
Straight to the point: a critical review of the emergence of osseous projectile points during the Early Upper Palaeolithic

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Résumé

The appearance of the Aurignacian technocomplex in the archaeological record is often explained by one of two contrasting views. Some associate this phenomenon exclusively with the initial dispersal of *Homo sapiens* in Europe; others perceive it to be the material expression of the development of novel socioeconomic strategies by populations inhabiting the continent. From an archaeological standpoint, the Aurignacian projectile points made of antler, bone, and ivory occupy a central place in the definition of this cultural entity. Split-based points are typically found in Early Aurignacian contexts while massive-based points are mainly associated with the later phases of the technocomplex. Furthermore, from a palaeoanthropological perspective, split-based points are often considered as a proxy for the initial dispersal of the members of our species on the continent. However, direct radiometric dating of these implements contradicts this interpretation. We are therefore faced with a need to propose a new scenario that can account for the complex emergence of osseous armatures during the Early Upper Palaeolithic. The present communication addresses two issues. First, we argue that the appearance of osseous implements predates the emergence of the Aurignacian technocomplex. A review of the evidence from Châtelperronian, Uluzzian, and Mousterian contexts is presented. Second, we focus on the morphometric variability of split-based points with the aim of highlighting the dynamics responsible for their emergence and transmission at a continental scale. The results were obtained through the adaptation of geometric morphometrics to study 322 split-based points uncovered from 38 European sites. This approach allows for the identification and description of eight volumetric templates considered fit for hunting and reproduced by the Aurignacian artisans. These templates are interpreted as a proxy for the socially transmitted rules of production that guided the manufacture of this tool type. The spatial and chronological distribution of these templates suggests that the Aurignacian armatures signal the development of innovative strategies by groups already present on the continent and linked to one another. We argue that split-based points conferred an adaptive technological solution to prehistoric groups living along the Mediterranean coast and engaged in increased mobility. On the other hand, the widespread adoption of the split-based points is linked with the eruption of the Campanian

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Ignimbrite. We proposed that in the wake of this cataclysmic event, the access to an increased continental network of prehistoric groups allowed for the rapid and widespread transmission of an emblematic technological innovation.

Mots-Clés: Europe, Aurignacian, Geometric morphometrics, bone technology, cultural adaptation, Campanian Ignimbrite