

## References

### Afrika

OSLISLY 2013

Richard Oslisly, Lee White, Ilham Bentaleb, Charly Favier, Michel Fontugne, Jean-François Gillet & David Sebag, *Climatic and cultural changes in the west Congo Basin forests over the past 5000 years*. *Phil. Trans. Royal Society B* **368** (2013), 20120304.

Central Africa includes the world's second largest rainforest block. The ecology of the region remains poorly understood, as does its vegetation and archaeological history. However, over the past 20 years, multidisciplinary scientific programmes have enhanced knowledge of old human presence and palaeoenvironments in the forestry block of Central Africa. This first regional synthesis documents significant cultural changes over the past five millennia and describes how they are linked to climate. It is now well documented that climatic conditions in the African tropics underwent significant changes throughout this period and here we demonstrate that corresponding shifts in human demography have had a strong influence on the forests. The most influential event was the decline of the strong African monsoon in the Late Holocene, resulting in serious disturbance of the forest block around 3500 BP. During the same period, populations from the north settled in the forest zone; they mastered new technologies such as pottery and fabrication of polished stone tools, and seem to have practised agriculture. The opening up of forests from 2500 BP favoured the arrival of metallurgist populations that impacted the forest. During this long period (2500–1400 BP), a remarkable increase of archaeological sites is an indication of a demographic explosion of metallurgist populations. Paradoxically, we have found evidence of pearl millet (*Pennisetum glaucum*) cultivation in the forest around 2200 BP, implying a more arid context. While Early Iron Age sites (prior to 1400 BP) and recent pre-colonial sites (two to eight centuries BP) are abundant, the period between 1600 and 1000 BP is characterized by a sharp decrease in human settlements, with a population crash between 1300 and 1000 BP over a large part of Central Africa. It is only in the eleventh century that new populations of metallurgists settled into the forest block. In this paper, we analyse the spatial and temporal distribution of 328 archaeological sites that have been reliably radiocarbon dated. The results allow us to piece together changes in the relationships between human populations and the environments in which they lived. On this basis, we discuss interactions between humans, climate and vegetation during the past five millennia and the implications of the absence of people from the landscape over three centuries. We go on to discuss modern vegetation patterns and African forest conservation in the light of these events.

Keywords: Holocene | archaeology | Congo–Ogooué basin | palaeoenvironment | climatic change | vegetation

### Aktuell

LEVINE 2017

Phillip B. Levine & Robin McKnight, *Firearms and accidental deaths, Evidence from the aftermath of the Sandy Hook school shooting*. [science](#)

358 (2017), 1324–1328.

Exposure to firearms increased substantially after the December 2012 shooting at Sandy Hook Elementary School in Newtown, Connecticut, where 20 children and 6 adults were killed. Gun sales spiked by 3 million, on the basis of the increase in the number of background checks for firearm purchases. Google searches for buying and cleaning guns increased. We used Vital Statistics mortality data to examine whether a spike in accidental firearm deaths occurred at the same time as the greater exposure to firearms. We also assessed whether the increase in these deaths was larger in those states where the spike in gun sales per capita was larger. We find that an additional 60 deaths overall, including 20 children, resulted from unintentional shootings in the immediate aftermath of Sandy Hook.

SCHIERMEIER 2018

Quirin Schiermeier, *Elsevier grants a reprieve*. [nature 553 \(2018\), 137](#).

It allows German institutions continued journal access.

The nationwide deal sought by scientists includes a open-access option, under which all corresponding authors affiliated with German institutions would be allowed to make their papers free to read and share for anyone in the world. This would be a milestone for global efforts to make the results of publicly funded research immediately and freely available to scientists and the wider public, they say.

## Amerika

MORENO-MAYAR 2018

J. Víctor Moreno-Mayar et al., *Terminal Pleistocene Alaskan genome reveals first founding population of Native Americans*. [nature 553 \(2018\), 203–207](#).

