

# Symposium: Diversifying Networks How Culture Infuses the Environment

October 8 - 10, 2025 Senckenberg Research Institute, Frankfurt am Main











### **Second Circular**

# Diversifying Networks. How Culture Infuses the Environment

International Symposium at the Senckenberg Research Institute, Frankfurt/Main, October 8 – 10, 2025

Organizer: "The Role of Culture in Early Expansions of Humans" (ROCEEH)

Research center of the Heidelberg Academy of Sciences and Humanities at the Senckenberg Research Institute and the University of Tübingen

Venue: Senckenberg Research Institute, Senckenberganlage 25, 60325 Frankfurt/M.

Entrance: Robert-Mayer-Str. 2, 60325 Frankfurt/M.

We do not charge a conference fee.

If you would like to participate, please contact claudia.groth@senckenberg.de.

Hominins are exceptional constructors of their ecosystems. Over the course of human evolution, their achievements increasingly impacted the environment on a global scale, transforming the conditions for development and evolution in unprecedented ways. Like some animal species, hominins used tools to access resources—but they did so on a much broader scale. They shifted their role in the carnivore guild from small game catchers and active scavengers to big game hunters, thus providing food for other consumers. They expanded the diversity of available food resources through the use of new technologies. They utilized raw materials that their ancestors had previously ignored. They enriched their resource space with a wide array of artifacts, which became part of the learning environments for future generations. They diversified their social relationships and developed new forms of complex interaction. Cultural achievements enabled them to penetrate areas that were previously unappealing or inaccessible. The ecological consequences of this expansion were unpredictable.

In doing so, hominins created new conditions for individual performance and development, for social learning, and for evolutionary processes—not only within their own species but also for synanthropic niches of other species.

With the ROCEEH Symposium "Diversifying Networks – How Culture Infuses the Environment", we aim to explore and discuss the interplay between cultural achievements and environmental aspects. How has the interconnection between hominins and their environment evolved? What impact did hominins, through their cultural innovations, have on their surroundings and their resource spaces? How did these resource spaces change—and how, in turn, did these changes affect the evolutionary path of hominins and their cultural accomplishments?

At this international conference, we aim to bring together researchers who examine, from various perspectives, the material, social, and ecological aspects of hominin achievements, their macro- and micro-environments, and the mutual dependencies that have shaped human evolution. By jointly assessing the current state of knowledge, we hope to gain a more comprehensive and diachronic understanding of the diversifying ecological networks within which human evolution has taken place.

# Diversifying Networks. How Culture Infuses the Environment

International Symposium 8-10 October 2025, Frankfurt/Main

### **Programm**

16:00-17:00 Arrival and Registration

17:00-17:15 Friedemann Schrenk, Nicholas J. Conard: Opening of the symposium and

welcome address

17:15-17:45 Miriam N. Haidle: Introduction

KEYNOTE

18:00-19:00 Annette Kehnel: Diversifying Resources, Sustainable Economy and Human

Resilience

19:00 Ice breaker

### Thursday, 9 October 2025

mursuay, 5 October 2025		
SESSION 1 - How Humans Shape Themselves and Their Environment		
9:00-9:30	Karen Hardy: Stringing It All Together. The Social, Technological and	
	Functional Roles of Plants as Key Drivers in Human Evolution.	
9:30-10:00	Ramiro March: Reconstructing the History of Fire, Control and Application of	
	Thermal Energy and Its Technical, Social, Symbolic and Environmental	
	Consequences	
10:00-10:30	Sabine Gaudzinski-Windheuser and Lutz Kindler: Neanderthal Ecology at	
	Neumark-Nord (Germany)	
BREAK 10:30-11:00		

11:00-11:30	Jessica Thompson: The Coevolution of Foragers and Landscapes in the
	Woodland Belt of Southern-Central Africa.
11:30-11:45	Discussion (Chair: Angela Bruch)

## SESSION 2 - Cultural Environments as Niches for Other Species

11:45-12:15	Shumon T. Hussain: Coupled Human-Nonhuman Feedback Systems of the
	Deep Past
12:00-12:45	Charles Stépanoff: Hybrid Communities. Biosocial Approaches to
	Domestication and Other Trans-Species Relationships

### LUNCH 12:45-14:00

14:00-14:30	Anaïs Vignoles: The Influence of Climate Variability on the Gravettian
	Cultural Diversity and Evolution
14:30-14:45	Discussion (Chair: Jesper Borre Pedersen)

14:45-15:15	Nataša Djurdjevac Conrad: Agent-Based Modeling of Hunter-Gatherer Societies and Their Cultural Evolution	
BREAK 15:15-15:45		
15:45-16:15	Fiona Coward: New Materialism Meets Niche Construction: Exploring Complementarities Between Evolutionary Theory and Traditional Ontologies.	
16:15-16:45	Miriam N. Haidle: Communities of Practice as Resource Space	
16:45-17:00	Discussion (Chair: Andrew Kandel)	
18:00 – 19:00	City Tour	
19:30	Conference Dinner	
Friday, 10 October 2025		
-	ng New Spaces: Hominin Mobility	
9:00-9:30	Matt Grove: The Generation and Maintenance of Cultural Diversity in	
0.20 10.00	Structured Populations  Mixing Compine Touring the Populations The Fouring the Populations In Section 1.	
9:30-10:00	Miriam Garcia Capin: Taming the Darkness. The Earliest Visual Culture in Cantabrian Caves	
10:00-10:30	Iwona Sobkowiak-Tabaka: Scaling Late Palaeolithic Mobility in the North	
	European Plain	
	BREAK 10:30-11:00	
11:00-11:30	Jesper Borre Pedersen, Peter Yaworsky, and Felix Riede: Cultural Packages and Landscape Memory – Discussing the Divergent Fates of LRJ and Aurignacian Expansions	
11:30-11:45	Discussion (Chair: Christine Hertler)	
SESSION 5 – Mode	ling Diversifying Networks	
11:45-12:15	Christine Hertler, Miriam N. Haidle, Ana Mateos, and Jesús Rodríguez:	
	Cut&Run – Measuring the Advantages of Tool-Supported Scavenging	
12:15-12:45	Jesus Rodriguez: Hominins as facultative scavengers - Biotic Interactions	
	and Ecological Constraints	
	LUNCH 12:45-14:00	
14:00-14:30	Ana Mateos: Are Hominins Equipped to Be Efficient Scavengers?	
14:30-15:00	Jan-Olaf Reschke, Carolina Cucart-Mora, Kamilla Lomborg, Matt Grove,	
	Christine Hertler, and Marie-Hélène Moncel: Surviving in the Pleistocene	
15.00 45.45	Guadix-Baza Basin – From Small-Scale Models to Large-Scale Insights	
15:00-15:15	Discussion (Chair: Christian Sommer)	
	BREAK 15:15-15:45	

SESSION 3 - Adaptations in Sociality Changed the Rules for Interaction

# PUTTING THE PIECES TOGETHER

15:45-16:30 Final Discussion (Chair: Andrew Kandel)