



ORAL

3. GARBA III (MELKA KUNTURE, ETHIOPIA): RE-ANALYSIS OF THE SPACE PATTERNING AND DWELL-ING STRUCTURES OF AN EARLY MSA SITE

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Garba III, in the upper Awash Valley of Ethiopia, is one of the many sub-sites of Melka Kunture, where the archaeological record starts with the Oldowan, continues with a rich Acheulean sequence, and also includes MSA and LSA industries. Garba III was excavated in the Seventies of last century, under the direction of Francis Hours who discovered in layers B2 and B3 lithic assemblages now recognized as belonging to the Early MSA (EMSA). Ever since the first publication, it was stated that it was "un habitat in situ" where the crushing and grinding of bones was going on. Small basins with vertical sides and flat bottoms were also described, together with space patterning in the distribution of stone tools and bone fragments. Garba III is one of the few EMSA sites that also yielded human fossils, which belong to archaic Homo sapiens. New investigations were started to update the record and assess if site patterning was part of the innovations related to the emergence of modern human behaviour.

In 2011 the original site was re-located and tested, the stratigraphy was re-established, site formation processes were studied, and the lithic collections were re-analysed. A grid allowing the spatial distribution of the original finds was also prepared. U-series dating of bones and a combination of ESR and U-series analyses on teeth were planned.

Complex site formation processes were evidenced, including cyclic phases of erosion and re-deposition of pre-existing soils and deposits, together with prolonged phases of stability when pedogenetic processes developed. The fossil fauna is derived from earlier deposits, while the accumulation of lithic implements in layers B2 and B3 is the outcome of other distinct processes. The lithic assemblages are coherent and relatively well preserved. No major differences were noticed in alteration patterns. Obsidian was mostly used, and is largely affected by a thick grey patina. Edges are generally well

preserved, which is not compatible with long distance fluvial transport, suggesting a limited degree of disturbance and displacement. Comparing B2 to B3, however, there are differences in assemblage composition and in knapping methods.

Overall, the analysis of post-depositional modifications does not show any apatial patterning. While bone and teeth fragments do not allow dating the lithic assemblages, circumstantial evidence suggests an age not later than an early phase of MIS 5e. The differences between the industry of B2 and B3 may be the outcome of diachronic changes and/or of differential water transport. Accordingly, Garba III possibly gives information on technological developments in lithic production and use at the time of the emergence of *Homo sapiens*, but not on space patterning.

ORAL

4. CONTINUITY AND CHANGE? THE INITIAL BLADE TECHNOLOGY OF THE LATE MIS 3 OCCUPATION AT MOCHENA BORAGO ROCKSHELTER, PROVINCE WOLAITA, ETHIOPIA

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An increase in technological variability and a decrease in artefact size of lithic inventories from the horn of africa towards the end of MIS 3 might give an important indication for the spread of modern humans from africa to eurasia, though its mechanisms are not well researched to date.

This paper presents a detailed comparative technological study of artefacts from the younger layers (~43.5-41 ka) of mochena borago rockshelter, province wolaita, ethiopia. The analysis was mostly concerned with the reconstruction of the *châine operatoire* and the secondary flaking characteristics.

In comparison to the older, mainly flake-based, inventories from mochena borago, the youngest (~41ka) already shows all the necessary technological capabilities required for a formal blade production. In contrast to this intra-site development towards an initial blade production, several aspects of these inventories remain quite constant through time and seem to form site-specific characteristics. The most important raw material used (obsidian) remains constant, as well as the uncommonly small size of the pieces recovered and the very low significance of the levallois concept.