

References

Anthropologie

BENNETT 2023

E. Andrew Bennett et al., *Genome sequences of 36,000- to 37,000-year-old modern humans at Buran-Kaya III in Crimea*. *Nature Ecology & Evolution* (2023), preprint, 1–23. DOI:10.1038/s41559-023-02211-9.

NatEcoEvo2023.11-Bennett-Supplement1.pdf, NatEcoEvo2023.11-Bennett-Supplement2.mp4

Populations genetically related to present-day Europeans first appeared in Europe at some point after 38,000–40,000 years ago, following a cold period of severe climatic disruption. These new migrants would eventually replace the pre-existing modern human ancestries in Europe, but initial interactions between these groups are unclear due to the lack of genomic evidence from the earliest periods of the migration. Here we describe the genomes of two 36,000–37,000-year-old individuals from Buran-Kaya III in Crimea as belonging to this newer migration. Both genomes share the highest similarity to Gravettian-associated individuals found several thousand years later in southwestern Europe. These genomes also revealed that the population turnover in Europe after 40,000 years ago was accompanied by admixture with pre-existing modern human populations. European ancestry before 40,000 years ago persisted not only at Buran-Kaya III but is also found in later Gravettian-associated populations of western Europe and Mesolithic Caucasus populations.

E. Andrew Bennett, Oğuzhan Parasyan, Sandrine Prat, Stéphane Péan, Laurent Crépin, Alexandre Yanevich, Thierry Grange & Eva-Maria Geigl

CANT 2023

Michael Cant, *Menopause in chimpanzees*. *science* **382** (2023), 368–369.

Signs of menopause in wild chimpanzees provide insights into human evolution.

Wood et al. consider two possible explanations for their findings. Chimpanzees and other mammals can have extended postreproductive life spans in captivity where they are protected from natural predators and pathogens. Therefore, if the Ngogo chimpanzees are similarly protected, they might also live artificially long lives. For example, predation by leopards or competition from other chimpanzee groups may have been more intense in the past.

Alternatively, the Ngogo chimpanzees might be living in conditions that are more representative of their evolutionary past compared with other populations. The Ngogo population is relatively remote and undisturbed by human activities, such as logging and hunting. Ngogo chimpanzees are also less exposed to potentially devastating human diseases than other chimpanzee populations. Wood et al. argue that previous research may have underestimated the life span of wild chimpanzees before the start of modern human influence.

WOOD 2023

Brian M. Wood & Kevin E. Langergraber et al., *Demographic and hormonal evidence for menopause in wild chimpanzees*. *science* **382** (2023), 416.

s382-0416-Supplement.pdf

Among mammals, post-reproductive life spans are currently documented only in humans and a few species of toothed whales. Here we show that a post-reproductive life span exists among wild chimpanzees in the Ngogo community of Kibale National Park, Uganda. Post-reproductive representation was 0.195, indicating that a female who reached adulthood could expect to live about one-fifth of her adult life in a post-reproductive state, around half as long as human hunter-gatherers. Post-reproductive females exhibited hormonal signatures of menopause, including sharply increasing gonadotropins after age 50. We discuss whether post-reproductive life spans in wild chimpanzees occur only rarely, as a short-term response to favorable ecological conditions, or instead are an evolved species-typical trait as well as the implications of these alternatives for our understanding of the evolution of post-reproductive life spans.

Brian M. Wood, Jacob D. Negrey, Janine L. Brown, Tobias Deschner, Melissa Emery Thompson, Sholly Gunter, John C. Mitani, David P. Watts & Kevin E. Langergraber

Bibel

BAUKS 1997

Michaela Bauks, *Die Welt am Anfang, Zum Verhältnis von Vorwelt und Weltentstehung in Gen 1 und in der altorientalischen Literatur*. Wissenschaftliche Monographien zum Alten und Neuen Testament 74 (Neukirchen-Vluyn 1997).

