PREFACE

Volker Hochschild

Inst. of Geography, Univ. of Tübingen, Rümelinstr. 19-23, 72070 Tübingen, Germany
The Role of Culture in Early Expansions of Humans (ROCEEH), Heidelberg Academy of Sciences and Humanities, Hölderlinstr. 12, 72074 Tübingen, Germany

This digital publication brings together presentations held at the Human Origins – Digital Future (HODiF 2020) conference, which was organized by The Role of Culture in Early Expansions of Humans (ROCEEH) under the sponsorship of the Heidelberg Academy of Sciences and Humanities. With teams in Frankfurt and Tübingen, this long-term project has created a comprehensive database containing information about archaeology, paleoanthropology, paleontology, paleobotany and paleogeography to study the prehistory of the hominins who migrated out of Africa into Eurasia. We call our web-based tool the ROCEEH Out of Africa Database (ROAD). Originally, we planned the HODiF 2020 conference to take place at the Senckenberg Research Institute in Frankfurt from 27–31 July 2020, but had to transform the event into an online format because of the CoVID-19 pandemic. Although we were at first unsure about the digital format, the conference turned out to be a success; the interpersonal contact it fostered during the pandemic was greatly appreciated. We scheduled the conference for two hours each weekday during the Middle European afternoons, enabling participants from as far as Japan and the USA to join at convenient times.

Today, challenges for all databases include the increasing amount of digital data available, web-based accessibility, the ability to maintain data beyond the period of project funding, and long-term storage. For these reasons, we split the conference into sessions about Databases, Methods, Applications, Products and Perspectives. I will not list examples of the papers given here, but instead focus on the major outcomes we gained from the conference. There was overall agreement about the importance of implementing the FAIR principles, which state that data should be findable, accessible, interoperable and reusable. In addition to the ROAD archaeological database there are numerous globally recognized examples of archaeological, paleontological and paleoecological databases and search portals such as ARIADNEplus, NEOTOMA, NQMDB, PaleoCore, Throughput, and many more. These databases face similar problems of uncertainty in their future concerning longevity and ontologies. From a methodological perspective, reverse engineering, data mining and machine learning approaches showed their tremendous potential for applications in archaeology. Finally, the "linked open data" approach seemed to be one of the most promising future directions in terms of finding and facilitating shared access to archaeological data.

Hochschild, V. (2022). Preface. In A. W. Kandel, M. N. Haidle, & C. Sommer (Eds.), *Human Origins – Digital Future: An International Conference about the Future of Archaeological and Paleoanthropological Databases* (pp. 4-5). Propylaeum, Heidelberg. DOI: https://doi.org/10.11588/propylaeum.882.c13430

Another major success of the conference was the strengthening of collaborations. In addition to further bilateral meetings, I hope that ROCEEH will organize a follow-up conference so we can all meet in person in the future. Sadly, Eric Grimm from the University of Minnesota passed away during the preparation of this edition, so we keep him in our memory. Finally, I would like to thank Maria Malina for the faultless technical support during the week, Miriam Haidle for summarizing the results daily in Mind Maps, as well as Angela Bruch, Christine Hertler, Claudia Groth, Zara Kanaeva, Andrew Kandel, Christian Sommer and Michael Bolus for session chairing and organization.

I hope you will enjoy hearing these papers covering a wide range of very interesting topics.

Volker Hochschild

July 2022