Backed pieces and their significance in the Later Stone Age of the Horn of Africa
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and their variability in the Later Stone Age of the Horn of Africa

Why our study?

• The emergence of backed pieces is associated with major late Pleistocene technological innovations and behavioural changes.
• Backed pieces are often linked to hafting and composite tool technologies as well as the development of projectiles.
• Backed pieces frequently occur in large numbers in most Later Stone Age (LSA) assemblages and therefore allow for inter-site comparisons.

In the Horn of Africa, the study of the emergence and development of backed pieces is hampered by the use of varied definitions and equivocal terms (microliths, crescents, segments, curved backed blades, etc.). This paper aims to facilitate inter-site comparisons by proposing a set of attributes to describe and analyse the variability of backed pieces in an objective and reproducible way.

Definition of backed pieces

Any product with at least one edge, or part of it, modified by abrupt to semi-abrupt retouch with roughly parallel to the longest morphological axis of the blank.

Materials and methods

A critical review of the occurrences of backed pieces during MIS 3-1 indicates:
• The absence of any robust evidence before 14 ka cal BP.
• Backed pieces become significant only during the Middle and Late Holocene.

We analysed all complete backed pieces from eight archaeological assemblages belonging to sites recently excavated and securely dated that cover the last 15 ky.

For each of the 191 artifacts identified we recorded 37 variables and took standardised photographs. Our analysis includes but is not limited to multivariate analyses (performed with R using FactoMineR and geometric morphometrics (using Momocs).

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