
Stylistic study of the Late Mesolithic lithic industries in Western France: crossing Principal Coordinate Analysis and use-wears analysis

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Abstract

As for many other periods of the European prehistory, archaeologists have traditionally employed lithic industries as clues for the periodization of the Mesolithic in Europe. The Tévécien and the Retzien entities are two good examples of that, being characterized by their blade and bladelets production and the typologies of their geometrical microliths. Nevertheless, the concept of "style" described as a "highly specific and characteristic manner of doing something which by its very nature is peculiar to a specific time and place" (Sackett, 1982) is a concept with a much broader heuristic potential, which deserves to be thought beyond a delimitation of "cultural barriers" denied by current anthropological work. In this work we propose to find different ways to approach stylistic attributes of the last hunter-gatherer's productions of Tévécien and Retzien (Late Mesolithic of Western France, 6th millenium cal BC), using statistical tests in order to find more quantitative clues to study the style of these populations. The interest of this approach is to confront them with functional choices and raw material constraints. To put it differently, we propose to question the form/function dyad with new analytical tools, to shed new light on the notion of choice.

Several sites of the Late Mesolithic in Western France have been chosen as case studies, all of them have been excavated and with reliable C14 dates. Since the truncation retouch seems to be a very specific technique of these industries, symmetrical and asymmetrical bitruncations and truncated bladelets are essentially studied here. The typological parameters are used as statistical variables in the principal coordinate analysis (PCoA). A network analysis was performed in addition to this test, in order to have a better understanding of the organization of the stylistics groups. Finally, functional analyses were carried out using the methodology of the use-wear study, based on the macro and microscopic examination of large samples, including retouched and unretouched blanks.

This study led us to the characterization of the "isochrestic panel" of the Late Mesolithic's symmetrical and asymmetrical bitruncations and truncated bladelets, approaching technological choices made during the manufacture of these objects. Furthermore, use-wear approach has allowed us to determine different modes of hafting of symmetrical and asymmetrical bitruncations and several functionalities, mainly used as projectile weapons. These

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results led us to discuss about the distribution of the formal and functional characteristics of the Mesolithic toolkit and differs from the traditional cultural analysis of knapped industries.

Keywords: Late Mesolithic, lithic industries, style, principal coordinate analysis (PCoA), social network analysis (SNA), use, wear analyses.