The Characteristics and Chronology of the Earliest Acheulean at Konso, Ethiopia

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The Lower Pleistocene sediments of the Konso paleoanthropological research area (southern Ethiopia) have revealed more than 20 archeological occurrences with chronostratigraphic placements that range from ~1.9 to 0.8 Ma. The pre-~1.75 Ma assemblages are characterized by Oldowan (mode I) technology, while abundant and multiple occurrences of Acheulean assemblages span the time period ~1.75 to <1.0 Ma.

The Konso localities that produced Acheulean artifacts are few for the earlier assemblages (older than ~1.6 Ma), whereas they become more abundant after 1.45 Ma. These assemblages are characterized by crudely made artifacts in the lower part of the sequence, and by more refined artifacts in the upper part of the sequence. The earliest Acheulean assemblage at Konso (~1.75 Ma) is characterized by a combination of large picks and crude bifaces/unifaces made predominantly on large flake blanks. The raw materials used are mostly local. Artifact refinement seen at Konso, from ~1.75 to ~1.25 Ma especially in the handaxe forms, marks technological evolution and implies enhanced function through time. Handaxes with advanced thinning and symmetry are seen only from the uppermost 0.8 to 0.9 Ma time-horizon.

The documentation of the earliest Acheulean at ~1.75 Ma in both northern Kenya and southern Ethiopia suggests that behavioral novelties were being established in a regional scale at that time, paralleling the emergence of *Homo erectus*-like hominid morphology. The post-1.0 Ma emergence of refined handaxes may be related with aspects of the transition of *Homo erectus* to a more advanced species of archaic *Homo*.