

From Tools to Thoughts: Comparative Approaches to Technological and Cultural Behaviour

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Keywords

Cognitive archaeology; Pleistocene; technology; primatology; experimental archaeology.

Abstract

Understanding the origins and evolution of material culture requires an integrative perspective that combines archaeological, primatological, experimental and cognitive approaches. Over the past decades, diverse empirical and theoretical studies have deepened our understanding of the cognitive and social foundations of technological and cultural behaviour, expanding the comparative perspective beyond specific species or contexts. There has been a proliferation of studies offering an essential comparative framework for Cognitive Archaeology, helping to investigate the technical abilities, but also the perceptual and social processes that shape innovation and learning.

Despite recent advances, research on early human cognition and behaviour often remains isolated within disciplinary boundaries. This session seeks to address that gap by promoting a genuinely comparative and interdisciplinary discussion, that integrates archaeological, primatological, experimental, and cognitive perspectives. By focusing on the processes underlying technological interaction, transmission, and cultural evolution, we aim to highlight how shared mechanisms of learning, cooperation and adaptation can inform our interpretations of the evolutionary roots of material culture and symbolic thought.

Through contributions from technological studies, primatology and experimental archaeology, this session encourages an exchange of perspectives that redefine the traditional boundaries of Cognitive Archaeology. It invites participants to explore not only similarities and differences in technological and behavioural strategies but also the theoretical and methodological implications of adopting a comparative framework within evolutionary archaeology.

Ultimately, this session aims to consolidate a meeting point between disciplines that, despite sharing fundamental questions, they rarely converge within prehistoric research forums. By integrating evidence from the Pleistocene archaeological record and experimental studies, we hope to contribute to a broader and more dynamic understanding of the evolutionary roots of material culture and the cognitive processes that sustain it.