
Hominin subsistence strategies around 0,3 Ma in northern France: What can we learn from the Acheulean site of Cagny-l'Épinette (Somme Valley)?

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Résumé

Despite a growing interest in Lower Palaeolithic sites, detailed intra-site spatial analyses of their activity areas are still rare.

Acheulean assemblages have been discovered within the alluvium (MIS 9) at the open-air site of Cagny-l'Épinette (Somme Valley, France). The lithic industries and, more importantly, the well preserved faunal remains make the site of particular interest for spatial analysis and behavioral interpretations. However, three decades of excavations (1980–2010) along with individualized studies have led to a fragmented history of research methods and consequently, divergent interpretations.

With a new research project (2016–2021) dedicated to restudying the assemblages from Cagny-l'Épinette comes the first site-scale analysis of these Acheulean assemblages as a whole. This thorough overall spatial analysis consists of three parts – archaeostratigraphy, taphonomy and study of the hominin activities organization – each of them considered through a quantitative and spatial approach.

The outcomes can be summarized as follows: The revised archaeostratigraphy merges the previously multi-layered Acheulean assemblages into a single layer within a fine-grained fluvial sedimentary unit (MIS 9). As for the taphonomic analysis, few indicators of disturbance have been identified, suggesting artifact discard in a primary context followed by a rapid burial. Finally, spatial patterns observed among faunal remains and lithic artifacts suggest two main activities were performed on site: mammalian carcass processing (i.e. *B. primigenius*, *C. elaphus*, and *E. mosbachensis*) and lithic productions (i.e. flakes, retouched flake tools and handaxes). The relationship between the two is confirmed by anthropogenic marks observed on bones and deer antlers (e.g., cut marks, green bone breakages, impact points, removal scars), among which new bone and antler tools have been identified. These observations imply hominin exploitation of carcasses for both alimentary and utility purposes.

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The aim of this paper is to show that, beyond the disorganized appearance of scattered remains, a zonal division with butchery and knapping activities can be identified at the site of Cagny-l'Épinette. Furthermore, based on spatial patterns, the hypothesis of distinct uses among stone tools during carcass processing, and bone and antler tools during stone knapping emerges. This paper intends to present the new resulting interpretations and their contribution to our knowledge regarding the diversity of hominin subsistence behaviors, i.e., resources acquisition and processing, around 0,3 Ma.

Mots-Clés: Cagny l'Épinette, Middle Pleistocene, Activity Areas, Spatial Analysis, Geographic Information System.