

References

Afrika

BRIELLE 2023

Esther S. Brielle et al., *Entwined African and Asian genetic roots of medieval peoples of the Swahili coast*. *nature* **615** (2023), 866–873. [n615-0866-Supplement.pdf](#)

The urban peoples of the Swahili coast traded across eastern Africa and the Indian Ocean and were among the first practitioners of Islam among sub-Saharan people^{1,2}. The extent to which these early interactions between Africans and non-Africans were accompanied by genetic exchange remains unknown. Here we report ancient DNA data for 80 individuals from 6 medieval and early modern (ad 1250–1800) coastal towns and an inland town after ad 1650. More than half of the DNA of many of the individuals from coastal towns originates from primarily female ancestors from Africa, with a large proportion—and occasionally more than half—of the DNA coming from Asian ancestors. The Asian ancestry includes components associated with Persia and India, with 80–90 % of the Asian DNA originating from Persian men. Peoples of African and Asian origins began to mix by about ad 1000, coinciding with the large-scale adoption of Islam. Before about ad 1500, the Southwest Asian ancestry was mainly Persian-related, consistent with the narrative of the Kilwa Chronicle, the oldest history told by people of the Swahili coast³. After this time, the sources of DNA became increasingly Arabian, consistent with evidence of growing interactions with southern Arabia⁴. Subsequent interactions with Asian and African people further changed the ancestry of present-day people of the Swahili coast in relation to the medieval individuals whose DNA we sequenced.

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CURRY 2023

Andrew Curry, *‘Persian princes’ helped found early African trade power, Ancient DNA reflects foreign influx to Swahili coast, but its culture is largely local*. *science* **379** (2023), 1284–1285.

DNA from medieval cemeteries used by the Swahili elite

“We have 300 years of Swahili civilization preceding this,” Horton says. “What we’re seeing is an event where Persians arrive into a well-formed culture or civilization and very rapidly get entangled.”

Yonatan Sahle, *Eastern African Stone Age*. Oxford
Research Encyclopedia of Anthropology 2020, Feb. 28.
DOI:10.1093/acrefore/9780190854584.013.53.

The Stone Age record is longer and better documented in eastern Africa. Archaeological and fossil evidence derives particularly from sites within the Rift Valley of the region, often with secure radiometric age estimates. Despite a relatively late start and disproportionate focus on earlier periods and open-air sites within the rift, scientific research into the region's Stone Age record continues to play a central role in our understanding of human evolution.

Putative stone tools and cutmarked bones from two Late Pliocene (3.6–2.58 million years ago or Ma) contexts are exclusive to eastern Africa, as is conclusive evidence for these by 2.5 Ma. The earliest indisputable technological traces appear in the form of simple flakes and core tools as well as surface-modified bones. It is not clear what triggered this invention, or whether there was a more rudimentary precursor to it. Neither is it certain which hominin lineage started this technology, or if it hunted or only scavenged carcasses. Well-provenienced archaeological occurrences predating 2.0 Ma are limited to sites in Ethiopia and Kenya, becoming more common across eastern Africa and beyond only later. By 1.75 Ma, lithic technologies that included heavy-duty and large cutting tools appeared in Ethiopian and Kenyan localities. Several details about this technological tradition are still inadequately understood, although its appearance in eastern Africa roughly coincides with that of *Homo erectus/ergaster*. By far the longest-lived Stone Age tradition, hominins with such technologies successfully inhabited high-altitude environments as early as 1.5 Ma, and expanded within and beyond Africa even earlier. Hunting and use of fire probably started in the earlier part of this technological tradition.

Small-sized and highly diverse tool forms gradually and variably started to replace heavy-duty and large cutting tools beginning c. 300 thousand years ago (ka). Conventional wisdom associates this technological and behavioral shift with the rise of *Homo sapiens*, although the oldest undisputed representatives of our species continued to use large cutting tools in eastern Africa after 200 ka. In addition to small retouched tools, often on products from prepared cores, significant innovations such as hafting and ranged weaponry emerged during the length of this technological tradition. Increasingly complex sociocultural behaviors, including mortuary practices, mark the later part of this period in eastern Africa. The consolidation of such skills and behaviors, besides ecological/demographic dynamics, may have enabled the ultimately decisive Out-of-Africa dispersal of our species, from eastern Africa, 50–80 ka.

