
New bead assemblages from the Later Stone Age to Iron Age of Northern Malawi: examining technological choice and local economies in diachronic perspective

Claire Heckel*^{1,2}, Jennifer Miller³, Andrew Zipkin⁴, Francesco D'errico^{5,6}, Elizabeth Gomani-Chindebvu⁷, and Jessica Thompson⁸

¹Division of Anthropology/Richard Gilder Graduate School, American Museum of Natural History - AMNH (US) (AMNH) – Central Park West at 79th Street New York, NY 10024, United States

²Travaux et Recherches Archéologiques sur les Cultures, les Espaces et les Sociétés UMR 5608 T.R.A.C.E.S, Université de Toulouse - Jean Jaurès (UMR 5608 TRACES) – UMR 5608 - TRACES – 5 allées Antonio Machado F-31058 Toulouse Cedex 9, France

³Department of Anthropology, University of Alberta – United States

⁴University of Illinois at Urbana-Champaign [Urbana] – 205 N. Mathews Ave., Urbana-Champaign, IL 61801, United States

⁵Department of Archaeology, History, Cultural Studies and Religion – University of Bergen, Postboks 7805, NO-5020 Bergen, Norway

⁶de la Préhistoire à l'Actuel, Cultures, Environnement, Anthropologie (PACEA) – CNRS : UMR5199, Ministère de la Culture et de la Communication, Université de Bordeaux (Bordeaux, France) – Bâtiment B18, Allée Geoffroy Saint Hilaire, CS 50023 33615 PESSAC CEDEX, France

⁷Ministry of Tourism, Wildlife, and Culture Malawi – Malawi

⁸Emory University [Atlanta, GA] – 201 Dowman Dr, Atlanta, GA 30322, United States

Abstract

This paper presents the initial results of a multi-pronged approach to the analysis of newly-excavated assemblages of beads from three rockshelter sites in northern Malawi: Hora 1, Mazinga 1, and Kadawonda 1. Excavations in 2016 and 2017 at these sites yielded an assemblage of over 150 beads and bead preforms made of terrestrial and aquatic shell and, to a lesser extent, bone and ostrich eggshell. Together, the assemblages span the Later Stone Age to Iron Age and constitute by far the oldest bead assemblages in Malawi. The assemblages present an unparalleled opportunity to examine change over time in beads and bead-production in the region. Earlier excavations (1950) at Hora 1 yielded the only complete LSA skeletons known from Malawi, which are also the source of Africa's oldest DNA (at 8100 BP); this provides further opportunity to understand ornament production within its larger cultural and biological context. A collective effort of specialists in Canada, the United States, and France, the analysis of these ornaments and their production stages integrates a range of methodological approaches: raw-materials characterization, radiometric dating, isotope analysis, morphometric analysis, residue and use-wear analysis, chaîne-opératoire

*Speaker

reconstruction, and experimental archaeology. The combined results show technological choice and cultural transmission in LSA societies over time and space, and across at least three environmental and climatic transitions: the Last Glacial Maximum, the dawn of the Holocene, and the end of the African Humid Period. They further serve as a basis of comparison between bead assemblages of the LSA bead and the Iron Age (after about 2 thousand years ago).

Keywords: East Africa, ornaments, parure, Later Stone Age, Iron Age