

Human Dispersals in the Late Pleistocene Interdisciplinary Approaches Towards Understanding the Worldwide Expansion of *Homo sapiens*

Organised by Michael Petraglia
Max Planck Institute for the Science of Human History
November 8-10, 2016

Homo sapiens emerged in Africa approximately 200,000 years ago. The story of our species' subsequent dispersal out of Africa and expansion across the globe remains an enduring and contentious topic in human evolutionary studies. Much debate revolves around the timing, number and routes of major human dispersals out of Africa.

New research in archaeology, genetics and palaeoenvironmental studies is changing our understanding of these processes of early human expansion and migration. Increasing information is being gathered about environmental change in key terrestrial settings across northern and eastern Africa and Eurasia. Fossil, genetic and archaeological research is demonstrating the complicated nature of Out of Africa expansions, inter-species interactions, and human survivorship in changing environments.

The aim of this conference is to examine new information on the relationship between environmental variability, demographic change, and human adaptations, and to explore how these multidisciplinary datasets can be better integrated to more effectively investigate, model and understand early human dispersals.

The new Department of Archaeology at the Max Planck Institute for the Science of Human History in Jena, Germany is dedicated to examining our species' past over the long term and from a multidisciplinary perspective. To celebrate the opening of our Department, we plan to bring together a diverse community of international researchers to discuss, debate and explore our species' evolutionary history.

Format: Our goal is to have as much discussion and interaction as possible. Please keep talks to a maximum **20 minutes**, allowing at least **10 minutes** for questions and discussion after each presentation. We will closely monitor the timings in the interests of discussion!

IN THE LATE PLEISTOCENE

Interdisciplinary Approaches Towards Understanding the Worldwide Expansion of Homo sapiens



Monday, 7 November

Speakers arrive, informal gatherings at hotel.

DAY 1 Tuesday, 8 November

08:00-9:00

Registration

09:00-09:05

Welcome

Nicole Boivin (Max Planck, Jena)

09:05-09:30

Introduction. "Out of Africa": single or multiple dispersals? Michael Petraglia (Max Planck, Jena)

09:30-09:50

Svante Pääbo (Max Planck, Leipzig) Genetic interactions between modern and archaic humans

10:00 Coffee/Tea

Late Pleistocene Origins

Chair: Russell Gray (Max Planck, Jena)

10:30-10:50

Alison Brooks (George Washington University, USA) Dispersals and reversals: the Eastern Africa evidence from the Late Pleistocene

11:00-11:20

Andrew Cohen (University of Arizona, USA) Comparative Mid-Late Pleistocene environmental records from Africa, Eastern Europe and Western Asia covering the last 400ka and their implications for human dispersal

11:30-11:50

John Hawks (University of Wisconsin-Madison, USA) Late Pleistocene African population diversity and its relevance for modern human dispersals

12:00-12:20

Shannon McPherron (Max Planck, Leipzig) The age of the Homo sapiens fossils from Jebel Irhoud (Morocco) and the origins of the Middle Stone Age

12:30-13:00

Interdisciplinary Approaches Towards Understanding



13:00 Catered Lunch at Institute

Background to Dispersals

Chair: Johannes Krause (Max Planck, Jena)

14:00-14:20

Nicole Boivin (Max Planck, Jena) and Ceri Shipton (University of Cambridge, UK)

Panga ya Saidi: Insights from a new archaeological and palaeoecological cave sequence from the coastal forest of Kenya

14:30-14:50

Achim Brauer (University of Potsdam, Germany)
Rapid climate and environment changes of the last glacial-interglacial cycle
recorded in lake sediments

15:00-15:20

Philipp Gunz (Max Planck, Leipzig)

Evolution and development of the modern human face and brain

15:30 Coffee/Tea

16:00-16:20

Rainer Grün (Griffith University, Australia)

Microanalytical approaches for dating human fossils

16:30-16:50

Nick Drake (King's College, London, UK)

<u>Late Pleistocene environment and hominin dispersals in North Africa</u>

17:00-17:30

Discussion

18:00 Reception at Phyletische Museum, Jena Dinner in Jena

DAY 2 Wednesday, 9 November

Staging Dispersals

Chair: Susan Trumbore (Max Planck, Jena)

