Shrouded in 'freezingly cold mist': multi-domain human responses to Last Glacial Maximum cooling in highland Lesotho, southern Africa

Brian A. Stewart*^{†1,2,3}, Kyra R. Pazan¹, Sam Challis³, Peter J. Mitchell^{3,4}, and Genevieve Dewar⁵

¹Department of Anthropology, University of Michigan, Ann Arbor, USA – États-Unis ²Museum of Anthropological Archaeology, University of Michigan, Ann Arbor, USA – États-Unis ³Rock Art Research Institute, School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, Johannesburg, South Africa – Afrique du Sud ⁴School of Archaeology, University of Oxford, Oxford, UK – Royaume-Uni ⁵Department of Anthropology, University of Toronto Scarborough, Scarborough, Canada – Canada

Résumé

With the bulk of its landmass situated between the tropics of Capricorn and Cancer, there are few places in Africa with low ambient temperatures. But the continent's archipelago of high mountain systems and volcanoes are obvious exceptions. As humans began exploiting afromontane and afroalpine environments on more than a sporadic basis, they were obliged to make strategic choices not often faced by foragers in other African ecosystems. This would have been especially true at the outset of glacial and stadial phases, when mean annual temperatures in mountain zones dropped, primary productivity plummeted, and vegetation belts descended in altitude. In southern Africa's highest mountain system – the Maloti-Drakensberg Mountains – the Last Glacial Maximum (LGM) is one of the only times of the past _~100,000 years that saw region mostly or wholly abandoned. Ahead of this apparent population crash, we see pronounced changes across a range of technological, subsistence, and social networking indicators that speak to afromontane foragers trying to come grips with their predicament, often in innovative ways. Here, we present zooarchaeological, lithic and social technological, and multi-proxy palaeoenvironmental data spanning the LGM from Melikane and Schonghong, two key Late Pleistocene sequences in the mountain core of highland Lesotho. Our integrated datasets speak to intensification behaviors across a range of cultural domains, coupled with territorial and social network reorganizations, before such adaptive responses ultimately failed afromontane foragers altogether. We close by speculating on possible knock-on implications for attendant impacts to local hunter-gatherer belief systems.

Mots-Clés: 'freezingly cold mist', Last Glacial Maximum cooling, highland Lesotho, southern Africa

*Intervenant

 $^{^{\}dagger}$ Auteur correspondant: bastew@umich.edu