

How to deal with homogeneous stratigraphies: excavation, sampling, and analysis strategies at Umhlatuzana Rockshelter, Kwazulu-Natal, South Africa

Dusseldorp, G.L.; Huisman, H.; Karkanas, P.; Reidsma, F.H.; Sifogeorgaki, I.

Citation

Dusseldorp, G. L., Huisman, H., Karkanas, P., Reidsma, F. H., & Sifogeorgaki, I. (2023). How to deal with homogeneous stratigraphies: excavation, sampling, and analysis strategies at Umhlatuzana Rockshelter, Kwazulu-Natal, South Africa. In . Retrieved from https://hdl.handle.net/1887/3704833

Version: Not Applicable (or Unknown)

License: <u>Leiden University Non-exclusive license</u>

Downloaded from: <u>https://hdl.handle.net/1887/3704833</u>

Note: To cite this publication please use the final published version (if applicable).

culture sphere. We consider how Koken's position on the geographic periphery of two distinct environmental-cultural zones—the steppe and Inner Asian Mountain Corridor—impacted ideological practice and the materiality of ritual behavior. Interdisciplinary evidence from Koken contributes to broader conversations on how pastoral communities can be both deeply invested in a localized landscape, and embedded in long-distance networks. * Images of human remains may appear in this presentation.

Đuric, Dragana [240] see Jovanovic, Mihailo

Dusseldorp, Gerrit (Leiden University; University of Johannesburg), Hans Huisman (Cultural Heritage Agency of the Netherlands), Panagiotis Karkanas (Malcolm H. Wiener Laboratory for Archaeological Science), Femke Reidsma (Leiden University) and Irini Sifogeorgaki (Leiden University)

[159]

How to Deal with Homogeneous Stratigraphies: Excavation, Sampling, and Analysis Strategies at Umhlatuzana Rockshelter, Kwazulu-Natal, South Africa

To ensure proper context control for archaeological samples, it is crucial that excavations determine and, where possible, follow the natural stratigraphic subdivisions in a sedimentary sequence. In cases with a single, unchanging source of sedimentary input, this may pose challenges. We present our strategies to deal with a >2 m deep homogeneous Pleistocene stratigraphy at Umhlatuzana rockshelter in South Africa, yielding archaeological remains from the Middle Stone Age. The site was originally excavated during a rescue project in 5–10 cm deep artificial spits for lack of visible stratigraphy. We revisited the shelter in 2018 and 2019. We integrate current standard practice such as piece-plotting archaeological materials with digital methods such as cluster analysis and geoarchaeological analyses (e.g., micromorphology, sedimentological analyses, geochemical analyses) to track the different sources of sedimentary input. We also develop an intensive sediment sampling strategy to illuminate geochemical variation within the sequence and postdepositional alterations affecting preservation conditions. We manage to reconstruct a natural stratigraphy of the site combining these methodologies, resulting in a radically changed understanding of the stratigraphy, depositional environment, and mechanisms of postdepositional disturbance.

Dusseldorp, Gerrit [171] see Schmid, Viola

Dussol, Lydie (Université Côte d'Azur), Kenneth Hirth (Penn State University) and Timothy Scheffler (University of Hawaii, Hilo)

Holocene Vegetation Changes and Fuel Use in the Honduran Highlands: The Anthracological Sequence of El Gigante Rockshelter (11,000–1000 BP)

Holocene pollen sequences have highlighted several episodes of vegetation opening in Central America since the Archaic period, which have often been related to the dispersal of nomadic slash-and-burn agriculturalists from the Central Mexican Highlands. However, few archaeobotanical data from archaeological sites have been available to date to examine woodland changes in relation to prehistoric occupations in the Highlands. El Gigante Rockshelter, Honduras, was occupied in intermittent phases over the last 11 millennia according to excavations conducted in 2001–2002 by Pennsylvania State University. The anthracological (charcoal) analysis of this long and well-established sequence allows us to explore changes in the fuel economy of these populations as a result of climatic, ecological, economic, and cultural changes from the Paleoindian to the Classic period. This unique case study helps us understand the processes of anthropogenic landscapes construction in prehistoric Mesoamerica.

Dussubieux, Laure (Field Museum of Natural History) [210]

Chair