J. Víctor Moreno-Mayar, Ben A. Potter, Lasse Vinner, Matthias Steinrücken, Simon Rasmussen, Jonathan Terhorst, John A. Kamm, Anders Albrechtsen, Anna-Sapfo Malaspinas, Martin Sikora, Joshua D. Reuther, Joel D. Irish, Ripan S. Malhi, Ludovic Orlando, Yun S. Song, Rasmus Nielsen, David J. Meltzer & Eske Willerslev

Despite broad agreement that the Americas were initially populated via Beringia, the land bridge that connected far northeast Asia with northwestern North America during the Pleistocene epoch, when and how the peopling of the Americas occurred remains unresolved<sup>1–5</sup>. Analyses of human remains from Late Pleistocene Alaska are important to resolving the timing and dispersal of these populations. The remains of two infants were recovered at Upward Sun River (USR), and have been dated to around 11.5 thousand years ago (ka)<sup>6</sup>. Here, by sequencing the USR1 genome to an average coverage of approximately 17 times, we show that USR1 is most closely related to Native Americans, but falls basal to all previously sequenced contemporary and ancient Native Americans<sup>1,7,8</sup>. As such, USR1 represents a distinct Ancient Beringian population. Using demographic modelling, we infer that the Ancient Beringian population and ancestors of other Native Americans descended from a single founding population that initially split from East Asians around  $36 \pm 1.5$  ka, with gene flow persisting until around  $25 \pm 1.1$  ka. Gene flow from ancient north Eurasians into all Native Americans took place 25–20 ka, with Ancient Beringians branching off around 22–18.1 ka. Our findings support a long-term genetic structure in ancestral Native Americans, consistent with the Beringian ‘standstill model’<sup>9</sup>. We show that the basal northern

and southern Native American branches, to which all other Native Americans belong, diverged around 17.5–14.6 ka, and that this probably occurred south of the North American ice sheets. We also show that after 11.5 ka, some of the northern Native American populations received gene flow from a Siberian population most closely related to Koryaks, but not Palaeo-Eskimos<sup>1</sup>, Inuits or Kets<sup>10</sup>, and that Native American gene flow into Inuits was through northern and not southern Native American groups<sup>1</sup>. Our findings further suggest that the far-northern North American presence of northern Native Americans is from a back migration that replaced or absorbed the initial founding population of Ancient Beringians.

## Anthropologie

BAE 2017

Christopher J. Bae, Katerina Douka & Michael D. Petraglia, *On the origin of modern humans, Asian perspectives.* [science 358 \(2017\), 1269.](#)

The traditional “out of Africa” model, which posits a dispersal of modern *Homo sapiens* across Eurasia as a single wave at  $\approx 60,000$  years ago and the subsequent replacement of all indigenous populations, is in need of revision. Recent discoveries from archaeology, hominin paleontology, geochronology, genetics, and paleoenvironmental studies have contributed to a better understanding of the Late Pleistocene record in Asia. Important findings highlighted here include growing evidence for multiple dispersals predating 60,000 years ago in regions such as southern and eastern Asia. Modern humans moving into Asia met Neandertals, Denisovans, mid-Pleistocene *Homo*, and possibly *H. floresiensis*, with some degree of interbreeding occurring. These early human dispersals, which left at least some genetic traces in modern populations, indicate that later replacements were not wholesale.

WRANGHAM 2018

Richard W. Wrangham, *Two types of aggression in human evolution.* [PNAS 115 \(2018\), 245–253.](#)

Two major types of aggression, proactive and reactive, are associated with contrasting expression, eliciting factors, neural pathways, development, and function. The distinction is useful for understanding the nature and evolution of human aggression. Compared with many primates, humans have a high propensity for proactive aggression, a trait shared with chimpanzees but not bonobos. By contrast, humans have a low propensity for reactive aggression compared with chimpanzees, and in this respect humans are more bonobo-like. The bimodal classification of human aggression helps solve two important puzzles. First, a long-standing debate about the significance of aggression in human nature is misconceived, because both positions are partly correct. The Hobbes–Huxley position rightly recognizes the high potential for proactive violence, while the Rousseau–Kropotkin position correctly notes the low frequency of reactive aggression. Second, the occurrence of two major types of human aggression solves the execution paradox, concerned with the hypothesized effects of capital punishment on self-domestication in the Pleistocene. The puzzle is that the propensity for aggressive behavior was supposedly reduced as a result of being selected against by capital punishment, but capital punishment is itself an aggressive behavior. Since the aggression used by executioners is proactive, the execution paradox is solved to the extent that the aggressive behavior of which victims were accused was frequently reactive, as has been reported. Both types of killing are important in humans, although proactive killing appears to be typically more frequent in war. The biology of proactive aggression is less well known and merits increased attention.

