

---

# Understanding the chronological meaning of Neanderthal technological blade strategies

Christian Hoggard\*<sup>†1</sup>

<sup>1</sup>Department of Archaeology and Heritage Studies (AU) – Aarhus University Moesgård Allé 20 Building  
4215, 137 DK-8270, Højbjerg, Denmark

## Abstract

Over the last fifty years, archaeological excavations and extensive technological analyses have documented the diversity of ‘technological blade strategies’ - the production of stereotyped elongated material - throughout the European Middle Palaeolithic. Specifically, research has highlighted the existence of laminar-based methods of blade production from the offset of the Middle Palaeolithic (and much earlier in other regions), contemporary with Levallois blade production methods, in addition to widespread evidence for laminar strategies in north-west Europe during MOIS 5, sometimes noted as the Technocomplexe du Nord-Ouest (Depaepe, 2007). However, while we know of their presence within the Neanderthal toolkit, a consideration of their long-term chronologies and the persistence of technological behaviours within both blades strategies remains unaddressed. With such an extensive record for technological blade strategies in the European Middle Palaeolithic now documented, we possess the interpretive potential to examine and understand the nature of diachronic change and social transmission through both technological blade strategies, and fundamentally their chronological meaning.

This talk will first contextualise the evidence for both laminar and Levallois technological strategies until the end of MOIS 5 (c. 71,000 BP). It will highlight the appearance of at least sixty-five laminar and forty-two Levallois blade-bearing European contexts prior to c. 71,000 BP, and observations in their spatio-temporal framework. Secondly, through analyses (including traditional and geometric morphometrics) of twelve archaeological contexts this talk will address whether technological punctuation and continuity is observed, and address the nature of cultural change on varying levels of resolution throughout this period. Finally, using theories of artefact design and ‘performance attributes’ (Skibo and Schiffer, 2001), coupled with an extensive experimental dataset of both blade strategies, the talk will discuss the retouch potential of Levallois blades and the portability potential of laminar blades as one possible explanation for understanding aspects of technological change noted throughout the European Middle Palaeolithic. Through this combined approach, integrating an experimental and archaeological data, the ‘true’ chronological meaning of these strategies can now be better understood.

Depaepe, P. (2007). *Le Paléolithique moyen de la vallée de la Vanne (Yonne, France): matières premières industries lithiques et occupations humaines*. Mémoire de la Société

---

\*Speaker

<sup>†</sup>Corresponding author: C.Hoggard@cas.au.dk

Préhistorique Française 41.

Skibo, J.M. and Schiffer, M.B. (2001). Understanding artifact variability and change: A behavioral framework. In: Schiffer, M.B. (ed.) *Anthropological perspectives on technology*. Albuquerque: University of New Mexico Press, 139-149.

**Keywords:** Neanderthal, Blades, Middle Palaeolithic, Technological Variability