

## References

### Altpaläolithikum

EGELAND 2018

Charles P. Egeland, Manuel Domínguez-Rodrigo, Travis Rayne Pickering, Colin G. Menter & Jason L. Heaton, *Hominin skeletal part abundances and claims of deliberate disposal of corpses in the Middle Pleistocene*. *PNAS* **115** (2018), 4601–4606.

[pnas115-04601-Supplement.pdf](#)

Humans are set apart from other organisms by the realization of their own mortality. Thus, determining the prehistoric emergence of this capacity is of significant interest to understanding the uniqueness of the human animal. Tracing that capacity chronologically is possible through archaeological investigations that focus on physical markers that reflect “mortality salience.” Among these markers is the deliberate and culturally mediated disposal of corpses. Some Neandertal bone assemblages are among the earliest reasonable claims for the deliberate disposal of hominins, but even these are vigorously debated. More dramatic assertions center on the Middle Pleistocene sites of Sima de los Huesos (SH, Spain) and the Dinaledi Chamber (DC, South Africa), where the remains of multiple hominin individuals were found in deep caves, and under reported taphonomic circumstances that seem to discount the possibility that nonhominin actors and processes contributed to their formation. These claims, with significant implications for charting the evolution of the “human condition,” deserve scrutiny. We test these assertions through machine-learning analyses of hominin skeletal part representation in the SH and DC assemblages. Our results indicate that nonanthropogenic agents and abiotic processes cannot yet be ruled out as significant contributors to the ultimate condition of both collections. This finding does not falsify hypotheses of deliberate disposal for the SH and DC corpses, but does indicate that the data also support partially or completely nonanthropogenic formational histories.

**Keywords:** mortality salience | mortuary behavior | taphonomy | skeletal part frequencies | machine learning

**Significance:** Awareness of self-mortality is a uniquely human capacity. Ritualistic treatment of corpses reflects this realization. Two large assemblages of fossil human bones from Spain (Sima de los Huesos, SH) and South Africa (Dinaledi Chamber, DC) are offered as the earliest evidence for mortuary behavior. This interpretation implies that humans had developed a sense of mortal transience by  $\approx 600,000$  to 300,000 years ago. Machinelearning statistical analyses of the skeletal part representation data upon which hypotheses of deliberate disposal of corpses at SH and DC are based fail to falsify—but also do not provide unequivocal support for—those hypotheses. We thus argue that it is premature to assert that SH and DC shed particular light on the development of the “human condition.”

### Neolithikum

BRACE 2018

Selina Brace et al., *Population Replacement in Early Neolithic Britain*. *bioRxiv* (2018), preprint, 1–18. DOI:10.1101/267443.

Selina Brace, Yoan Diekmann, Thomas J. Booth, Zuzana Faltyskova, Nadin Rohland, Swapan Mallick, Matthew Ferry, Megan Michel, Jonas Oppenheimer, Nasreen Broomandkhoshbacht, Kristin Stewardson, Susan Walsh, Manfred Kayser, Rick Schulting, Oliver E. Craig, Alison Sheridan, Mike Parker Pearson, Chris Stringer, David Reich, Mark G. Thomas & Ian Barnes

The roles of migration, admixture and acculturation in the European transition to farming have been debated for over 100 years. Genome-wide ancient DNA studies indicate predominantly Anatolian ancestry for continental Neolithic farmers, but also variable admixture with local Mesolithic hunter-gatherers<sup>1-9</sup>. Neolithic cultures first appear in Britain c. 6000 years ago (kBP), a millennium after they appear in adjacent areas of northwestern continental Europe. However, the pattern and process of the British Neolithic transition remains unclear<sup>10-15</sup>. We assembled genome-wide data from six Mesolithic and 67 Neolithic individuals found in Britain, dating from 10.5-4.5 kBP, a dataset that includes 22 newly reported individuals and the first genomic data from British Mesolithic hunter-gatherers. Our analyses reveals persistent genetic affinities between Mesolithic British and Western European hunter-gatherers over a period spanning Britain's separation from continental Europe. We find overwhelming support for agriculture being introduced by incoming continental farmers, with small and geographically structured levels of additional hunter-gatherer introgression. We find genetic affinity between British and Iberian Neolithic populations indicating that British Neolithic people derived much of their ancestry from Anatolian farmers who originally followed the Mediterranean route of dispersal and likely entered Britain from northwestern mainland Europe.

#### CLARE 2016

Lee Clare & Bernhard Weninger, *Early Warfare and its Contribution to Neolithisation and Dispersal of First Farming Communities in Anatolia*. In: MARKUS REINDEL, KARIN BARTL, FRIEDRICH LÜTH & NORBERT BENECKE (Hrsg.), *Palaeoenvironment and the Development of Early Settlements, Proceedings Palaeoenvironment (Şanlıurfa/Turkey, 5-7 Oct. 2012) and Early Settlement (Aqaba/Jordan, 12-15 Nov. 2013)*. Von der Sesshaftigkeit zur komplexen Gesellschaft: Siedlung, Wirtschaft, Umwelt, Kult 14 ([Rahden 2016](#)), 29-49.

This paper focuses on the influence of conflict and violence on Neolithisation and Neolithic dispersal in the Eastern Mediterranean. While the transition from hunter-gathering to Neolithic economies in the early Holocene is sometimes regarded as solely practicable at times of peace and harmonious relations between communities, we ask whether the subsequent dispersal of Neolithic lifeways over tens of hundreds of kilometres in the 7th millennium calBC was “facilitated” or “accelerated” by climate-induced inter-group violence. We conclude that although early warfare may have become more frequent among Neolithic societies at this time, it is unlikely that it played any significant role in contemporaneous expansion processes.