Keywords: proactive aggression | reactive aggression | human evolution | self-domestication | capital punishment

## Archäologie

STOCKHAMMER 2017

PHILIPP W. STOCKHAMMER & JOSEPH MARAN (Hrsg.), *Appropriating Innovations, Entangled knowledge in Eurasia, 5000–1500 BCE*. (Oxford 2017).

## Bibel

KNOPPERS 2015

Gary N. Knoppers, *The Northern Context of the Law-Code in Deuteronomy*. [Hebrew Bible and Ancient Israel 4 \(2015\), 162–183](#).

It has been long recognized that Deuteronomy evinces a strong emphasis on Israelite identity and the solidarity and kinship shared by all members of the larger Israelite community. My essay deals with the two sets of directions about public liturgies that bracket the central law collection of Deuteronomy (12:2–26:15). Each of these two sets of instructions about Israelite conduct upon entering the land remands the Israelites to the area of Shechem. Both represent, I argue, later additions to an earlier form of Deuteronomy. The first set of instructions (Deut 11:26–30), which preface the introduction (Deut 11:31–12:1) to the central law-code (Deut 12:2–26:15), consists of public pronouncements of blessings and curses validating God’s covenant with Israel, which the Israelites are mandated to deliver on Mt. Gerizim and Mt. Ebal. The second, longer and more complex set of instructions following the conclusion to the law code (Deut 26:16–19) mandates pan-Israelite ceremonies at Mt. Gerizim and Mt. Ebal (Deut 27:1–26). Directions about future public liturgies at Mt. Gerizim and Mt. Ebal frame, therefore, the laws of the covenant, which constitute the heart of the Deuteronomic presentation.

At least equally important, this second set of instructions mandates the inscription of “all the words of this torah” upon large stones and the construction of an altar made of whole stones upon which burnt offerings and offerings of well-being are to be presented on Mt. Gerizim (so SP; MT Mt. Ebal; Deut 27:2–8). My essay argues that Judean and the Samaritan communities within the late Persian and early Hellenistic periods could read the relevance of the altar instructions of Deuteronomy 27 in their own distinctive ways and still lay claim to the authority of the text of Deuteronomy that they both shared. In other words, the instructions about public sacrifices in the Shechem area lent themselves to multiple readings. Whether the Gerizim altar is construed as the central altar alluded to in Deut 12:2–32 (so the Yahwistic Samaritan community) or as a one-time communal act upon entering the land (so the Yahwistic Judean community), the text of Deuteronomy privileges the northern area of Shechem. The foundational importance of northern Israel to Israelite identity is, therefore, not simply an abstract theological tenet, but also something embodied within the instructions of Deuteronomy itself.

## Biologie

BALTHAZART 2018

Jacques Balthazart, *Fraternal birth order effect on sexual orientation explained*. [PNAS 115 \(2018\), 234–236](#).

Note that the FBO effect accounts for only a maximum of 29% of gay males, or possibly a bit more if one assumes that a fraction of the primiparous mothers who had a gay son had unknowingly miscarried male embryos previously.

Alternatively, perhaps the prenatal/perinatal biological factors do not by themselves determine sexual orientation but interact with specific aspects of the post-natal environment to reveal their full effect. There is, for example, recent evidence that the prenatal androgenization of girls with congenital adrenal hyperplasia modifies the way in which these girls respond to information about genderappropriate behavior (15). This finding brings us back to the nature–nurture debate, demonstrating that these two approaches to the control of sexual orientation are not mutually exclusive but clearly cooperate to determine the adult phenotype.

## BOGAERT 2018

Anthony F. Bogaert et al., *Male homosexuality and maternal immune responsivity to the Y-linked protein NLGN4Y*. [PNAS 115 \(2018\), 302–306](#).

