



## **Salt, mud and stones: Unpicking archaeological landscapes in the southern African interior.**

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The dry interior of southern Africa holds particular challenges for researchers interested in Stone Age archaeology and human-environment interactions in the late Quaternary. Whilst well-preserved South African coastal cave sites now provide detailed information, right down to the seasonal hunting preferences of Stone Age humans, we know almost nothing about how (or when) humans used the vast, dry interior of the continent, despite the extensive presence of Stone Age archaeology. Beyond the handful of Kalahari cave and rock-shelter sites, extracting a record of human landscape use from the deep sands and deflationary surfaces of the interior requires novel, interdisciplinary approaches.

Geo-archaeological theories concerning the distribution and mobility of early humans in the landscape place great importance on the temporal dynamics of water availability. In the Kalahari, where there is ample evidence that the region repeatedly experienced both extreme water deficits and excesses and where many of the reported archaeological sites are associated with river systems and palaeolakes, the relationship between humans and water availability seems particularly significant. New research from the Makgadikgadi basin, the largest of these palaeolakes, is using landform and archaeological site mapping, sedimentological and chronometric analyses together with *décapage* methodology and lithic geochemical fingerprinting to tease out the record of human landscape use in relation to changing environmental and hydrological conditions.

Preliminary findings from this research suggest the basin was exploited, by what were most likely hunting parties, during seasonally dry periods when the lake was low or absent. Whilst some sites show evidence of disturbance, *chaîne opératoire* analyses on the lithic material suggest that others are remarkably well-preserved having been buried during lake high stands and re-exposed during deflationary periods. Geochemical analyses suggest the black silcrete which dominates knapping scatters at most sites was procured from within the basin though was sometimes transported many kilometers to the site of tool manufacture. OSL dating of sediments from landforms in and around these Stone Age archaeological sites is building a clearer picture of both the timing of human occupation and the associated environmental conditions. Innovative, interdisciplinary approaches such as this are beginning to address the fundamental knowledge gaps in our understanding of human-environment interactions and demonstrate the strong utility of landscape archaeology in these challenging and poorly investigated dryland zones.