Even smaller and more diverse stone tool forms and other sociocultural innovations evolved in many areas of eastern Africa by 50 ka. Miniaturization and diversification allowed for the adoption of more complex technologies, including intentional blunting and microlithization. Some of these were used as parts of sophisticated composite implements, such as the bow and arrow. Complex behaviors involving personal ornamentation, symbolism, and rituals that resembled the lifeways of ethnographically known hunter-gatherer populations were similarly adopted. These dynamics eventually led to the development of new technological and socioeconomic systems marked by the inception of agriculture and attendant lifeways.

Keywords: prehistory | archaeology | stone tools | human evolution | Rift Valley

Aktuell

FROST 2023

Stephen R. Frost, Frances J. White, Hailay G. Reda & Christopher C. Gilbert, *Multiple, independent lines of evidence suggest Sterkfontein is less than 2.8 My old, Reply to Granger et al.* [PNAS 120 \(2023\), e2301351120](#).

In the past (e.g., the KBS tuff controversy), when new radiometric estimates conflicted with those based on biochronology, the faunal estimates ultimately proved more accurate. We hope to see additional faunal and radiometric analyses that continue to refine African Plio-Pleistocene chronology.

GRANGER 2023

Darryl E. Granger et al., *Monkey fossils do not negate cosmogenic dating at Sterkfontein.* [PNAS 120 \(2023\), e2300314120](#).

We, therefore, disagree that Sterkfontein must be <3 My, which would require that radiometric dating of breccias (2, 7) is flawed.

MALLAPATY 2023

Smriti Mallapaty, *Covid-origins study links raccoon dogs to Wuhan market.* [nature 615 \(2023\), 771–772](#).

Some researchers say the analysis provides new evidence supporting the hypothesis that SARS-CoV-2 spilled over from an animal — but falls short of definitive proof.

But establishing that the animals were at the market suggests that the pandemic could have had an animal origin, say some researchers.

The data included almost all the swabs taken from drains, market stalls and the ground in January and February 2020 that had tested positive for SARS-CoV-2. “We’re talking about millions and millions of sequencing reads,” says Crits-Christoph.

The data confirm that “exactly what we thought was there in the market, was there in the market”

Altpaläolithikum

FLICKER 2023

Dylan Flicker & Alastair Key, *Statistical assessment of the temporal and cultural relationship between the Lomekwian and Oldowan.* [Journal of Archaeological Science: Reports 48 \(2023\), 103834, 1–7](#).

[JASRep048-a103834-Supplement.zip](#)

The temporal relationship between the Lomekwi 3 archaeological site and the Oldowan stone tool industry is not well explored. Lomekwi 3 dates to 3.3 million years ago (Ma), meaning the ‘Lomekwian’ as we currently understand it is 719 thousand years (Ka) older than the current oldest known Oldowan site, Ledi-Gararu. Here, we investigate the temporal relationship between Lomekwi 3 and early Oldowan occurrences using the ‘surprise test’, a statistical technique able to assess the temporal cohesion of cultural occurrences. It evaluates the null hypothesis that Lomekwi 3 was produced by the same cultural process responsible for the Oldowan, and does so by determining the temporal exceptionality of an outlying occurrence (i.e., Lomekwi 3) relative to a larger sample of earlier or later occurrences (in this case early Oldowan sites). Results indicate the null hypothesis

cannot be rejected, suggesting Lomekwi 3 to potentially be from the same cultural process responsible for the Oldowan. This lack of temporal distinction means the former cannot reliably be inferred to be outside of the temporal range of the latter, increasing the feasibility of a cultural evolutionary relationship between Lomekwi 3 and the Oldowan and emphasising the need for a more widely evidenced technological distinction between the two. Additionally, we examine the impact of a less porous Oldowan record on these results by simulating the discovery of additional early Oldowan sites. The addition of one or more sites was required to guarantee a significant result. Thus, temporal evidence suggests Lomekwi 3 and the Oldowan should currently be considered part of the same cultural process (i.e., not to result from technological convergence), but this scenario could change through additional site discoveries.

Keywords: Extreme order statistics | Gumbel domain of attraction | Lomekwian | Oldowan | Surprise test | Early Stone Age

KEY 2023

Alastair Key & Nick Ashton, *Hominins likely occupied northern Europe before one million years ago*. [Evolutionary Anthropology](#) **32** (2023), 10–25.