Enthält der erste Schöpfungsbericht eine eigene Kosmologie? Bietet er eine naturalistische Darstellung der göttlichen Schöpfung? Welche Rolle kommt Gott dem alttestamentlichen Text nach zu: die des alleinigen Schöpfers oder die des Demiurgen? Erst die traditionsgeschichtlichen Untersuchungen machen deutlich, daß es sich mit diesen Gegenüberstellungen um nicht zutreffende Kategorien handelt, die zwar dem abendländischen Denken entsprechen, nicht aber den Kulturen des Alten Orients, zu denen Israel zählt.

Michaela Bauks, geb. 1962; Studium der Evangelischen Theologie, Romanistik, Ägyptologie und Altorientalistik in Bochum, Hamburg und Heidelberg mit Promotion zum Dr. theol.; seit 1995 Professorin für Altes Testament an der Faculté de Theologie Protestante in Montpellier (Frankreich).

FRIEDMAN 2000

Richard Elliott Friedman & Shawna Dolansky Overton, *Death and Afterlife, The Biblical Silence*. In: ALAN J. AVERY-PECK & JACOB NEUSNER (Hrsg.), *Judaism in Late Antiquity, Part four: death, life-after-death, resurrection and the world-to-come in the Judaisms of antiquity*. Handbuch der Orientalistik 49 (Leiden 2000), 35–59.

Why would priests in general be so averse to discussing anything regarding after-death experience, while someone like the author of J incorporates it as though taking for granted that it was part of his or her readers' world view? First, as we discussed above, local ceremonies for dead ancestors did not require a priest, brought no income to the priesthood, and could even compete with priests' income and authority. The priests' livelihood was dependent on sacrifices to YHWH, and the priestly laws were designed in such a way as to ensure that all aspects of interaction with the divine were conducted only through the priests. If a belief in an afterlife was encouraged, and necromancy was given legitimacy as a means for

knowing the divine will, then the priests would be ceding a portion of the control of the religion.

We have seen that there is not simply one view of the afterlife that can be generalized for all of ancient Israel over the thousand year period of the Hebrew Bible's composition. On the contrary, conflicting views can prevail simultaneously. Rather than attempting to extract a single, unified notion of the afterlife in ancient Israel that progresses linearly through time, we must instead investigate each reference to mortuary rites, the netherworld, veneration of deceased ancestors, necromancy, and resurrection within its own literary-historical framework, with the understanding that each author, within his or her own political and spatio-temporal context, might have a distinct idea of what happens to humans after they die, what they become, and what the proper relationship should be between the living and the dead.

JANOWSKI 2003

Bernd Janowski, *Jenseits von Eden, Gen 4, 1–16 und die nichtpriesterliche Urgeschichte*. In: KLAUS KIESOW & THOMAS MEURER (Hrsg.), *Textarbeit – Studien zu Texten und ihrer Rezeption aus dem Alten Testament und der Umwelt Israels, Festschrift für Peter Weimar zur Vollendung seines 60. Lebensjahres*. Alter Orient und Altes Testament 294 (Münster 2003), 267–284.

Ein Mensch bringt einen anderen Menschen, der sogar sein Bruder ist, um. Der Brudermord, das Antihumane schlechthin, ist das Urmuster zwischenmenschlicher Konflikte. „Wir sind alle ‘Kaimiter’“ sagt M. Görg dazu.

Im folgenden sollen nicht derart weitreichende Schlußfolgerungen gezogen, sondern lediglich der Sinn eines einzigen Verses geklärt werden, der für das Verständnis der Erzählung allerdings zentral ist: Gen 4,7. Dieser Vers gilt seit jeher als “der dunkelste Vers des Kapitels (sc. Gen. 4), ja der Genesis”. Seine Dunkelheit wird in der Regel durch eine Übersetzung aufgehellt, die bis heute durch ihre suggestive Kraft besticht. So übersetzt etwa C. Westermann. “Alle Deutungs- oder Änderungsversuche”, kommentiert Westermann, “sind bisher an diesem Satz gescheitert”. Auch sein eigener Versuch, den er in weiser Zurückhaltung als eine “Vermutung” ausgibt, kann m.E. nicht überzeugen.

