On the organization of lithic tool manufacture and waste management in the late Middle Paleolithic: an almost complete refit of the production sequence of a bifacial tool from Kabazi V, Crimea, Ukraine

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Abstract

Numerous well preserved multi-layered Middle Paleolithic sites allowed the analysis of many aspects of the economic behavior of Crimean Neanderthals. Subsistence tactics and land use patterns were reconstructed on the basis of complex evidences concerning the raw material procurement and use, the organization of hunting, butchering and fauna transportation as well as the organization of living space in rock-shelters and open-air sites. Evident data for the spatial organizations of sites mainly come from different types of fire-places and pits. One of the most spectacular pits was found in the buried rock-shelter of Kabazi V, Level III/4-2. Kabazi V is a rock-shelter 120 m above the present Alma River and 10 m below the top of the questa, which in this part faces southeast. The archaeological sequence of Kabazi V is 8 m thick and contains 27 lithological layers and 40 mainly Middle Paleolithic archaeological levels. During the period of Unit III, Kabazi V was used as a residential camp. Carcasses of smaller species like saiga antelope were brought into or near to the rock shelter, where primary and secondary butchering was carried out. Larger species, e.g. equids, were dismembered elsewhere, probably at the kill-site, and only meat bearing parts were transported to the camp. The consumption of food resources is substantiated by the presence of hearths, which are indicative of longer stays. However, low minimum numbers of individuals amongst the hunted prey suggest that visits did not last the entire (summer) season. A fairly restricted duration of some occupations is also underlined by the observation that fuel for fireplaces was not totally combusted, but contained large pieces of charcoal and burned bone. In this context of residential longer stays, Level III/4-2 yielded a real snap-shot of Neanderthal activities related to tool manufacture and waste management. A small ovoid pit (length – 14,5 cm; width – 9 cm; depth – 7,5 cm) was exclusively – and therefore intentionally - filled with the almost complete debitage (2,786 items) of the production of a bifacial tool. The artifacts comprise 44 flakes, 7 blades and 2,735 chips. It was possible to refit almost all larger and numerous smaller pieces, resulting in a refit which allows to reconstruct the production sequence from the cortex to the inner part of the raw nodule. The refitted 83 artifacts mainly stem from the initial shaping of the upper and the lower surface and are that

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complete that it was possible to produce a cast of the bifacial preform. The bifacial preform itself was missing among the excavated archaeological material (or could not be identified due to resharpening and reduction). Typologically, the cast represents the initial stage of a leaf-shaped bifacial tool typical for the Crimean Micoquian. The possible implications of the waste storage pit from Kabazi V, Level III/4-2 for the spatial organization of Crimean Neanderthal sites as well as for the planning of anticipated periods are the main topic of this paper.

Keywords: Neanderthals, bifacial tool production, spatial organisation, waste management, pit, Crimean Micoquian