Abstract:

The southern African archaeological record shows an unusual sequence of techno-complexes, which have been dated to relatively high precision. Bursts of innovation and symbolic behaviour appear around 70-60 thousand years ago, to be replaced by less sophisticated technology and geographical fragmentation. Given the fluctuating global climate during the late Pleistocene, it is natural to enquire whether climatic change in southern Africa has driven human behavioural change. However, our understanding of regional palaeoclimate is severely limited by the sparse and disputable proxy record.

Here I re-evaluate the key palaeoclimate records from the region, beginning with the unparalleled sediment sequence from the impact crater Lake Tswaing and proceeding to marine-core particle-size and charcoal records. I contend that the influence of orbital parameters on summer rainfall has been misinterpreted, and with the aid of climate-model output I propose a conceptual model of quaternary rainfall change that can explain many unusual features of the palaeoclimate record. Under this revised model, the major Middle Stone Age industries are correlated with periods of abundant, year-round rainfall, implying that behavioural innovation is linked to benign environmental conditions.