Die Festschrift ist dem Alttestamentler Peter Weimar (Münster) gewidmet und enthält 33 Beiträge, in denen es um Texte, Theologie, Geschichte und Sprache des Alten Testaments und den altorientalischen Zusammenhang geht. Unter anderem schreibt B. Janowski über Kain und Abel, E. Otto über neuassyrische Motive in Psalm 2 und R. Zwick über Moses in zeitgenössischen Filmen.

MÜLLER 1985

Hans-Peter Müller, *Das Motiv für die Sintflut, Die hermeneutische Funktion des Mythos und seiner Analyse. Zeitschrift für die Alttestamentliche Wissenschaft* 97 (1985), 295–316.

Dem unzureichend motivierten Schuldvorwurf an den Menschen Gen 6,5-8 | und 11 —13 P entspricht es, daß schon die altbabylonischen Sintfluterzählungen sich als Antimythen zur Erzählung von der Menschenschöpfung begreifen lassen: lebensfreundlichen Göttern, die u. a. den Menschen schufen, stehen daseinsfeindliche gegenüber, die zum Chaotischen zurückstreben; nur zögernd wird menschliches Verschulden benannt, um für die Chaosdrohung ein Theodizee-Motiv zu finden. Für eine Theorie des Mythos folgt daraus, daß sich in Mythos und Antimythus die Zweideutigkeit widerspiegelt, der u. a. die Beheimatung des Menschen in seiner biologischen Umwelt unterliegt; trägt Mythos zur Produktion eines menschlichen

Lebensraumes bei, so folgt er einem ethologischen Verhaltensmuster, dessen "Subjekt" den Bereich humarer Rationalität übergreift. Gott bringt sich mittels des Menschen als transzendentes Subjekt einer Selbstverständigung des Seienden zur Sprache, die dem Mythos bleibende, wenn auch gebrochene Geltung sichert.

NEWMAN 2016

Stephen A. Newman, *Why Moses did not circumcise his son. Jewish Bible Quarterly* 44 (2016), 50–52.

God was angry with Moses for rejecting circumcision in its totality, while Moses believed that he was rejecting an Egyptian practice. Through the actions of Ziporah, Moses realized that there was a distinctly Israelite version of circumcision that God had ordained.

OTTO 1996

Eckart Otto, *Die Paradieserzählung Genesis 2–3, Eine nachpriesterschrifliche Lehrerzählung in ihrem religionshistorischen Kontext*. In: ANJA A. DIESEL, REINHARD G. LEHMANN, ECKART OTTO & ANDREAS WAGNER (Hrsg.), *Jedes Ding hat seine Zeit, Studien zur israelitischen und altorientalischen Weisheit – Dietrich Michel zum 65. Geburtstag*. Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft 241 (Berlin 1996), 167–192.

Voraussetzung des Mit-Sein Gottes ist die Versöhnung von Gott und Volk am Versöhnungstag (Lev 16), die der Angelpunkt in der Pentateuchredaktion ist. Hier erreicht der in Gen 2–3 ausgespannte Horizont sein Gegenüber.

RÖMER 2004

Thomas Römer, *Hauptprobleme der gegenwärtigen Pentateuchforschung. Theologische Zeitschrift* 60 (2004), 289–307.

SCHELLENBERG 2011

Annette Schellenberg, *Der Mensch, das Bild Gottes? Zum Gedanken einer Sonderstellung des Menschen im Alten Testament und in weiteren altorientalischen Quellen. Abhandlungen zur Theologie des Alten und Neuen Testaments* 101 (Zürich 2011).

