# References

## Afrika

#### Moffett 2020

Abigail J. Moffett, Simon Hall & Shadreck Chirikure, Crafting power, New perspectives on the political economy of southern Africa, AD 900– 1300. Journal of Anthropological Archaeology **59** (2020), 101180, 1–13.

Archaeological studies of craft production locales provide an important lens through which to evaluate the mechanisms of the political economy at different, intersecting scales. Such multi-scaler perspectives are pertinent to the study of southern Africa in the late first and early second millennium. Dominant models of the political economy of this period derive from research conducted at regional political centers, leaving critical assumptions surrounding resource mobility, access to craft products and other items of value, and control over craft persons largely untested in the wider region. Research conducted at the site of Shankare (AD 900–1300), located near Lolwe, the earliest dated copper mine in southern Africa, revealed the presence of a community of independent specialists. Crafting at Shankare took place in domestic contexts, with copper worked alongside domestic activities such as textile spinning, indicative of multi-crafting. Exchange and consumption patterns from the site indicate that imported items and technologies from the Indian Ocean rim region, such as glass beads and the technology of textile spinning, were spread widely within local networks. This study reveals the variable and heterogeneous ways in which craft, trade and political power articulate, and cautions for more nuanced explorations of power and economy in the region.

Keywords: Copper metallurgy | Crafting | Multicrafting | Trade | Political economy | Southern Africa | Iron age

## Aktuell

### KUPFERSCHMIDT 2021

Kai Kupferschmidt, New mutations raise specter of 'immune escape'. science **371** (2021), 329–330. DOI:10.1126/science.371.6527.329.

SARS-CoV-2 variants found in Brazil and South Africa may evade human antibodies.

South Africa's 501Y.V2 variant could be 50% more transmissible but no better at evading immunity, or just as transmissible as previous variants but able to evade immunity in one in five people previously infected.

Historically, few viruses have managed to evolve resistance to vaccines, with the notable exception of seasonal influenza, which evolves so rapidly on its own without vaccine pressure—that it requires a newly designed vaccine every year.

## Altpaläolithikum

#### Venditti 2021

Flavia Venditti, Aviad Agam, Jacopo Tirillò, Stella Nunziante-Cesaro & Ran Barkai, An integrated study discloses chopping tools use from

### Late Acheulean Revadim (Israel). PLoS ONE **16** (2021), e245595. DOI:10.1371/journal.pone.0245595.

Chopping tools/choppers provide one of the earliest and most persistent examples of stone tools produced and used by early humans. These artifacts appeared for the first time  $\approx 2.5$  million years ago in Africa and are characteristic of the Oldowan and Acheulean cultural complexes throughout the Old World. Chopping tools were manufactured and used by early humans for more than two million years regardless of differences in geography, climate, resource availability, or major transformations in human cultural and biological evolution. Despite their widespread distribution through time and space in Africa and Eurasia, little attention has been paid to the function of these items, while scholars still debate whether they are tools or cores. In this paper, we wish to draw attention to these prominent and ubiquitous early lithic artifacts through the investigation of 53 chopping tools retrieved from a specific context at Late Acheulean Revadim (Israel). We combined typo-technological and functional studies with a residue analysis aimed at shedding light on their functional role within the tool-kits of the inhabitants of the site. Here we show that most of the chopping tools were used to chop hard and medium materials, such as bone, most probably for marrow extraction. A few of the tools were also used for cutting and scraping activities, while some also served as cores for further flake detachment. The chopping tools exhibit extraordinarily well-preserved bone residues suggesting they were used mainly for bone-breaking and marrow acquisition. We discuss the data and explore the tool versus core debate also in light of a sample of 50 flake cores made on pebbles/cobbles retrieved from the same archeological layer. The results add further pieces to the puzzle of activities carried out at Revadim and add to our knowledge of the production and use of these enigmatic tools and their role in human evolutionary history.

## Amerika

#### Prentiss 2020

Anna Marie Prentiss, Matthew J. Walsh, Thomas A. Foor, Kathryn Bobolinski, Ashley Hampton, Ethan Ryan & Haley O'Brien, Malthusian cycles among semi-sedentary Fisher-Hunter-Gatherers, The socioeconomic and demographic history of Housepit 54, Bridge River site, British Columbia. Journal of Anthropological Archaeology **59** (2020), 101181, 1–20.

