

First African Acheulean: a view from the North-West

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With its roots planted back in the Upper Miocene, the Casablanca Quaternary sequence is the most complete stratified succession of raised beaches and associated continental deposits and pedo-units preserved in North-West Africa.

Although micro and macro-mammal assemblages occur from the very bottom of the sequence up into its more recent expressions, human artefacts can only be recorded with any certainty from above the upper part of the Lower Pleistocene units. Numerous human fossils, the oldest of which are dated to 0.6-0.5 Ma, have been found in the Middle Pleistocene units.

Regarding the Lower Pleistocene, absolute dates by OSL and ESR (about 1 Ma) were obtained for unit L of Thomas Quarry I. Several litho-stratigraphic arguments, paleontological evidence, direct dates and paleo-magnetic indices for this unit place its age at between 1 and 1.4 Ma. To date, it provides the oldest evidence of a human presence within a secure stratigraphic position that has been identified in Morocco.

Unit L of Thomas Quarry consists of a complex of deposits laid down in a paleo-backwater at the top of which the sedimentation has an aeolian origin. In this unit the presence of humans has been documented for two levels, L1 and L5. Both of these have delivered a rich lithic complex attributable to the early Acheulean and are associated with faunal remains.

Level L1 at the base of the series, was excavated over about 150 m² and has delivered a rich lithic assemblage (1973 artefacts and 1155 unworked objects) and a limited number of paleontological remains (409). This industry has been attributed to the early Acheulean on the basis of the presence of trihedral and bifacial objects. It also contains spheroids and sub-spheroids, a large variety of polyhedra, polyhedral nuclei, discoidal cores and hammer-stones of quartzite, as well as small flint pebbles flaked using bipolar reduction techniques. The variety of modifications to the working edges of the bifacial and trifacially flaked pieces suggests they had a wide range of uses.

Archaeological level L5 was excavated over a limited area (16 m²) and, unlike the L1 level, has delivered an industry (1129 artefacts) in which flaked artefacts are well represented, and associated with cores and hammer-stones. Consequently the assemblage contains a predominance of flakes as compared to finished artefacts.

The First Acheulean in Casablanca appears to have a technical and economic structure that is separate and distinct from the preceding regional Oldowan culture known from Algeria. The Thomas Quarry assemblages look very similar to those from Tighenif (Algeria) and also to some from the Middle-East.