Für all diejenigen, die sich für die Respektierung der Würde aller Menschen einsetzen, geht P zweifelsohne zuwenig weit. So sehr in der Urgeschichte angedeutet wird, dass die Menschen vor aller Unterschiedenheit alle gleichermassen „Bild Gottes“ sind, werden diese Andeutungen im weiteren Fortgang nicht konkretisiert, sondern treten sogar hinter andere Aussagen zu Sonderstellungen einzelner Menschen(gruppen) zurück. Im Vergleich zu anderen ao. Texten aber stellt P in Bezug auf die horizontale Dimension des Sonderstellungsgedankens trotzdem einen Schritt vorwärts dar – allem voran durch die Aussagen in der Urgeschichte, aber auch, weil die Inklusion der „anderen“ im weiteren Fortgang zumindest als Möglichkeit angedeutet ist – und zwar positiv.

Dass die Offenheit von P im Rahmen antiken Denkens aussergewöhnlich war, zeigt sich schliesslich auch daran, wie die Bild-Gottes-Prädikation in späteren Schriften rezipiert wurde. Häufig ist die Perspektive in diesen Rezeptionen wieder enger als diejenige in der P-Urgeschichte, wird die Bild-Gottes-Prädikation auf bestimmte Menschen eingeengt: die Israeliten (vgl. Sir 17), die Weisen/Frommen (vgl. Sap 2), die Männer (vgl. 1Kor 11,7) oder den König Jesus Christus (vgl. 2Kor 4,4; Kol 1,15; Heb 1,3).

SCHMID 2002

Konrad Schmid, *Die Unteilbarkeit der Weisheit, Überlegungen zur so-genannten Paradieserzählung Gen 2f. und ihrer theologischen Tendenz. Zeitschrift für die Alttestamentliche Wissenschaft 114 (2002), 21–39.*

Beachtet man innerhalb der Paradieserzählung Gen 2f. das Mißverständnis des Verbots aus Gen 2,17 in Gen 3,2, so entschlüsselt sich Gen 2f. als theologische Tendenzerzählung, die in striktem Abweis aller proto- und eschatologischen Überhöhungen der conditio humana die Begabung des Menschen mit gottgleicher Erkenntnisfähigkeit, Gut und Böse zu unterscheiden, als zwar in ihren Auswirkungen ambivalente, aber lebensnotwendige Folge des sogenannten Falls interpretiert. Damit stellt sich die Erzählung Gen 2f. diametral der ihr vorgegebenen Tradition, wie sie etwa in Ez 28 greifbar ist, entgegen.

SCHÜLE 2006

Andreas Schüle, *Der Prolog der hebräischen Bibel, Der literar- und theologiegeschichtliche Diskurs der Urgeschichte (Gen 1–11). Abhandlungen zur Theologie des Alten und Neuen Testaments 86 (Zürich 2017).*

Die in Genesis 1–11 versammelten Texte wurden ganz gezielt so verfasst oder (bei älteren Vorlagen) so bearbeitet, dass sie als Prolog zum Pentateuch und, darüber hinaus, zu anderen Büchern der hebräischen Bibel dienen konnten. Insofern hat man es hier mit vergleichsweise späten Texten zu tun, in denen sich bereits ein, cum grano salis, ‘kanonisches’ Bewusstsein abzeichnet. Die hier vertretene, damals wie heute nicht neue These, wonach die Priesterschrift die entstehungsgeschichtliche Basis der Urgeschichte bildet, wird gewiss umstritten bleiben. Weitaus bedeutsamer ist m.E. aber die Wahrnehmung der theologischen Positionen, die in den Textschichten von Genesis 1–11 zum Ausdruck kommen, und des Diskurses, der sich zwischen ihnen aufspannt. Zum Verständnis genau dieses Diskurses will der Band nun auch in neuer Gestalt beitragen.