Models in demographic ecology predict that populations in agrarian villages experience cycles of growth and decline as tied to relationships between founding population sizes, birth and mortality rates, habitat constraints, landscape productivity, and socio-economic practices. Such predictions should be equally applicable to fisher-hunter-gatherers. Intensive research at the Bridger River site on the Canadian Plateau has provided significant new insight into the dynamics of population growth and decline, subsistence productivity, cooperation, and development of social inequalities in material goods. In this paper, we present new evidence drawing from the fine-grained stratigraphic record of Housepit 54 to assess details regarding change in subsistence and technology as related to population and social dynamics. Results indicate a long and complex history characterized by two complete demographic cycles. Critically, the two subsistence downturns were managed using different tactics. Reduced local resources during the first period was likely managed with shorter stays in winter residences, somewhat more extensive use of the landscape, and continuation of egalitarian social relations. The second economic downturn followed a short-lived boom in resources and population growth

that created extremely competitive social conditions. The subsequent downturn was managed by entrenched winter sedentism and likely social control of access to critical resources.

Keywords: Complex fisher-hunter-gatherers | Malthusian demographic models | Bridge River site | Zooarchaeology | Lithic technology | Indigenous history

### Anthropologie

#### Kuzmin 2020

Yaroslav V. Kuzmin & Susan G. Keates, *The chronology of hominin fossils from the Altai Mountains, Siberia, An alternative view.* Journal of Human Evolution **146** (2020), 102834, 1–6.

JHumEvo146-a102834-Supplement.pdf

A disturbed stratigraphy at all of the Altai cave sites with hominin fossils is evident, and this has an immediate impact on their ages. The application of any luminescence dating methods and Bayesian modeling of their results is unwarranted owing to the severe distortion of sediments by different natural and biogenic agents. Although at the current stage of research it is not possible to build a reliable chronology for Pleistocene hominins in the Altai, contra Jacobs et al. (2019) and Douka et al. (2019), some preliminary Conclusions can be made. The age of Denisovans is ca. 130.40 ka, judging from both biostratigraphic data (the possible MIS 5e age of layer 22.1 in the Main Chamber of Denisova Cave) and the youngest 14C date from layer 11.2 of the East Gallery in the same cave. Neanderthals can be dated to more than 50 ka, although the maximal age remains uncertain. Early modern humans in the Altai can tentatively be dated to ca. 28.3–23.1 ka. More work is needed to firmly establish the age of the hominin fossils in the Altai caves and to establish how it affects our understanding of the temporal relationships of the different hominin species.

Keywords: Hominin fossils | Chronology | Taphonomy | Paleolithic | Altai Mountains | Siberia

#### VILLASEÑOR 2020

Amelia Villaseñor, René Bobe & Anna K. Behrensmeyer, *Middle Pliocene hominin distribution patterns in Eastern Africa*. Journal of Human Evolution **147** (2020), 102856, 1–19.

Abundance distributions of large mammals are underused in exploring how ecological pressures vary across contemporaneous sites in the fossil record. To investigate variation in relative abundance across contemporaneous Pliocene mammal communities, we examine the time interval between  $\approx 3.6$  and 3.22 Ma at four sites in the Afar and Turkana basins: Hadar and the lower Omo Valley in Ethiopia and East Turkana and West Turkana in Kenya. Taphonomic and collection biases are examined using skeletal parts, body size, and taxonomic data from database collections. Taphonomic biases due to geologic conditions and fossil collection affected all sites, but those in the Turkana Basin appeared particularly affected by collecting bias. As a result, hominin relative abundance is calculated separately using a taphonomic control taxon, which shares similar collection biases and size. Comparisons of mammalian taxonomic groups revealed that the Omo region was dominated by suids and cercopithecids. The other sites are dominated by open habitat and mixed habitat associated boyids. Hominins had higher abundance wherein the dominant mammal taxa indicate a mix of woodland and grassland environments (Hadar) and were rarer at sites where the majority of taxa are associated with woodland vegetation (the Omo Valley). West Turkana is

characterized by mixed habitats and the highest relative abundance of hominins relative to control taxa, but sampling issues due to the collection and reporting of papionins likely drive this result. East Turkana has few hominins relative to the control taxon and has dominant habitats indicative of floodplain grasslands but has a small sample size compared with the other sites. These analyses suggest that Kenyanthropus platyops and Australopithecus afarensis inhabited similar types of habitats across different rift basins. Most convincingly, this study contributes to a growing body of evidence suggesting that early hominins diverged from their great ape counterparts by abandoning woodland-dominated habitats.

