
Regional variability during the Middle Stone Age of MIS 3 in southern Africa – Patterns and mechanisms

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Résumé

The MSA of southern Africa plays a key role in studying the cultural evolution of early modern humans. Recent comparative research of this record has started to evaluate the origins and variability of spatially bounded techno-typological traditions in our species. This work has identified periods of more homogeneous lithic assemblages over large geographical scales in MIS 4 and 2, contrasting with more heterogeneous, regionalized signals that characterize the interglacials of MIS 5 and 3. While there has been intense discussion on the reasons for wide-spread similarities in lithic assemblages during MIS 4 in the Still Bay and Howiesons Poort little is known about the patterns, mechanisms, and evolution of regional differences during MIS 3.

To assess different models for regionalization of this record, we require a detailed understanding of inter-regional and intra-regional patterning of lithic assemblages on a diachronic scale between ~58-29 ka. Following a bottom-up approach, we first evaluate the nature and variability of lithic technology during MIS 3 by combining new and high-resolution data from our own excavations and surveys at Sibudu, Holley Shelter, Klein Kliphuis, Mertenhof, Putslaagte 8, Umbelli Beli and Uitspankraal 7 with a detailed review of other data. Spatial comparisons are performed by partitioning the study region into the three modern rainfall zones of southern Africa. Our methodology aims to construct comparative datasets from different sources and to relate the lithic data to cultural transmission, social learning and knowledge transfer, which are powerful concepts to operationalize spatio-temporal differences in artefact assemblages.

Based on the emerging patterns of intra- and inter-regional variability in lithic domains throughout MIS 3 in the three analytical regions we evaluate different causal mechanisms including: i.) environmental and climatic factors; ii.) mobility, settlement systems and subsistence strategies; iii.) demographic factors; iv.) socio-cultural aspects. These potential factors are assessed under a variety of explanatory frameworks such as behavioral ecology, organization of technology and cultural transmission theory. Apart from pointing out specific limitations pertaining to our study region – such as the need for more data from open-air contexts and interior parts of southern Africa – we also emphasize issues that are of general relevance to the study of regionalization in the Lower and Middle Paleolithic. These include the importance of achieving more comparable, quantitative techno-typological data in lithic analyses between researchers and regional traditions, as well as articulating questions and theories regarding regionalization within appropriate scales.

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