

TITLE:

Zooarchaeological tests for modern human behavior at Blombos Cave and Pinnacle Point Cave 13B, southwestern Cape, South Africa

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ABSTRACT :

Data were collected and analyzed from the fossil animal bones at two archaeological sites in the southwestern Cape, South Africa: Blombos Cave and Pinnacle Point Cave 13B (PP13B). Both sites date to a time known as the Middle Stone Age (MSA), from ca. 280 – 30 thousand years ago (ka). This was a critical period in human evolution, and recent discoveries from Blombos have shown that creativity and symbolic behavior were present in *Homo sapiens* by at least 70 ka. However, the relationship between these factors and diet remains unknown. Work on this problem has been seriously hindered by a lack of empirical data: in all of Southern Africa only one other faunal collection from this time period has been comprehensively analyzed and published (Die Kelders Cave 1 [DK1]). The study presented here replicates many of the methods employed at DK1, effectively tripling the empirical record for faunal collections that are complete, have been fully analyzed using taphonomic methods, and are comparable to one another. For the first time, behavioral comparisons of MSA faunal exploitation can be made between sites with abundant evidence for symbolic behavior (Blombos) and with less such evidence (PP13B and DK1). This dissertation examines in detail the taphonomic histories at PP13B and Blombos, including fragmentation, the relative contributions of human and non-human bone accumulators, and density-mediated destruction. With these factors understood and controlled for, evaluations of MSA hunting ability, transport decisions, and carcass processing strategies are made from these sites and at DK1 using both standard zooarchaeological measures and new methods for reconstructing these behaviors from iv fossil collections. These analyses reveal that MSA hominins were adept hunters with a prey focus on large ungulates but who also opportunistically exploited smaller ungulates, tortoises, and small mammals. There is a great deal of variability in how ungulates of all body sizes were processed and transported, but at all sites there is an intensive use of all animal resources, including bone grease, and an emphasis on the filleting of meat from shafts.