SCHÜLE 2009

Andreas Schüle, *Die Urgeschichte (Gen 1–11). Zürcher Bibelkommentare (Zürich 2009).*

VAN DER VEEN 2018

Pieter Gert van der Veen, *Why Mount Horeb is not in Saudi Arabia and why the crossing of the Sea of Reeds did not occur at the Gulf of Aqabah.* In: UWE ZERBST & PIETER GERT VAN DER VEEN (Hrsg.), *Keine Posaunen vor Jericho? Beiträge zur Archäologie der Landnahme.* (Holzgerlingen 2023).

In recent years, this author has been repeatedly asked by his readers about the equation of Mount Horeb with Mount Jebel al-Lawz (in North Arabia) and about the crossing of the Red Sea at Nuweibeh, which has been advocated above all in popular scientific circles. He has therefore decided to discuss here, why he does not share this view. Undoubtedly, the topic requires a more extensive discussion. On the other hand, the discussion offers further evidence for the working hypothesis advocated by this author and his co-author Uwe Zerbst, since it shows that the traditional arguments for the localization of Horeb in Sinai and of Yam Suph on the eastern border of the Egyptian Nile Delta are clearly compatible with the postulated early date of Exodus and Conquest (also shared by J. Bimson and D.

Rohl), even if this has been queried by proponents of the late date, such as James Hoffmeier and Kenneth Kitchen.

An earlier version of this article initially appeared as an appendix to our German book: U. Zerbst & P. G. van der Veen (eds), 2018. Keine Posaunen vor Jericho? Beiträge zur Archäologie der Landnahme. Holzgerlingen: Hänssler Verlag, 174–188.

Biologie

CALLAWAY 2012

Ewen Callaway, *Great apes go through mid-life crisis.* [nature 2012, Nov. 19.](#)

SWINFORD 2023

N. A. Swinford, S. P. Prall, S. Gopalan, C. M. Williams, J. Sheehama, B. A. Scelza & B. M. Henn, *Increased homozygosity due to endogamy results in fitness consequences in a human population.* [PNAS 120 \(2023\), e2309552120.](#)

[pnas120-e2309552120-Supplement.pdf](#)

Recessive alleles have been shown to directly affect both human Mendelian disease phenotypes and complex traits. Pedigree studies also suggest that consanguinity results in increased childhood mortality and adverse health phenotypes, presumably through penetrance of recessive mutations. Here, we test whether the accumulation of homozygous, recessive alleles decreases reproductive success in a human population. We address this question among the Namibian Himba, an endogamous agro-pastoralist population, who until very recently practiced natural fertility. Using a sample of 681 individuals, we show that Himba exhibit elevated levels of “inbreeding,” calculated as the fraction of the genome in runs of homozygosity (FROH). Many individuals contain multiple long segments of ROH in their genomes, indicating that their parents had high kinship coefficients. However, we do not find evidence that this is explained by first-cousin consanguinity, despite a reported social preference for cross-cousin marriages. Rather, we show that elevated haplotype sharing in the Himba is due to a bottleneck, likely in the past 60 generations. We test whether increased recessive mutation load results in observed fitness consequences by assessing the effect of FROH on completed fertility in a cohort of postreproductive women ($n = 69$). We find that higher FROH is significantly associated with lower fertility. Our data suggest a multilocus genetic effect on fitness driven by the expression of deleterious recessive alleles, especially those in long ROH. However, these effects are not the result of consanguinity but rather elevated background identity by descent.

Keywords: mutation load | runs of homozygosity | fertility | bottleneck | endogamy

Significance: Human populations have been shown to differ in their mutation load—the accumulation of mutations in their genomes; the penetrance of these mutations will depend on their recessive, dominant, or additive states. However, most estimates of mutation load are theoretical and have not been associated with evolutionary fitness (i.e., reproductive success). Here, we assess the effect of runs of homozygosity on fitness in a natural fertility population from northern Namibia. As the homozygous fraction of the genome increases, female fertility is significantly reduced. This suggests a multilocus genetic effect on fitness driven by the expression of deleterious recessive alleles. Interestingly, despite a cultural

preference for consanguineous marriage in the Himba, we find that such marriages rarely occur between close biological kin.