Keywords: Australopithecus afarensis | Kenyanthropus platyops | Abundance | Hominin paleoecology | African Pliocene | Taphonomy

## Bibel

### FANTALKIN 2020

Alexander Fantalkin, Assaf Kleiman, Hans Mommsen & Israel Finkelstein, Aegean Pottery in Iron IIA Megiddo, Typological, Archaeometric and Chronological Aspects. Mediterranean Archaeology and Archaeometry **20** (2020), 135–147.

The revival of economic and cultural contacts between Greece and the Levant during the early first millennium BCE has received much attention in scholarship, as Aegean imports found in the Eastern Mediterranean provide a reliable framework for inter-regional synchronization. In this article, we discuss Aegean sherds that were found in stratified Iron IIA contexts during recent excavations at Megiddo, one of the crucial sites for the establishment of Greek Protogeometric and Geometric chronology. An archaeometric analysis of these sherds suggests that some of them originated in Euboea. The specific Aegean provenance of the other fragments remains uncertain, but based on typological observations, two items, probably from the same vessel, appear to have originated from an Aegean milieu. The exposure of such imports at Megiddo, with its well-established stratigraphy, ceramic typology and radiocarbon dating system, is another contribution to the chronological synchronization of Greece and the Levant in the early first millennium BCE.

Keywords: Aegean Pottery | Euboea | Megiddo | Chronology | Iron IIA | NAA Analysis | Greece | Levant

#### FINKELSTEIN 2020

Israel Finkelstein, Saul and Highlands of Benjamin Update, The Role of Jerusalem. In: JOACHIM J. KRAUSE, O. SERGI & K. WEINGART (Hrsg.), Saul, Benjamin and the Emergence of Monarchy in Israel, Biblical and Archaeological Perspectives. (Atlanta 2020), 33–56.

In this article I offered a more nuanced, three-stage process for the geographical expansion of the Saulide entity in the tenth century BCE. In the peak of its rule, the house of Saul could have ruled from Jerusalem over the entire central highlands, that is, over the territories of the two traditional Bronze Age city-states of Shechem and Jerusalem. The memory of this early united monarchy, which was ruled by a northern king (at least from the perspective of the later Israel) from the southern hub, may have served as a model for the idea of a great united monarchy ruled by a northern king in the time of Jeroboam II, and no less important, for the Deuteronomistic concept of a united monarchy ruled from Jerusalem by a Davidide. Though admittedly hypothetical, this reconstruction is in line with the few fragmentary sources of information on the highlands in the tenth century BCE. It also provides a reasonable scenario for the otherwise rather enigmatic contemporaneous rise of Israel and Judah.

#### FINKELSTEIN 2020

Israel Finkelstein, Northern Royal Traditions in the Bible and the Ideology of a "United Monarchy" Ruled from Samaria. In: PETER DUBOVSKÝ & FEDERICO GIUNTOLI (Hrsg.), Stones, Tablets, and Scrolls, Periods of the Formation of the Bible. Archaeology and Bible (Tübingen 2020), 113–126.

Three northern royal traditions can be identified in the books of Samuel and Kings, concealed beneath layers of Deuteronomistic writing. These accounts, which deal with Saul, Jeroboam I, and Jehu, were committed to writing in the first half of the eighth century BCE, in the days of Jeroboam II - in territorial and economic terms, the greatest monarch of Israel. Shreds of the latter king's own royal tradition also exist, referring to conquests and building endeavors. The Jeroboam II account was mostly suppressed by later Deuteronomistic authors, although they did make use of it when it suited their theological program. The animosity of the Nimshides toward the Omrides probably explains why no royal tradition of the latter dynasty survived, and why their military prowess and territorial achievements were not celebrated. The Israelite royal traditions may have been part of a record that described the history of the Northern Kingdom from Jeroboam I to Jeroboam II, with special reference to events that demonstrated Israel's dominion over Judah. This is a clue that the idea of a great united monarchy – a single king ruling over the territories and people of Israel and Judah combined – may have originated in Israel (and its capital Samaria) in the days of Jeroboam II. It was "transferred" to Jerusalem after the fall of the Northern Kingdom and applied to Judah by Deuteronomistic authors. The list of "Solomonic" districts in 1 Kgs 4 and the conquest traditions in Josh 6–11 may also have originated in Israel and depicted the same northern ideology.