Anthony F. Bogaert, Malvina N. Skorska, Chao Wang, José Gabriele, Adam J. MacNeil, Mark R. Hoffarth, Doug P. VanderLaan, Kenneth J. Zucker & Ray Blanchard

We conducted a direct test of an immunological explanation of the finding that gay men have a greater number of older brothers than do heterosexual men. This explanation posits that some mothers develop antibodies against a Y-linked protein important in male brain development, and that this effect becomes increasingly likely with each male gestation, altering brain structures underlying sexual orientation in their later-born sons. Immune assays targeting two Y-linked proteins important in brain development—protocadherin 11 Y-linked (PCDH11Y) and neuroligin 4 Y-linked (NLGN4Y; isoforms 1 and 2)—were developed. Plasma from mothers of sons, about half of whom had a gay son, along with additional controls (women with no sons, men) was analyzed for male protein-specific antibodies. Results indicated women had significantly higher anti-NLGN4Y levels than men. In addition, after statistically controlling for number of pregnancies, mothers of gay sons, particularly those with older brothers, had significantly higher anti-NLGN4Y levels than did the control samples of women, including mothers of heterosexual sons. The results suggest an association between a maternal immune response to NLGN4Y and subsequent sexual orientation in male offspring.

**Keywords:** sexual orientation | homosexuality | fraternal birth order | NLGN4Y | maternal immune hypothesis

**Significance:** Gay men have, on average, a greater number of older brothers than do heterosexual men, a well-known finding within sexual science. This finding has been termed the fraternal birth order effect. Strong scientific interest in sexual orientation exists because it is a fundamental human characteristic, and because its origins are often the focal point of considerable social controversy. Our study is a major advance in understanding the origins of sexual orientation in men by providing support for a theorized but previously unexamined biological mechanism—a maternal immune response to a protein important in male fetal brain development—and by beginning to explain one of the most reliable correlates of male homosexuality: older brothers.

## Isotope

### BRÜGMANN 2017

Gerhard Brüggmann, Daniel Berger, Carolin Frank, Janeta Marahrens, Bianka Nessel & Ernst Pernicka, *Tin Isotope Fingerprints of Ore*

*Deposits and Ancient Bronze*. In: PHIL NEWMAN (Hrsg.), *The Tin-working Landscape of Dartmoor in a European Context – Prehistory to 20th Century, Papers presented at a conference in Tavistock, Devon, 6–11 May 2016 to celebrate the 25th anniversary of the DTRG*. (Exeter 2017), 103–114.

The sources and origin of tin, and the dispersion of bronze technology in the 3rd and 2nd millennium BC, are the central research topics of our multi-disciplinary research project, funded by an Advanced Grant of the European Research Council (ERC). It has the general goal to establish the tin isotopic composition of tin ores and tin-bearing artefacts, and considers the influence of anthropogenic processes on the isotope ratios. We discuss the tin isotopic composition of cassiterite from two major tin provinces in Europe: from Cornwall and Devon (Southern England), and from the Erzgebirge (Germany and Czech Republic). The samples from both tin provinces show a very large variation of isotopic compositions with  $d_{124/120\text{Sn}}$ -values ranging overall from -0.28 to 0.85 ‰. Although there is large overlap, on average, cassiterite from the Erzgebirge ( $d_{124/120\text{Sn}} = 0.09$  ‰) is isotopically lighter than that of southwest England ( $d_{124/120\text{Sn}} = 0.18$  ‰). This is due to a higher proportion of heavy isotope compositions in the samples from Cornwall and Devon. In addition, we compare the ore data with preliminary tin isotopic systematics in Early Bronze Age metal artefacts from the Únetice Culture in Central Germany and from several ancient settlements in Mesopotamia belonging to the Early Dynastic III and the Akkadian Periods. Bronze artefacts of the Únetice Culture containing more than 3 wt. % tin have rather constant isotopic compositions ( $d_{124/120\text{Sn}} = 0.2$  to  $0.31$  ‰), despite having highly variable trace element concentrations and tin contents. This suggests the intentional addition of an isotopically homogeneous tin raw material (metal or cassiterite) to the copper ore or melt. In contrast, the tin isotopic composition of artefacts from Mesopotamia (>3 wt. % Sn) show a much larger  $d_{124/120\text{Sn}}$  variation from -0.2 to +0.4 ‰. This is even observed in single settlements such as Ur. Since there is no sizeable tin mineralization in the vicinity, this implies that the tin demand of the ancient metallurgist was covered by trading tin from different ore sources.

