
The transition from the MSA to the LSA in El Harhoura 2 cave (North Western Africa) in the light of multi-dating approach

Eslem Ben Arous*^{†1}, Christophe Falgueres*¹, Qingfeng Shao*², Norbert Mercier*³, Olivier Tombret*¹, Maïlys Richard*^{1,4}, Mohammed El Hajraoui*⁵, and Roland Nespoulet*¹

¹Département Homme et Environnement du Muséum national d'Histoire naturelle – CNRS : UMR7194
– 1, rue René Panhard, 75013, Paris, France

²Nanjing Normal University (NNU) – 1, Wenyuan Road, Nanjing 210023, Chine

³Institut de Recherches sur les Archéomatériaux - Centre de Recherche en Physique Appliquée à l'Archéologie – CNRS UMR 5060, Université Michel de Montaigne - Bordeaux III – France

⁴Institut de Recherches sur les Archéomatériaux - Centre de Recherche en Physique Appliquée à l'Archéologie – CNRS : UMR5060, Université Michel de Montaigne - Bordeaux III – Maison de l'Archéologie, Esplanade des Antilles, 33607 Pessac, France

⁵Institut National des Sciences de l'Archéologie et du Patrimoine de Rabat – Institut National des Sciences de l'Archéologie et du Patrimoine [INSAP] - Rabat – France

Résumé

Rabat-Témara region (Atlantic coast, Morocco) is well known for its archeological caves and many research works have emphasized the importance to consider this area in the *H. sapiens* emergence and dispersal model in Northern Africa.

At the end of the Upper Pleistocene, cultural and paleoclimatic changes took place in Northern Africa, which correspond to the transition from the Middle Stone Age (MSA) to the Later Stone Age (LSA). Late Pleistocene models of modern human migrations within and out of Africa have been modeled mostly through genetic datasets. Due to the paucity of reliable dating evidence, these human migrations have proven difficult to describe spatially/temporally and to fit them with archaeological data.

The purpose of this study is to contribute to a better chronological resolution of the last occurrence of the MSA and the presence of the LSA in El Harhoura 2 cave by using a multi-geochronological approach. We present new dates obtained by combined US-ESR on 17 fossil teeth, by OSL on quartz grain and Radiocarbon on charcoal and human bones. The numerical ages obtained in the present study correlate the latest MSA human occupations at El Harhoura 2 to the end of the MIS 3 (~40 ka), 15 ka older than previously published ages. The LSA is dated between 14 ka and 7 ka BP.

*Intervenant

[†]Auteur correspondant: eslem.ben-arous@mnhn.fr