#### FINKELSTEIN 2020

Israel Finkelstein, Was There an Early Northern (Israelite) Conquest Tradition? In: JOACHIM J. KRAUSE, WOLFGANG OSWALD & KRISTIN WEINGART (Hrsg.), Eigensinn und Entstehung der Hebräischen Bibel, Erhard Blum zum siebzigsten Geburtstag. (Tübingen 2020), 211–221.

If the core-territory of Israel in the central highlands, the Gilead and the Jezreel-Beth-shean Valley did not have a Northern (that is, pre-720 BCE) conquest tradition, one could ask if the Northern Kingdom perceived its core people – the "true Israelites" – as having been autochthonous to the land. Needless to say, the answer must be negative, because the Exodus tradition also comes from the North.52 This point emphasizes the nature of the Northern conquest tradition: rather than creating an origin story, it served to provide legitimacy for the rule over areas not included in core-Israel and taken by force starting in the period of the Omrides; they were inhabited by Phoenicians, Arameans, Moabites and Judahites. This is not surprising: to differ from the "new" territories in the Galilee and Transjordan, the core-land of Israel was perceived as being inhabited by homogeneous Israelites (whatever their true origin) long enough, and not threatened by neighbors, and therefore in no need of legitimacy. The assumed Northern corpus of origin, royal and heroic texts, including a Northern conquest narrative, could have been brought to Judah after the fall of Israel in 722/720 BCE.53 Needless to say, the original Northern conquest text did not survive.

A Deuteronomistic author used parts of the Northern conquest story in his Book of Joshua narrative (Chapters 6–11), which deals with Cisjordan only.

### Isotope

#### Oelze 2014

Vicky M. Oelze, Josephine S. Head, Martha M. Robbins, Michael Richards & Christophe Boesch, Niche differentiation and dietary seasonality among sympatric gorillas and chimpanzees in Loango National Park (Gabon) revealed by stable isotope analysis. Journal of Human Evolution **66** (2014), 95–106.

The feeding ecology of sympatric great ape species yields valuable information for palaeodietary reconstructions in sympatric early hominin species. However, no isotopic references on sympatrically living apes and their feeding ecology are currently available. Here we present the first isotopic study on sympatric great apes, namely western lowland gorillas (Gorilla gorilla gorilla) and central chimpanzees (Pan troglodytes troglodytes) from Loango National Park, Gabon. We successfully analyzed the stable carbon and nitrogen isotope ratios in a selection of food plants (n = 31) and hair samples (n = 30) retrieved from sleeping nests to test whether niche partitioning among sympatric chimpanzees and gorillas is detectable using isotope analysis of hair. Ape hair strands with roots were sectioned into sequential segments (n = 100) to investigate temporal isotopic variation related to seasonal variations in food resources. We found significant d13C differences between herbaceous plants and fruits, most likely due to canopy effects. While the d13C values of chimpanzees indicate the consumption of fruit, the low d13C values in gorilla hair indicate folivory, most likely the consumption of 13C-depleted herbaceous vegetation. Our isotopic data also confirmed dietary overlap between chimpanzees and gorillas, which varied by season. Gorillas showed significant variation in d13C values in response to season due to shifting proportions of herbaceous plants versus fruits. In chimpanzees, significant seasonal variation in d15N was likely related to the seasonal availability of fruit species with particularly high d15N values. In summary, we found isotopic evidence for niche partitioning and seasonal dietary variation among sympatric great apes at Loango. These findings provide a valuable reference for palaeodietary research on fossil hominins using d13C analyses, particularly for studies focusing on sympatric taxa and on temporal isotopic variation within incremental tissues such as tooth enamel.

Keywords: Carbon and nitrogen isotopes | Palaeodietary reconstruction | Great ape | Africa | Niche partitioning

#### **Oelze** 2016

Vicky M. Oelze et al., Comparative isotope ecology of African great apes. Journal of Human Evolution **101** (2016), 1–16.

