; half of them are made from soft stone material. Microscopic analysis of the surface of stone artifacts from archaeological collections in South Siberia made it possible to carry out their traceological analysis. As a result of the research, a technological chains of production was established, the nature of their use-wear was determined. Differentiation in the technologies of production of artifacts of two categories (ordinary and geometrically complex products) is noted. Signs of the use of archaic and innovative technologies are singled out on the every stages of Upper Paleolithic. The facts of using a specific toolkit for each and the marked technologies are documented. Studies of archaeological museum's gatherings allowed to reveal the probable tools used in the production of the investigation of the collections. The evolution of the tools used in the manufacture of artifacts in the Upper Paleolithic period is fixed. The most striking changes in the use of the toolkit are marked in groups of tools associated with surface processing and drilling of the items of personal ornamentation. This study is supported by the Russian Foundation for Basic Research, project No. 17-56-16016.

**Mots-Clés:** traces, stone raw materials, technological chains, tool kit evolution, Upper Paleolithic, Southern Siberia

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