



A BONE HANDLE FROM BURAN-KAYA III: THE EARLIEST KNOWN IN THE CRIMEA

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INTRODUCTION

The site of Buran-Kaya III lies about 20 km. south-west of Belogorsk in the eastern Crimea. The site is situated on the eastern side of the Burul'cha River, 3 km. south of the town of Aromatnoye. The site has been excavated, on and off, since it was discovered by A. A. Yanevich in 1990 (YANEVICH, STEPANCHUK and COHEN, 1996). The site has a long stratigraphic sequence, beginning with Late Bronze Age and passing through, Late Neolithic, Late Paleolithic, early Upper Paleolithic, as well as Middle Paleolithic, before reaching bed-rock at a depth of about 3.5 m. (YANEVICH, STEPANCHUK and COHEN, 1996).

Although many of these occupations are of considerable interest (e. g., YAMADA, 1996; MARKS, 1997), and a series of radiocarbon dates are making it among the best dated early Upper Paleolithic/Middle Paleolithic in the Crimea (PETTITT, 1997), this brief note will be limited to the description, illustration, and dating of a sizable, well-shaped bone handle found during the 1994 excavations. These 1994 excavations were funded by M. Yamada and were carried out jointly by him and A. A. Yanevich.

The handle in question (fig. 1) was not seen coming out of the ground but was first noticed while artifacts and bones were being washed in the laboratory in Aromatnoye. While its exact provenance is, therefore, unknown, it came from Square "r" and

appeared to come from Level 27 of that season's excavations. While that would have placed it in the Middle Paleolithic, Kiik-Koba occupation, in that part of the site, the Kiik-Koba layer lies directly upon the underlying layer, which is in no way Kiik-Koba (MARKS, 1997). Thus, since the excavations were done in horizontal, arbitrary 2/3 cm. spits, it might have come from either the lowest-most Kiik-Koba (Level B1 of the Middle Paleolithic sequence, as designated by the Joint Ukrainian/American Project) or the top-most of the underlying layer (Level C of the Middle Paleolithic sequence).

The handle was kept in Aromatnoye and remained unpublished, in spite of one report on the Kiik-Koba and lower occupations, all of which were reported to be homogeneous and, more specifically, Eastern Micoquian (YAMADA, 1996). In 1996, when the Joint Ukrainian/American Paleolithic Project began cooperative work with A. A. Yanevich related to the Middle Paleolithic occupations (Kiik-Koba and below), this artifact was given to A. Marks to be illustrated and dated, as part of the cooperative efforts. The handle was illustrated by K. Monigal (Southern Methodist University), was sampled for AMS dating by Paul Pettitt (Archaeological Dating Laboratory, Oxford University, Oxford) and was examined, measured and identified to species by Dr. H-P. Uerpman.

THE HANDLE

The handle (fig. 1) was made on the distal end of a right metatarsal of an equid. While *Equus hydruntinus* is very well represented at Middle Paleolithic sites in the Crimea (e.g., FORMOSOV, 1958), larger

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equids are known as well (A. BURKE, pers. comm.). With a distal breadth (Bd) of 55.2 mm and a maximum distal depth (DD) of 40.3 mm, the specimen is well outside the size range of *E. Hydruntinus* or other small equids like *E. hemionus*, which might have occurred in the area during parts of the Pleistocene. According to its morphological characteristics, the specimen clearly represents a caballine horse (*Equus ferus sensu lato*). During the Upper Pleistocene, this species occupied the steppe areas of the northern hemisphere from the Iberian Peninsula in the west to the ice-free areas of Alaska in the east. The most striking aspect of the handle is the strongly beveled shaft end, which clearly shows that the bone was first grooved, then snapped and, finally, smoothed along the beveled edge. In addition to the man-made modifications, the epiphysis shows signs of gnawing by a carnivore of fox - to wolf size (fig. 1).

The clear man-made modification, as well as the fine condition in which it was found, raised questions as to its true age and cultural association. The Kiik-Koba layer in which it was thought to have originated contains a typical Middle Paleolithic lithic assemblage of Kiik-Koba type (YAMADA, 1996), as well as a large quantity of faunal materials - seemingly from Saiga to Mammoth. Yet, this was the only worked bone seen and the excavations of 1996 by the Joint Ukrainian/American Project failed to find any others in the Kiik-Koba layer, in spite of large, additional faunal samples.

On the other hand, the 1996 excavations uncovered a number of ringed and snapped bones from Level C, the layer underlying the Kiik-Koba occupation, in association with a non-Kiik-Koba flint assemblage (MARKS, 1997). Because of these similarly modified bones, it was hypothesized that the handle, in fact, had derived from Level C and not from the lowest-most Kiik-Koba materials. In order to test this hypothesis, two unmodified mammal bones from the lowest portion of the Kiik-Koba layer (Level B1) and two ringed and snapped bones from the underlying layer (Level C) were submitted for AMS dating, along with the handle. These dates (PETTITT, 1997; MARKS, 1997), make it absolutely clear that the handle illustrated here comes from Level C below the Kiik-Koba layer (B1) and dates to before 30,000 BP. The

date on the handle was $32,350 \pm 650$ BP (OxA-6869) and an almost identical date was gotten from an unmodified mammal bone from Level C (PETTITT, 1997). The two AMS dates from the Kiik-Koba layer (B1) are consistent and significantly younger, falling at ca. 28,600 BP (PETTITT, 1997), removing any possibility that this handle was associated with the Kiik-Koba cultural material.

By itself, this handle is quite unexpected at such an age, being among the very few known from before the mid-Upper Paleolithic. Since its age falls within a complex period of cultural developments in Eastern Europe (40,000 BP to 30,000 BP), alone it cannot be clearly placed within either the Middle or Upper Paleolithic. While such tools are thought by some to be the sole prerogative of the Aurignacian and its progeny (e.g., STRINGER and GAMBLE, 1993), it comes from below a rich Middle Paleolithic occupation and is associated with a lithic assemblage totally unrelated technologically and typologically with any Aurignacian (MARKS, 1997). In fact, there is an Aurignacian level at Buran-Kaya III: it is stratigraphically just above the thick Kiik-Koba occupational deposits. Given the unique nature of this find, both in terms of its date and its stratigraphic association, the question of its broader relationships and significance must await additional excavations at Buran-Kaya III and the full study of all the materials recovered from the appropriate level.

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Figure 1. Bone handle made from an Equid metatarsal, using a ring and snap technique from Buran-Kaya III, eastern Crimea.