The isotope ecology of great apes is a useful reference for palaeodietary reconstructions in fossil hominins. As extant apes live in C3-dominated habitats, variation in isotope signatures is assumed to be low compared to hominoids exploiting C4-plant resources. However, isotopic differences between sites and between and within individuals are poorly understood due to the lack of vegetation baseline data. In this comparative study, we included all species of free-ranging African great apes (Pan troglodytes, Pan paniscus, Gorilla sp.). First, we explore differences in isotope baselines across different habitats and whether isotopic signatures in apes can be related to feeding niches (faunivory and folivory). Secondly, we illustrate how stable isotopic variations within African ape populations compare to other extant and extinct primates and discuss possible implications for dietary flexibility. Using 701 carbon and nitrogen isotope data points resulting from 148 sectioned hair samples and an additional collection of 189 fruit samples, we compare six different great ape sites. We investigate the relationship between vegetation baselines and climatic variables, and subsequently correct great ape isotope data to a standardized plant baseline from the respective sites. We obtained temporal isotopic profiles of individual animals by sectioning hair along its growth trajectory. Isotopic signatures of great apes differed between sites, mainly as vegetation isotope baselines were correlated with site-specific climatic conditions. We show that controlling for plant isotopic characteristics at a given site is essential for faunal data interpretation. While accounting for plant baseline effects, we found distinct isotopic profiles for each great ape population. Based on evidence from habituated groups and sympatric great ape species, these differences could possibly be related to faunivory and folivory. Dietary flexibility in apes varied, but temporal variation was overall lower than in fossil hominins and extant baboons, shifting from C3 to C4-resources, providing new perspectives on comparisons between extinct and extant primates.

Keywords: Carbon | Nitrogen | Habitat | Feeding ecology | Seasonality | Isotopic baseline

Vicky M. Oelze, Geraldine Fahy, Gottfried Hohmann, Martha M. Robbins, Vera Leinert, Kevin Lee, Henk Eshuis, Nicole Seiler, Erin G. Wessling, Josephine Head, Christophe Boesch & Hjalmar S. Kühl

#### Oelze 2020

Vicky M. Oelze, Roman M. Wittig, Sylvain Lemoine, Hjalmar S. Kühl & Christophe Boesch, How isotopic signatures relate to meat consumption in wild chimpanzees, A critical reference study from Taï National Park, Côte d'Ivoire. Journal of Human Evolution **146** (2020), 102817, 1–11.

The roots of human hunting and meat eating lie deep in our evolutionary past shared with chimpanzees (Pan troglodytes). From the few habituated wild populations, we know that there is considerable variation in the extent to which chimpanzees consume meat. Expanding our knowledge of meat eating frequencies to more, yet unhabituated, populations requires noninvasive, indirect quantitative techniques. We here evaluate the use of stable isotopes to reconstruct meat-eating behavior in wild chimpanzees. We present hair isotope data (n = 260) of two western chimpanzee (P. troglodytes verus) groups from Taï forest (Cote d'Ivoire) and relate them to directly observed amounts of meat consumed, sex/ female reproductive state, and group, while controlling for differences between individuals, seasons, and observation efforts. Succeeding seven months of hunting observations, we collected hair of 25 individuals for sequential analysis of d15N and d13C. Hunting success in the 7-month study period varied between the groups, with 25 successful hunts in the East group and only 8 in the North group. However, our models only found a direct relationship between amounts of meat consumed and variation within individual hair d15N values in the East group, but not in the North group and not when comparing between individuals or groups. Although on average East group individuals consumed more than double the amount of meat than North group individuals, their d15N values were significantly lower, suggesting that differences in microhabitat are substantial between group territories. The effect of sex/female

reproductive state was significant in d15N and d13C, suggesting it related to access to food or feeding preferences. We conclude that several factors additional to diet are influencing and thus obscuring the isotope ratios in wild chimpanzee hair, particularly when comparing between sexes and social groups.

Keywords: Hunting | Stable isotopes | Carbon | Nitrogen | Reproductive state

## Kultur

#### KWASMAN 1998

T. Kwasman & A. R. George, A new join to the Epic of Gilgameš Tablet I, The opening of the Epic of Gilgameš. Nouvelles Assyriologiques Brèves et Utilitaires **1998**, 89–90.

