



PROCEEDINGS OF THE IFRAO CONGRESS
September 2010

2013 # 5

<http://www.palethnologie.org>

ISSN 2108-6532

directed by
Jean CLOTTES

PLEISTOCENE ART OF THE WORLD

Short articles



TECHNOLOGICAL DATA ON MAMMOTH IVORY ENGRAVING IN THE EPIGRAVETTIAN: the Case of Mezin (Ukraine)

Martina LÁZNIČKOVÁ-GALETOVÁ

This article presents the procedure of engraving used to realize the geometric decoration on ivory pieces from the site of Mezin in Ukraine. Mezin, located on the right bank of the Desna River, was discovered in 1907. This Epigravettian site ($15\,100 \pm 200$ BP) yielded a rich bone industry, including numerous portable art objects, many in ivory. Since their discovery, the latter have been the object of many typological and stylistic analyses, such as those by Tchikalenko (1923), F. Hančar (1940), Salmony (1949), Abramova (1962), Bibikov (1981), Filipov (1983), Soffer (1985) and Iakovleva (1995, 2009).

In our study, we chose to focus on the techniques used to realize the decorations on these pieces, and in particular, that used to create the geometric decorations present on some of the ivory pieces. We studied the engraved incisions using a low power microscope (Nikon SMZ 645) and a scanning electron microscope (SEM, BS 340).

Decoration type

At Mezin, the portable art objects and personal ornaments in ivory are decorated only with engraved geometric motifs. These decorations are present on schematic female statuettes, engraved tusks and bracelets in ivory. The decorations are composed of squiggly lines, zigzags, parallel lines and interlaced chevrons.

The technique used to realize the decorations

At Mezin, engraved geometric decorations are present on two types of supports. The most common one, supports “with volume”, consists of cylindrical fragments of mammoth tusk. The other one, “flat” supports, consists of long ivory “blades” used to make bracelets. Our analysis shows that the same engraving procedures were used on both support types.

1. Engraving on supports “with volume”

Cylindrical supports were made by segmenting the tusk. Depending on the age of the animal and the location of the support (proximal, medial or distal part of the tusk and its location at the heart of the tusk, or not), the support is more or less curved. Several object types realized on supports with volume are decorated with geometric motifs.

The first object type is a tusk segment, such as the one decorated with two linked diamonds, realized on the outer layer of the tusk through the incision of straight, continuous grooves of different lengths. In the specimens studied, we did not observe any evidence of surface preparation. The engraving was realized simply by repeated strokes of the tool.

The second object type is a ronde-bosse sculpture. In this case, the cement layer was removed in some places and the surface used for engraving has a highly variable form, depending on the morphology of the statuette. All of the statuettes were decorated using the same engraving procedure as that of the engraved tusk described above.

2. Engraving on flat supports

We studied two nearly complete bracelets and several flat fragments that can also be considered as parts of bracelets or crowns.

Debitage by extraction in order to obtain a flat support is well attested at the site by the presence of characteristic by-products (extraction matrices). All show that the extraction procedure employed grooving to delimit the supports to be extracted.

The bracelet fragments with a longitudinal shape originate from the outer layer of the tusk, still covered with the cement layer. The surface available for engraving is flat and slightly convex.

The geometric decoration is organized in repeated “chevrons” and concentric diamonds. The engraving is composed of grooves of variable depths and lengths, which plays a role in the final result. The grooves (straight) were realized by repeated strokes with the tool.

We observed two types of lines to create the geometric decorations on flat supports:

- lines made by long, linear and continuous incisions;
- discontinuous lines made by short, contiguous incisions that followed each other by pivoting with a 15° angle.



Flat ivory fragments – fragments of bracelets or crowns
(photo: S. Péan, MNHN Paris).

There are at least two manners in which this type of discontinuous line can be made: either beginning with a linear incision onto which short incisions are regularly imprinted, or beginning with a line composed of short oblique incisions that regularly overlap. Since the grooves are filled with sediment, we can only observe the morphology of the lines.

In conclusion, we observed that at Mezin, the ivory pieces with geometric decorations correspond to two types of supports: supports “with volume” and flat supports. We also identified two distinct engraving procedures that were employed indifferently on both support types.