[EvolAnth32-010-Supplement.pdf](#)

Our understanding of when hominins first reached northern Europe is dependent on a fragmented archaeological and fossil record known from as early as marine isotope stage (MIS) 21 or 25 (c. 840 or 950 thousand years ago [Ka]). This contrasts sharply with southern Europe, where hominin occupation is evidenced from MIS 37 to 45 (c. 1.22 or 1.39 million years ago [Ma]). Northern Europe, however, exhibits climatic, geological, demographic, and historical disadvantages when it comes to preserving fossil and archaeological evidence of early hominin habitation. It is argued here that perceived differences in first occupation timings between the two European regions needs to be revised in light of these factors. To enhance this understanding, optimal linear estimation models are run using data from the current fossil and artefact record. Results suggest northern Europe to have first been occupied as early as 1.16 Ma, or as late as 913 Ka. These timings could represent minimum date expectations and be extended through future archaeological and fossil discoveries.

Keywords: early human dispersal | early pleistocene | hominin demography | Lower Palaeolithic | modelling | optimal linear estimation | temporal range estimation

MUSSI 2023

Margherita Mussi & Eduardo Mendez-Quintas et al., *A surge in obsidian exploitation more than 1.2 million years ago at Simbiro III (Melka Kunture, Upper Awash, Ethiopia)*. [Nature Ecology & Evolution](#) **7** (2023), 337–346.

[NatEcoEvo07-0337-Supplement.pdf](#)

The selective exploitation and methodical shaping of obsidian signals complex behaviours since the Early Pleistocene and from an early stage of the Acheulean Technocomplex. Hominins at Simbiro III had the capacity to anticipate and plan activities in a diverse and locally wooded environment. When returning to the same important spot they had to consider the seasonal flooding of the area. This recurrent activity had to avoid the period of the year when, predictably, the area was marshy or just under water. Overall, the evidence provided by MS-level C contradicts the common assumption of early hominins simply ‘coping’ with environmental change: more than around 1.2 Ma, they exploited a new resource that

had become locally available, even if not easily so all over the year. They creatively solved through convergent thinking technological problems such as effectively detaching and shaping large flakes of the unusually brittle and cutting volcanic glass. MS-level C signals the need, when discussing human evolution, to address the emergence of behaviours and capacities more complex than commonly assumed.

Margherita Mussi, Eduardo Mendez-Quintas, Doris Barboni, Hervé Bocherens, Raymonde Bonnefille, Giuseppe Briatico, Denis Geraads, Rita T. Melis, Joaquin Panera, Laura Pioli, Andrea Serodio Domínguez & Susana Rubio Jara

Pleistocene archaeology records the changing behaviour and capacities of early hominins. These behavioural changes, for example, to stone tools, are commonly linked to environmental constraints. It has been argued that, in earlier times, multiple activities of everyday life were all uniformly conducted at the same spot. The separation of focused activities across different localities, which indicates a degree of planning, according to this mindset characterizes later hominins since only 500,000 years ago. Simbiro III level C, in the upper Awash valley of Ethiopia, allows us to test this assumption in its assemblage of stone tools made only with obsidian, dated to more than 1.2 million years (Myr) old. Here we first reconstruct the palaeoenvironment, showing that the landscape was seasonally loaded. Following the deposition of an accumulation of obsidian cobbles by a meandering river, hominins began to exploit these in new ways, producing large tools with sharp cutting edges. We show through statistical analysis that this was a focused activity, that very standardized handaxes were produced and that this was a stone-tool workshop. We argue that at Simbiro III, hominins were doing much more than simply reacting to environmental changes; they were taking advantage of new opportunities, and developing new techniques and new skills according to them.

Amerika

CURRY 2023

Andrew Curry, *Horse Nations, After the Spanish conquest, horses transformed Native American tribes much earlier than historians thought.* *science* **379** (2023), 1288–1293.

Some historians say they've made steps in that direction, using ethnographic and linguistic evidence. The idea that horses might have been adopted by Native groups in New Mexico and beyond in the 1600s, prior to the Pueblo Revolt, "is pretty much in line with what historians have been writing for the last 20 or 30 years," says Ted Binnema, a historian at the University of Northern British Columbia. "The entire military history of the Plains seems to make sense with this timeline."

But pushing the arrival of the horse back much further is a stretch, he says. Spanish troops entering New Mexico in 1598 make no mention of encountering mounted warriors. "Any evidence Indigenous groups were already equestrian before 1598 would be a big discovery," Binnema says. "But this isn't enough to convince me."