## Judentum

DALMAN 1925

Gustaf Dalman, *Hundert deutsche Fliegerbilder aus Palästina*. Schriften des Deutschen Palästina-Instituts 2 (Gütersloh 1925).

## Klima

WENINGER 2017

Bernhard Weninger, *Niche construction and theory of agricultural origins, Case studies in punctuated equilibrium*. *Documenta Praehistorica* 44 (2017), 6–17.

DocPrae44-006-Supplement.pdf

In contemporary archaeological and anthropological research, the domestication of plants and animals in the Near East during the Early Holocene is alternatively interpreted as an overall slow and gradual, or as a rapid process. The present reanalysis of published archaeobotanical and archaeozoological data shows that the wild-domesticate-transition (WDT) was indeed initially slow (millennial scale),

but terminated at  $10.2 \pm 0.2$  ka cal BP with an abrupt switch to herding and agriculture. The abruptness of WDT can be understood as due to amplification under positive feedback conditions (resonance) of some few biological and social factors, primarily the short and longdistance transport of domesticates, in conjunction with a synchronous, abrupt climatic switch to higher precipitation.

**Keywords:** punctuated equilibrium | Neolithisation | cereal domestication | animal domestication | darwinism | complex system theory | palaeoclimatology

## Kultur

MELLER 2017

Harald Meller, *Armies in the Early Bronze Age? An alternative interpretation of Únětice Culture axe hoards*. *Antiquity* **91** (2017), 1529–1545.

The Early Bronze Age Unetice Culture in central Germany was a highly stratified society with a ruling class of ‘princes’, as evidenced by the famous burials at Leubingen and Helmsdorf, and the newly excavated burial mound Bornhock near Dieskau. To investigate the notion of Unetice military organisation, this article presents a new interpretation of the numerous weapons hoards recovered from the region. Hoard deposition and composition from central Germany strongly suggests a shift from a Late Neolithic culture of ‘warrior heroes’ to the creation of organised standing armies of professional soldiers under the control of ruling elites.

**Keywords:** Germany | Dieskau | Early Bronze Age | Unetice | hoards | military organisation

TURCHIN 2018

Peter Turchin et al., *Quantitative historical analysis uncovers a single dimension of complexity that structures global variation in human social organization*. *PNAS* **115** (2018), E144–E151.

pnas115-E00144-Supplement1.csv, pnas115-E00144-Supplement2.csv, pnas115-E00144-Supplement3.mp4

Peter Turchin, Thomas E. Currie, Harvey Whitehouse, Pieter François, Kevin Feeney, Daniel Mullins, Daniel Hoyer, Christina Collins, Stephanie Grohmann, Patrick Savage, Gavin Mendel-Gleason, Edward Turner, Agathe Dupeyron, Enrico Cioni, Jenny Reddish, Jill Levine, Greine Jordan, Eva Brandl, Alice Williams, Rudolf Cesaretti, Marta Krueger, Alessandro Ceccarelli, Joe Figliulo-Rosswurm, Po-Ju Tuan, Peter Peregrine, Arkadiusz Marciniak, Johannes Preiser-Kapeller, Nikolay Kradin, Andrey Korotayev, Alessio Palmisano, David Baker, Julye Bidmead, Peter Bol, David Christian, Connie Cook, Alan Covey, Gary Feinman, Árni Daniel Júlíusson, Axel Kristinsson, John Miksic, Ruth Mostern, Cameron Petrie, Peter Rudiak-Gould, Barend ter Haar, Vesna Wallace, Victor Mair, Liye Xie, John Baines, Elizabeth Bridges, Joseph Manning, Bruce Lockhart, Amy Bogaard & Charles Spencer

Do human societies from around the world exhibit similarities in the way that they are structured, and show commonalities in the ways that they have evolved? These are long-standing questions that have proven difficult to answer. To test between competing hypotheses, we constructed a massive repository of historical and archaeological information known as “Seshat: Global History Databank.” We systematically coded data on 414 societies from 30 regions around the world spanning the last 10,000 years. We were able to capture information on 51 variables reflecting nine characteristics of human societies, such as social scale, economy, features of governance, and information systems. Our analyses revealed that these

different characteristics show strong relationships with each other and that a single principal component captures around threequarters of the observed variation. Furthermore, we found that different characteristics of social complexity are highly predictable across different world regions. These results suggest that key aspects of social organization are functionally related and do indeed coevolve in predictable ways. Our findings highlight the power of the sciences and humanities working together to rigorously test hypotheses about general rules that may have shaped human history.

