

# Table of Contents

## Volume Abstract

<i>Andrew W. Kandel, Miriam N. Haidle &amp; Christian Sommer</i> Human Origins – Digital Future: An International Conference about the Future of Archaeological and Paleoanthropological Databases .....	2
--	---

## Preface

<i>Volker Hochschild</i> .....	4
--------------------------------	---

## Introduction

Figure 1: Mind map of the entire conference .....	8
<i>Andrew W. Kandel, Miriam N. Haidle &amp; Christian Sommer</i> Overview of the Conference: Human Origins – Digital Future .....	9

## Chapter I – Databases

Figure 2: Mind map of session 1 .....	18
<i>Eric C. Grimm &amp; John W. Williams</i> The Neotoma Paleoecology Database: Shared Standards, Community Curation, and Active Reanalysis of Paleo Data .....	19
<i>Andrew W. Kandel &amp; the ROCEEH Team</i> A Beginner’s Guide to the ROCEEH Out of Africa Database.....	21
<i>Franco Niccolucci</i> A Data-Centric Archaeological Research Methodology: Opportunities and Risks.....	22
<i>Christopher Nicholson</i> Challenges of Archiving Complex Archaeological Datasets for Reuse: An Example from the American Southwest .....	23
<i>Jesús Rodríguez</i> The Specific Problems of Palaeontological Databases and How NQMDB Deals with Them .....	25

## Chapter II – Methods

Figure 3: Mind map of session 2 .....	28
<i>Juan A. Barceló</i> Solving Archaeological Inverse Problems – A Reverse Engineering Approach .....	29
<i>Christian Sommer &amp; Volker Hochschild</i> New Perspectives for Data Exploration in ROAD .....	30
<i>Alice J. Williams</i> How Well Does the Circumscription Theory Explain the Formation of Complex Societies? Using Agent-Based Models to Evaluate Archaeological Theories against Existing Archaeological Data .....	32
<i>Christian Willmes</i> PaleoMaps – Creating, Collecting and Compiling Geospatial Palaeoenvironment Data for Culture-Environment-Interaction Modeling Applications .....	34

## Chapter III – Applications

Figure 4: Mind map of session 3 .....	38
<i>Rimtautas Dapschauskas, Matthias Göden, Christian Sommer &amp; Andrew W. Kandel</i> Using a Georelational Spatial Information System to Examine Questions about the Large-Scale Development of Cultural Behavior in Human Evolution: The Example of Ochre in the African Middle Stone Age .....	39
<i>Ewa Dutkiewicz</i> Structuring the Unstructured: Databases for Paleolithic Art .....	41
<i>Christine Hertler &amp; the ROCEEH Team</i> The Map Module for the ROAD Database.....	43
<i>Ericson Hölzchen, Christian Sommer &amp; Christine Hertler</i> NeMo – An Agent-Based Model for Simulating Neanderthal Mobility.....	45
<i>Zara Kanaeva &amp; the ROCEEH Team</i> ROAD Summary Data Sheet – A Publication and Data Sharing Tool.....	47
<i>Ana Mateos, Christian Willmes &amp; Jesús Rodríguez</i> Matching Datasets and Palaeoenvironment to Frame Human Palaeoecology in Europe around MIS 11 .....	48

<i>Shannon P. McPherron</i> Is a Decentralized, Non-Standardized Approach to Data Sharing in Archaeology Good Enough? .....	50
<i>Mika R. Puspaningrum, Christine Hertler, Angela A. Bruch, Iwan P. Anwar, Ericson Hölzchen, Susanne Krüger, Agus T. Hascaryo &amp; Jan-Olaf Reschke</i> Living in Sangiran.....	51
<i>Denné Reed</i> Paleo Core – A Platform for Data Integration in Paleoanthropology.....	53
<i>Manuel Will, Mario Krapp, Jay T. Stock &amp; Andrea Manica</i> Combining Paleoenvironmental and Paleoanthropological Datasets to Understand Human Brain and Body Size Evolution .....	54
<i>Andreas Zimmermann &amp; Isabell Schmidt</i> Prehistoric Population Dynamics – Extended .....	56

#### Chapter IV – Products

Figure 5: Mind map of session 4 .....	60
<i>Wolfgang Börner</i> Wien Kulturgut: Web Portal for the Contribution of Archaeological Data from the Paleolithic until Today .....	61
<i>Liane Giemsch &amp; Tanja Neumann</i> METAhub Frankfurt – A Database as Link Between Museum Cultures and Performative Art ....	62
<i>Yasuhisa Kondo</i> Interdisciplinary Challenges of the Cultural History of PaleoAsia Project and its Database Development: Lessons Learnt .....	63
<i>Matthias Lang, Philippe Kluge, Colin Emonds &amp; Vinzenz Rosenkranz</i> Spacialist – A Virtual Research Environment for the Spatial Humanities .....	65

## Chapter V – Perspectives (as Interviews)

Figure 6: Mind map of session 5 ..... 68

*Sarah Whitcher Kansa*

Sustaining Open Data: Lessons from Open Context ..... 69

*Peter McKeague*

Mapping Our Heritage: Towards a Sustainable Future for Digital Spatial Information  
and Technologies in European Archaeological Heritage Management ..... 70

*Julian D. Richards*

The FAIR Principles in Archaeology ..... 72

*Dieta Svoboda-Baas*

Research Data Infrastructure – Securing Long-term Storage and Use ..... 73

## Appendix A. Digital Resources

Table 1: List of digital resources discussed during conference ..... 76

## Appendix B. List of Authors

Table 2: List of authors contributing to this volume ..... 78

## Appendix C. Participants List

Table 3: List of delegates attending the conference ..... 84