The new join demonstrates that the first preserved line of K 2756C is not the incipit of the Standard Babylonian epic, as everyone had assumed from Haupt's time to the present, but is in fact line 3, and that the opening of the text takes the form of a repeated couplet of a type common in ancient Mesopotamian poetry.

### Methoden

#### PILLER 2021

Charles Piller, Disgraced COVID-19 studies are still routinely cited. science **371** (2021), 331–332.

Journal mentions of studies based on disputed data from Surgisphere often fail to clearly flag retractions.

Ivan Oransky, co-founder of the website Retraction Watch, says such blunders occur because "people are either willfully or negligently not checking references." Many authors copy and paste lists of apparently relevant citations from similar papers without actually reading them, he says. "It's frightening. It's terrible, but common."

## Neolithikum

#### Egfjord 2021

Anne Friis-Holm Egfjord, Ashot Margaryan, Anders Fischer, Karl-Göran Sjögren, T. Douglas Price, Niels N. Johannsen, Poul Ott, Genomic Steppe ancestry in skeletons from the Neolithic Single Grave Culture in Denmark. PLoS ONE **16** (2021), e244872. DOI:10.1371/journal.pone.0244872.

The Gjerrild burial provides the largest and best-preserved assemblage of human skeletal material presently known from the Single Grave Culture (SGC) in Denmark. For generations it has been debated among archaeologists if the appearance of this archaeological complex represents a continuation of the previous Neolithic communities, or was facilitated by incoming migrants. We sampled and analysed five skeletons from the Gjerrild cist, buried over a period of c. 300 years, 2600/2500-2200 cal BCE. Despite poor DNA preservation, we managed to sequence the genome (>1X) of one individual and the partial genomes (0.007X and 0.02X) of another two individuals. Our genetic data document a female (Gjerrild 1) and two males (Gjerrild 5 + 8), harbouring typical Neolithic K2a and HV0 mtDNA haplogroups, but also a rare basal variant of the R1b1 Y-chromosomal haplogroup. Genome-wide analyses demonstrate that these people had a significant Yamnaya-derived (i.e. steppe) ancestry component and a close genetic resemblance to the Corded Ware (and related) groups that were present in large parts of Northern and Central Europe at the time. Assuming that the Gjerrild skeletons are genetically representative of the population of the SGC in broader terms, the transition from the local Neolithic Funnel Beaker Culture (TRB) to SGC is not characterized by demographic continuity. Rather, the emergence of SGC in Denmark was part of the Late Neolithic and Early Bronze Age population expansion that swept across the European continent in the 3rd millennium BCE, resulting in various degrees of genetic replacement and admixture processes with previous Neolithic populations.

Anne Friis-Holm Egfjord, Ashot Margaryan, Anders Fischer, Karl-Göran Sjögren, T. Douglas Price, Niels N. Johannsen, Poul Otto Nielsen, Lasse Sørensen, Eske Willerslev, Rune Iversen, Martin Sikora, Kristian Kristiansen & Morten E. Allentoft

#### Hrnčíř 2020

Václav Hrnčíř, Václav Vondrovský & Petr Květina, Post-marital residence patterns in LBK, Comparison of different models. Journal of Anthropological Archaeology **59** (2020), 101190, 1–16.

Many ideas about post-marital residence rules in the society of the first farmers in the European temperate zone (Linear Pottery Culture, ca. 5500–4900 cal BC) have been proposed. The prevailing hypothesis is patrilocality and community exogamy, based on strontium isotope, modern DNA, ancient DNA, linguistic and anthropological evidence. However, presenting several different anthropological models and comparing them with strontium isotope results from two LBK cemeteries (Vedrovice and Nitra), we argue that other post-marital residence rules such as ambilocality, avunculocality, shifting residence or predominant matrilocality were also possible. Arguments set in contradiction to one-sided interpretation of strontium isotope results include a possible practice of polygyny, abduction of young women and non-inhumation burials. A hypothetical model combining patrilocality and matrilocality on different social and geographical levels is proposed.

**Keywords**: Post-marital residence | LBK | Vedrovice | Nitra | Cross-cultural research | Strontium isotope