**Keywords:** cultural evolution | sociopolitical complexity | comparative history | comparative archaeology | quantitative history

**Significance:** Do human societies from around the world exhibit similarities in the way that they are structured and show commonalities in the ways that they have evolved? To address these longstanding questions, we constructed a database of historical and archaeological information from 30 regions around the world over the last 10,000 years. Our analyses revealed that characteristics, such as social scale, economy, features of governance, and information systems, show strong evolutionary relationships with each other and that complexity of a society across different world regions can be meaningfully measured using a single principal component of variation. Our findings highlight the power of the sciences and humanities working together to rigorously test hypotheses about general rules that may have shaped human history.

## Mesolithikum

GEHLEN 2006

Birgit Gehlen, *Late Mesolithic – Proto-Neolithic – Initial Neolithic? Cultural and Economic Complexity in Southwestern Central Europe between 7000 and 5300 calBC*. In: CLAUS-JOACHIM KIND (Hrsg.), *After the Ice Age – Settlements, subsistence and social development in the Mesolithic of Central Europe, Proceedings of the International Conference 9th to 12th of September 2003, Rottenburg/Neckar, Baden-Württemberg, Germany*. Materialhefte zur Archäologie in Baden-Württemberg 78 (Stuttgart 2006), 41–57.

The Final Mesolithic might represent a population that felt that it belonged neither to the oldest Bandkeramik, nor to the La Hoguette group. Or alternatively, the final Mesolithic sites could simply be La Hoguette or oldest Bandkeramik hunting stations.

The questions posed both within the title and at the beginning of this paper were put wrongly. If we accept the early dates for cultivated cereals in the Southwest of Central Europe we have to rethink the definition of what we call “Mesolithic” and “Neolithic”. As Neolithization is a social and economic process and not a state of living, we have to admit that our knowledge of this phase of transition is still quite restricted. Clearly, there must have been several groups with different cultural background in this area which developed different ways of life during the long period of more than 1,500 years from the first farming activities until the rise of the LBK lifestyle.

It is for this reason that we should – in our future discussions – try to avoid a general categorization of archaeological finds and features from the period 7000 to 5000 calBC into such groups as Mesolithic and Neolithic. This said, a differentiation using a finer chronological, economic, and cultural framework, comprising Late Mesolithic, Final Mesolithic, Proto-Neolithic, and Initial Neolithic phases, would probably prove difficult to realize at the present time.



## GEHLEN 2017

Birgit Gehlen, *No future? No past? Mesolithic heritage in Neolithic burials*. In: JUDITH M. GRÜNBERG, BERNHARD GRAMSCH, LARS LARSSON, JÖRG ORSCHIEDT & HARALD MELLER (Hrsg.), *Mesolithic burials – Rites, symbols and social organisation of early postglacial communities, International Conference Halle/Saaale, 18.–21. 9. 2013*. Tagungen des Landesmuseum für Vorgeschichte Halle 13 ([Halle 2017](#)), 827–849.

Social-economic processes during the Mesolithic-Neolithic transition are diverse in their character, duration, and consequences in different regions of Europe. Burial mode and offerings of personal ornaments in Neolithic graveyards show the Mesolithic heritage of the dead. These facts partly form a contrast to the general Neolithic-centric view. Archaeology, palaeogenetics and isotopic examination should be better coordinated in future research. Is genetic relationship much less important for the cultural orientation, the economy, and the collective identity than has been widely assumed up to now? This question will be discussed on the basis of different examples from Central Europe that illustrate the currently available information.

Ohne Zukunft? Ohne Vergangenheit?