WEISS 2012

Alexander Weiss, James E. King, Miho Inoue-Murayama, Tetsuro Matsuzawa & Andrew J. Oswald, *Evidence for a midlife crisis in great apes consistent with the U-shape in human well-being*. **PNAS 109 (2012)**, 19949–19952.

[pnas109-19949-Supplement.pdf](#)

Recently, economists and behavioral scientists have studied the pattern of human well-being over the lifespan. In dozens of countries, and for a large range of well-being measures, including happiness and mental health, well-being is high in youth, falls to a nadir in midlife, and rises again in old age. The reasons for this U-shape are still unclear. Present theories emphasize sociological and economic forces. In this study we show that a similar U-shape exists in 508 great apes (two samples of chimpanzees and one sample of orangutans) whose well-being was assessed by raters familiar with the individual apes. This U-shaped pattern or “mid-life crisis” emerges with or without use of parametric methods. Our results imply that human well-being’s curved shape is not uniquely human and that, although it may be partly explained by aspects of human life and society, its origins may lie partly in the biology we share with great apes. These findings have implications across scientific and social-scientific disciplines, and may help to identify ways of enhancing human and ape well-being.

Keywords: aging | primate | satisfaction | evolution | affect

WITZE 2023

Alexandra Witze, *Is there life on . . . Earth?* **nature 622 (2023)**, 451–452.

Carl Sagan’s bold experiment asking what we could tell about our planet from space in still reverberates 30 years on.

Isotope

LUCQUIN 2023

Alexandre Lucquin et al., *The impact of farming on prehistoric culinary practices throughout Northern Europe*. **PNAS 120 (2023)**, e2310138120.

[pnas120-e2310138120-Supplement1.pdf](#), [pnas120-e2310138120-Supplement2.xlsx](#), [pnas120-e2310138120-Supplement3.xlsx](#)

To investigate changes in culinary practices associated with the arrival of farming, we analysed the organic residues of over 1,000 pottery vessels from hunter-gatherer-fisher and early agricultural sites across Northern Europe from the Lower Rhine Basin to the Northeastern Baltic. Here, pottery was widely used by hunter-gatherer-fishers prior to the introduction of domesticated animals and plants. Overall, there was surprising continuity in the way that hunter-gatherer-fishers and farmers used pottery. Both aquatic products and wild plants remained prevalent, a pattern repeated consistently across the study area. We argue that the rapid adaptation of farming communities to exploit coastal and lagoonal resources facilitated their northerly expansion, and in some cases, hunting, gathering, and fishing became the most dominant subsistence strategy. Nevertheless, dairy products frequently appear in pottery associated with the earliest farming groups often

mixed with wild plants and fish. Interestingly, we also find compelling evidence of dairy products in hunter-gatherer-fisher Ertebølle pottery, which predates the arrival of domesticated animals. We propose that Ertebølle hunter-gatherer-fishers frequently acquired dairy products through exchange with adjacent farming communities prior to the transition. The continuity observed in pottery use across the transition to farming contrasts with the analysis of human remains which shows substantial demographic change through ancient DNA and, in some cases, a reduction in marine consumption through stable isotope analysis. We postulate that farmers acquired the knowledge and skills they needed to succeed from local hunter-gatherer-fishers but without substantial admixture.

