Geoarchaeology of Saharan tethering stones. A tool to interpret hidden landscapes and invisible human traces

Marina Gallinaro (1), Andrea Zerboni (2), Mauro Cremaschi (2), Savino di Lernia (1,3)
(1) Sapienza Università di Roma, Scienze dell’Antichità, Italy (marina.gallinaro@uniroma1.it), (2) Università degli Studi di Milano, Dipartimento di Scienze della Terra ‘A. Desio’, Italy (andrea.zerboni@unimi.it), (mauro.cremaschi@unimi.it), (3) School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, South Africa (savino.dilernia@uniroma1.it)

Geoarchaeology offers many tools useful in interpreting the hidden archaeological record and in interpreting the trajectory followed by past human groups to survive landscape changes. This is true especially in arid regions, where the archaeological record is often dismantled by severe erosion and in deflated surfaces dotted with artefacts is difficult to reconstruct traces of human occupation. Among others, one of the most interesting and neglected materials are tethering or trapping stones (TS), which are a specific trait of the Saharan material culture, rarely found outside this large region. TS are made of stone slabs or boulders of different size (up to > 1 m), with notches or grooves along the median diameter to block a rope; they are generally represented in rock art engravings as hunting devices. However, these artefacts had multiple uses and possibly re-uses throughout the Holocene, and the debate on their functional aspects and dating is still open. The main aim of this paper is to present the main features of TS mapped and recorded in three distant and physiographically different Saharan regions in nowadays southern Libya (the Wadi Tanezzuft, the Messak Plateau, and the Kufra region), and to discuss their function, on the basis of a correlation between available archaeological and geomorphological data. In each context, TS appears as isolated finds, clustered assemblages, and related to settlements, close to specific geomorphological features, or in ceremonial Pastoral Neolithic sites. Our investigation allowed enhancing the functional interpretation of these artefacts, highlighting their role in Middle and Late Pastoral Neolithic sites, and helping to interpret invisible human traces.