Mesolithisches Erbe in neolithischen Bestattungen

Sozio-ökonomische Prozesse während der Phase der Neolithisierung unterscheiden sich im Charakter, in der Dauer und ihren Konsequenzen in den verschiedenen Regionen Europas. Bestattungssitten und Schmuckbeigaben in den Gräbern neolithischer Bestattungsorte geben Hinweise auf das mesolithische Erbe einiger Bestatteten. Diese Hinweise stehen teilweise im Widerspruch zu der allgemein üblichen neolithisch-zentrierten Betrachtungsweise und den Ergebnissen von Paläogenetik und Isotopenanalysen. Hat genetische Verwandtschaft eine weitaus geringere Bedeutung für die kulturelle Orientierung, die Wirtschaftsweise und die kollektive Identität als es bisher gemeinhin angenommen wird? Diese Frage wird im folgenden Artikel anhand von verschiedenen Beispielen aus Mitteleuropa, die den derzeitigen Forschungsstand illustrieren, diskutiert.

## Metallzeiten Bibel

## NIELSEN 2017

Nicky Nielsen, *Cereal cultivation and nomad-sedentary interactions at the Late Bronze Age settlement of Zawiyet Umm el-Rakham*. [Antiquity 91 \(2017\), 1561–1573](#).

Research on Late Bronze Age relations between Egyptians and local nomadic or semi-nomadic Libyans has hitherto focused almost exclusively on Egyptian textual and iconographic sources. Recent archaeological evidence for grain production and agrarian practice at the Egyptian fortress of Zawiyet Umm el-Rakham allows us to address this imbalance, in combination with ethnographic data and cross-cultural parallels drawn from nomad-sedentary interactions in the Near East. Results suggest that Egyptian subsistence in this relatively isolated outpost of the New Kingdom Empire was probably dependent upon Libyan manpower and their knowledge of local environmental conditions and effective farming methods.

Keywords: Egypt | Libya | Bronze Age | nomadism | sedentism | cultivation

## Mittelpaläolithikum

TAFELMAIER 2018

Yvonne Tafelmaier, Andreas Pastoors & Gerd-Christian Weninger, *Cultural contact over the Strait of Gibraltar during the Middle Palaeolithic? Evaluating the visibility of cultural exchange*. *Munibe Antropologia-Arkeologia* (2018), preprint, 1–15. DOI:10.21630/maa.2017.68.16.

Possible contacts between hunter-gatherers of Northern Africa and Europe via the Strait of Gibraltar during the Pleistocene are still object to discussions. In the absence of significant fossil remains, debates are mainly based on similarities and differences of singular aspects of material culture. However, a theoretical framework for these discussions was lacking. The first aim of this study thus has been the development of a theoretical base. We therein included Maslow's pyramid of basic needs. The idea of our approach is that the presence or absence of so-called cultural tracers identify either contact or disparity. A large database on archaeological sites of Morocco and Southern Iberia dating between 160 ka and 40 ka years ago has been compiled, containing information about lithic technology and typology, lithic raw material acquisition, subsistence patterns and symbolic behaviour. We formulated three potential contact scenarios between the two regions. The presence and/ or absence of so-called cultural tracers within the data set, that covered all levels of Maslow's pyramid, led us to conclude that – based on the present archaeological and anthropological data – no contact took place between Iberian and North African populations across the Strait of Gibraltar in the given time frame.

Keywords: Mousterian | Neanderthal | cultural transmission | corridor.

## Neolithikum

CLARE 2014

Lee Clare & Bernhard Weninger, *The Dispersal of Neolithic Lifestyles, Absolute Chronology and Rapid Climate Change in Central and West Anatolia*. In: M. ÖZDOĞAN, N. BAŞGELEN & P. KUNIHOLM (Hrsg.), *10500–5200 BC, Environment, settlement, flora, fauna, dating, symbols of belief, with views from north, south, east, and west*. *The Neolithic in Turkey 6 (Istanbul 2014)*, 1–65.

In the past few years advances in palaeoclimatology have provided a range of new perspectives for climate-archaeological research both in the Pleistocene and Holocene. In recent contributions (Weninger et al. 2006, 2009, 2011; Clare et al. 2008; Clare 2013) we have repeatedly indicated the existence of some interesting coincidences between the timing of certain major cultural transitions in the Eastern Mediterranean and climate anomalies in the Holocene, referred to as Rapid Climate Change (RCC) intervals (sensu Mayewski et al. 2004; Rohling et al. 2002). Based on a compilation of Cl4-data from selected archaeological sites, in the present paper we investigate in more detail whether the dispersal of Neolithic lifestyles from Turkey to Southeast Europe was triggered by RCC-conditions between 6600 and 6000 cal. BC.