Keywords: pottery | hunter-gatherers | early farmers | organic residue analysis | circum-Baltic

Alexandre Lucquin, Harry K. Robson, Ester Oras, Jasmine Lundy, Giulia Mortetti, Lara González Carretero, Joannes Dekker, Özge Demirci, Ekaterina Dolbunova, T. Rowan McLaughlin, Henny Piezonka, Helen M. Talbot, Kamil Adamczak, Agnieszka Czekaj-Zastawny, Daniel Groß, Witold Gumiński, Sönke Hartz, Jacek Kabaciński, Satu Koivisto, Trond Eilev Linge, Ann-Katrin Meyer, Teemu Mökkönen, Bente Philippsen, Gytis Piliūnas, Vanda Visocka, Aivar Kriiska, Daan Raemaekers, John Meadows, Carl Heron & Oliver E. Craig

Significance: How prehistoric farming became established in Northern Europe, a region that supported dense populations of hunter-gatherers, has concerned archaeologists for over a century. Through analysis of the organic residues recovered from over 1,000 vessels dating across the transition to farming, we found unexpected consistency in the use of aquatic foods at odds with prevailing narrative of large-scale demographic and economic change. We argue that the ability of farming groups to adapt to their environment by learning hunter-gatherer-fisher practices, combined with dairying, was key to their northerly expansion. We also provide evidence of dairy use by hunter-gatherers which we attribute to long-distance exchange with farmers, implying a much greater degree of interaction and cooperation than previously described.

Judentum

VERMES 2003

Geza Vermes, *The authentic gospel of Jesus*. (London 2004).

In [this] book, [the author] subjects all the sayings of Jesus to ... informed scrutiny ... Aware of the limits of our knowledge but immersed in what we do have—both the “official” gospels and associated Jewish and early Christian texts – [the author] sieves through every quote ascribed to Jesus to let the reader get as close as possible to the charismatic Jewish healer and moralist who changed the world. The result is a book that creates a revolutionary and unexpected picture of Jesus – scraping aside the accretions of centuries to approach as close as we can hope to his true teaching.

Jungpaläolithikum

YAWORSKY 2023

Peter M. Yaworsky, Shumon T. Hussain & Felix Riede, *Climate-driven habitat shifts of high-ranked prey species structure Late Upper Paleolithic hunting*. *Scientific Reports* **13** (2023), 4238. DOI:10.1038/s41598-023-31085-x.

Changing climates in the past affected both human and faunal population distributions, thereby structuring human diets, demography, and cultural evolution. Yet, separating the effects of climate-driven and human-induced changes in prey species abundances remains challenging, particularly during the Late Upper Paleolithic, a period marked by rapid climate change and marked ecosystem transformation. To disentangle the effects of climate and hunter-gatherer populations on animal prey species during the period, we synthesize disparate paleoclimate records, zooarchaeological data, and archaeological data using ecological methods and theory to test to what extent climate and anthropogenic impacts drove broad changes in human subsistence observed in the Late Upper Paleolithic zooarchaeological records. We find that the observed changes in faunal assemblages during the European Late Upper Paleolithic are consistent with climate-driven animal habitat shifts impacting the natural abundances of high-ranked prey species on the landscape rather than human-induced resource depression. The study has important implications for understanding how past climate change impacted and structured the diet and demography of human populations and can serve as a baseline for considerations of resilience and adaptation in the present.

Klima

HAO 2023

Dalei Hao, Gautam Bisht, Hailong Wang, Donghui Xu, Huilin Huang, Yun Qian & L. Ruby Leung, *A cleaner snow future mitigates Northern Hemisphere snowpack loss from warming*. **Nature Communications 14 (2023), 6074, 1–10.** DOI:[10.1038/s41467-023-41732-6](https://doi.org/10.1038/s41467-023-41732-6).

NatComm14-a06074-Supplement.pdf

Light-absorbing particles (LAP) deposited on seasonal snowpack can result in snow darkening, earlier snowmelt, and regional climate change. However, their future evolution and contributions to snowpack change relative to global warming remain unclear. Here, using Earth System Model simulations, we project significantly reduced black carbon deposition by 2081–2100, which reduces the December–May average LAP-induced radiative forcing in snow over the Northern Hemisphere from 1.3 W m⁻² during 1995–2014 to 0.65 (SSP126) and 0.49 (SSP585) W m⁻². We quantify separately the contributions of climate change and LAP evolution on future snowpack and demonstrate that projected LAP changes in snow over the Tibetan Plateau will alleviate future snowpack loss due to climate change by $52.1 \pm 8.0\%$ and $8.0 \pm 1.1\%$ at the end of the century for the two scenarios, mainly due to reduced black carbon contamination. Our findings highlight a cleaner snow future and its benefits for future water supply from snowmelt especially under the sustainable development pathway of SSP126.