09:00-09:20

Jürgen Richter (University of Cologne, Germany) "The Archaeology of Migrations": The challenging case of Homo sapiens

09:30-09:50

Eleanor Scerri (University of Oxford, UK)

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Inferring Late Pleistocene hominin demography in the Green Sahara

10:00-10:20

Dominik Fleitmann (University of Reading, UK)
Timing and Nature of Pleistocene pluvial periods in Southern Arabia

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10:30 Coffee/Tea

11:00-11:20

Huw Groucutt (University of Oxford, UK)

An Arabian perspective on the dispersal of Homo sapiens out of Africa

11:30-11:50

Jed Kaplan (University of Lausanne, Switzerland)
Numerical modeling of hunter-gatherer population, dispersal, and influence on the environment in the Late Pleistocene

12:00-12:20

Katerina Harvati (University of Tubingen, Germany)

Early modern human dispersals: testing hypotheses using modern human skeletal variation

12:30-13:00 *Discussion*

13:00 Catered Lunch at Institute

Eurasian Dispersals

Chair: Nicholas Conard (University of Tubingen, Germany)

13:45-14:05

Katerina Douka (University of Oxford, UK)
Dating human dispersals and extinctions across Eurasia using advanced chronometric approaches

14:15-14:35

Andrea Manica (University of Cambridge, UK)

The role of climate in shaping human demography and migration during out-of Africa expansion

14:45-15:05

Mikhail Shunkov (Russian Academy of Sciences, Russia) Recent discoveries at Denisova Cave and dispersal of the genus Homo in Asia

15:15 Coffee/Tea

15:45-16:05
Gao Xing (Chinese Academy of Sciences, China)

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Human dispersal and adaptation in the Late Pleistocene in North China

16:15-16:35

Andrey Krivoshapkin (Novosibirsk State University, Russia)
Middle to Upper Paleolithic transition in western Central Asia and dispersal of modern humans

16:45-17:15

Discussion

17:15 Bus to Museum für Ur- und Frühgeschichte Thüringens (Weimar)
Dinner in Weimar

DAY 3

Thursday, 10 November

Improving the Story of Dispersal

Chair: Patrick Roberts (Max Planck, Jena)

09:00-09:20

Stephan Schiffels (Max Planck, Jena)

Studying fine-scale human separation and demographic history from modern and ancient genome sequences

09:30-09:50

Thomas Higham (University of Oxford, UK)

Identifying human fossil remains from Pleistocene Eurasia using collagen
fingerprinting

10:00 Coffee/Tea

Filling Up the Earth

10:30-10:50

Nicholas Conard (University of Tubingen, Germany)

The last Neanderthals and the spread of modern humans into the Upper Danube drainage

11:00-11:20

Johannes Krause (Max Planck, Jena)

Ice age history of Europe: Genome wide studies of early modern humans

11:30-11:50

Sabine Gaudzinski-Windheuser and Olaf Jöris (MONREPOS, Germany) Society and dispersal – the geographic expansion of Late Glacial societies

12:00-12:20

Yousuke Kaifu (National Museum of Nature and Science, Japan)

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How Palaeolithic people crossed the ocean to the Japanese Islands > 30,000 years ago: An experimental approach

12:30-13:00 *Discussion*

13:00 Catered Lunch at Institute

Filling Up the Earth (cont'd)

Chair: Eleanor Scerri (University of Oxford, UK)

14:00-14:20

Mark Stoneking (Max Planck, Leipzig)

Genetic perspectives on the colonisation of Sahul

14:30-14:50

Sue O'Connor, Julien Louys and Shimona Kealy
(Australian National University, Australia)

Modern human colonisation of Wallacea: results from Alor, Pantar and Kisar Islands

15:00-15:20

Julien Louys (Australian National University, Australia)

The long road to the green south: the Pleistocene Sumatran record and hominin dispersals in Southeast Asia

15:40-16:00

Patrick Roberts (Max Planck, Jena)

Human occupation of rainforests in the Late Pleistocene

16:10 Coffee/Tea

16:40-17:40

- i) Discussion
- ii) Future Prospects

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