An inverted perspective: identification of flints used in the production of bone and antler tools. The case of the Dabki site, Poland.

Jacek Kabaciński* and Małgorzata Winiarska-Kabacińska

1Institute of Archaeology and Ethnology, Polish Academy of Sciences (IAE PAS) – Rubież 46, 61-612 Poznań, Poland
2Poznań Archaeological Museum – Poland

Abstract

The overwhelming majority of Palaeolithic and Mesolithic sites recorded on the North European Plain are composed exclusively of lithic assemblages. The reason for this appears to be due to the specific environmental conditions in which archaeological remains were deposited, namely acidic fluvio-glacial sandy-gravelly-clayish deposits that quickly dissolve any organic matter. Numerous macro- and microscopic surface trace studies have been conducted with the aim of the identification of micro-wear traces visible on flint tools and the classification of these traces. The basic trace categories are related to the main groups of materials processed on the site, like wood, hide, bone or antler. Even with these studies, it is practically impossible to take the next step forward and interpret what exactly the object may have been used for. However, this difficulty can be overcome by research of peatbog sites located next to biogenic deposits filling river valleys and lake basins that preserve artefacts made of organic materials. One such site is Dabki, in northern Poland, on the southern Baltic coastal zone. The paleogeographic context of the site appears to be an island within an ancient lake. Almost twenty years of archaeological research has led to the recovery of tens of thousands of animal bones, including a rich collection of bone and antler tools. This fortunate circumstance allows us to conduct a microwear study from a reverse perspective: instead of starting with a flint tool and finishing with some general conclusions about what materials were processed, we can begin with the analysis of the bone and antler tools, describing first the basic activities necessary to make a final product. Based on this approach, we can offer the conclusion that a specific set of flint tools appears to be used for the manufacture of certain categories of bone and antler tools.

Keywords: Late Mesolithic, bone and antler tools, microwear analysis, identification of function

*Speaker
†Corresponding author: jacek.kabacinski@interia.pl