Kultur

HUSSAIN 2023

Shumon T. Hussain & Nathalie Ø. Brusgaard, *Human-beaver cohabitation in the Early and Mid-Holocene of Northern Europe, Re-visiting Mesolithic material culture and ecology through a multispecies lens*. **The Holocene (2023), preprint, 1–31.** DOI:[10.1177/09596836231200444](https://doi.org/10.1177/09596836231200444).

The Eurasian beaver (*Castor fiber*) was an important member of Early and Mid-Holocene landscapes and animal communities in Northern Europe. Previous zooarchaeological research has established the alimentary roles of beavers for Mesolithic

societies and their importance for fur procurement. In this paper, we develop an integrated biocultural approach to human-beaver interactions, examining the position of humans and beavers in Mesolithic and Early Neolithic multispecies systems. We contextualize beaver landscape agency in hydroactive environments with human behaviour, synthesizing currently available data on mammalian assemblages, ichthyofauna and beaver-related material culture across Northern Europe. This cross-cultural, diachronic analysis reveals previously overlooked facilitations of human behaviour by beaver practices and ecological legacies. We show that long-term trajectories of human-beaver cohabitation differed between northern European regions. While in Southern Scandinavia, human-beaver intersections witnessed major reorganizations during the Mid-Holocene, beavers retained a key role for human societies across Northeastern Europe throughout much of the Holocene and played an important part at the Mesolithic-Neolithic transition in the Dutch wetlands. Divergent pathways are also evidenced by Mesolithic beaverrelated material culture, highlighting the cultural keystone status of Castor fiber in higher latitude European landscapes. We argue that this keystone status is grounded in the supply of human hunting, fishing, and gathering affordances by the animals, pointing to the generative commensality between Mesolithic foragers and their beaver neighbours. Taken together, our findings demonstrate the importance of the beaver in the making of Early and Mid-Holocene forager societies in Northern Europe and illustrate the fruitfulness of deploying an integrated multispecies approach.

Keywords: Affordances | conviviality | Castor fiber | human-animal relations | hunter-gatherers | mandible tools | multispecies archaeology

Politik

FRIEDLÄNDER 2023

Margot Friedländer, “*Ihr helft mir, indem ihr mir zuhört*”. [Die Zeit 2023, Oct. 30.](#)

Die Holocaustüberlebende Margot Friedländer wird 102 Jahre alt. Nun wurde ihre Lebensgeschichte verfilmt. Wohl nie wirkte sie so aktuell wie in diesen Wochen.

Religion

AVERY-PECK 2000

ALAN J. AVERY-PECK & JACOB NEUSNER (Hrsg.), *Judaism in Late Antiquity, Part four: death, life-after-death, resurrection and the world-to-come in the Judaisms of antiquity*. Handbuch der Orientalistik 49 ([Leiden 2000](#)).

Story or Book

MONOSSON 2023

Emily Monosson, *The plant poisons that shape our daily lives*. [nature 622 \(2023\), 689–690.](#)

How humans use nature's toxins as foods, medicines and mind-altering drugs.

Most Delicious Poison: The Story of Nature's Toxins — From Spices to Vices. Noah Whiteman. Little, Brown Spark (2023)

The author's passion for his subject matter comes through on almost every page of *Most Delicious Poison*, and the book's illustrations — collages of key plants, chemical structures, target species and human use — provide succinct visual summaries. Aficionados of chemical form, people interested in botanical pharmacology and toxicology, and those who are simply curious about the origins of their drugs and spices will find much to enjoy in this fascinating compendium.