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# Action and dynamics in the manufacture of Late Palaeolithic and Mesolithic art objects

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## Abstract

Finds of Late Palaeolithic and Mesolithic ornamented artefacts are still very rare in Central Europe. In our paper we examine four objects: three from northern Poland (Pomerania), and one from southern Poland (Malopolska). The artefacts from Pomerania dated to the Mesolithic include a baton from Szczecin-Podjuchy, a mattock-head from Trudna and a chisel-like artefact from Niezabyszewo. The Late Palaeolithic artefact is a fragment of reindeer antler found at Podzamcze, Cave IV at the Birów Mountain. The cave is located in the Kraków-Czestochowa Upland.

The artefacts from our study are made of bone or antler. The three Mesolithic objects are stray finds. The artefact from Podzamcze although deriving from a regular archaeological excavation surfaced in a disturbed layer. With no context to rely on, the only source of information about these decorated objects was the study of their form and ornamentation. The approach used was that of artefact biography – from the time of their shaping until discarding. One of the aims of our research was analysing the dynamics and the technique of ornament manufacture. This was done through the study of all traces of manufacture, use and the technology of ornamentation and its phases. Advanced methods of analysis of the ornaments, shaping traces and usewear involved the use of a stereomicroscope, metallographic microscope, 3-D microscope, SEM and other methods of surface analysis (tomography, RTI), completed with making resin casts of the decorated objects. The latter method enabled a non-invasive study of surfaces and ornaments.

Our study showed that the engravings covering the surfaces of the Mesolithic artefacts had not been made all at once. Sometimes new decorations were added while some earlier ornaments were deliberately worn off. In such cases, the ornament was not the result of a one-off action – it would be expanded upon as the need arose, when the older forms became worn and/or lost their symbolic function. The distribution of the engravings is directly related to the type of object. The form of the ornamented artefact was dictated by the desired optimal technological properties but also by an appearance suited to its symbolic use. It seems that some parts of surfaces, such as perforations of the batons, played both a functional and a symbolic role. We can conclude that the functionality of objects was the effect not only of technological properties, but was dictated to an equal extent by appropriate symbolic actions in the form of the ornament.

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