TAYLOR 2023

William Timothy Treal Taylor, Brandi Bethke, Emily Lena Jones, Yvette Running Horse Collin & Ludovic Orlando et al., *Early dispersal of domestic horses into the Great Plains and northern Rockies.* *science* **379** (2023), 1316–1323.

s379-1316-Supplement.pdf

The horse is central to many Indigenous cultures across the American Southwest and the Great Plains. However, when and how horses were first integrated into Indigenous lifeways remain contentious, with extant models derived largely from colonial records. We conducted an interdisciplinary study of an assemblage of historic archaeological horse remains, integrating genomic, isotopic, radiocarbon, and paleopathological evidence. Archaeological and modern North American horses show strong Iberian genetic affinities, with later influx from British sources, but no Viking proximity. Horses rapidly spread from the south into the northern Rockies and central plains by the first half of the 17th century CE, likely through Indigenous exchange networks. They were deeply integrated into Indigenous societies before the arrival of 18th-century European observers, as reflected in herd management, ceremonial practices, and culture.

William Timothy Treal Taylor, Pablo Librado, Mila Hunska Tašunke Icu, Carlton Shield Chief Gover, Jimmy Arterberry, Anpetu Luta Wih, Akil Nujipi, Tanka Omniya, Mario Gonzalez, Bill Means, Sam High Crane, Mazasu, Barbara Dull Knife, Wakihyala Wih, Cruz Tecumseh Collin, Chance Ward, Theresa A. Pasqual, Lorelei Chauvey, Laure Tonasso-Calviere, Stéphanie Schiavinato, Andaine Seguin-Orlando, Antoine Fages, Naveed Khan, Clio Der Sarkissian, Xuexue Liu, Stefanie Wagner, Beth Ginondidoy Leonard, Bruce L. Manzano, Nancy O'Malley, Jennifer A. Leonard, Eloísa Bernáldez-Sánchez, Eric Barrey, Léa Charliquant, Emilie Robbe, Thibault Denoblet, Kristian Gregersen, Alisa O. Vershinina, Jaco Weinstock, Petra Rajiæ Šikanjiæ, Marjan Mashkour, Irina Shingiray, Jean-Marc Aury, Aude Perdereau, Saleh Alquraishi, Ahmed H. Alfarhan, Khaled A. S. Al-Rasheid, Tajana Trbojeviæ Vukicjeviæ, Marcel Buric, Eberhard Sauer, Mary Lucas, Joan Brenner-Coltrain, John R. Bozell, Cassidee A. Thornhill, Victoria Monagle, Angela Perri, Cody Newton, W. Eugene Hall, Joshua L. Conver, Petrus Le Roux, Sasha G. Buckser, Caroline Gabe, Juan Bautista Belardi, Christina I. Barrón-Ortiz, Isaac A. Hart, Christina Ryder, Matthew Sponheimer, Beth Shapiro, John Southon, Joss Hibbs, Charlotte Faulkner, Alan Outram, Laura Patterson Rosa, Katelyn Palermo, Marina Solé, Alice William, Wayne McCrory, Gabriella Lindgren, Samantha Brooks, Camille Ech , C cile Donnadieu, Olivier Bouchez, Patrick Wincker, Gregory Hodgins, Sarah Trabert, Brandi Bethke, Patrick Roberts, Emily Lena Jones, Yvette Running Horse Collin & Ludovic Orlando

Arch ologie

KRISTIANSEN 2022

Kristian Kristiansen, *Archaeology and the Genetic Revolution in European Prehistory*. Elements in the Archaeology of Europe ([Cambridge 2022](#)).

This Element was written to meet the theoretical and methodological challenge raised by the third science revolution and its implications for how to study and interpret European prehistory. The first section is therefore devoted to a historical and theoretical discussion of how to practice interdisciplinarity in this new age and, following from that, how to define some crucial but undertheorized categories, such as culture, ethnicity, and various forms of migration. The author thus integrates new results from archaeogenetics into an archaeological frame of reference to produce a new and theoretically informed historical narrative – one that invites further debate and also identifies areas of uncertainty where more research is needed.

Keywords: archaeology | genetics | European prehistory | migration | ethnicity

Bibel

RÖMER 2023

Thomas Römer, *The mysteries of the Ark of the Covenant*. [Studia Theologica – Nordic Journal of Theology \(2023\), preprint, 1–17](#). DOI:10.1080/0039338X.2023.2167861.

The Ark of the Covenant, or Ark of Yhwh, has stimulated the imagination of many people from biblical times up to today: it has served as the inspiration for many stories, as the subject of paintings, and even the fodder for Hollywood directors, who still today show an interest in producing movies about the Lost Ark. There are probably many reasons for this fascination. For starters, the Hebrew Bible itself leaves many questions about the Ark open: What happened to the Ark after King Solomon brought it into the Temple? Was the Ark deported or destroyed when the Babylonians conquered Jerusalem? And what did the Ark originally contain?

It can therefore be hypothesized that the early history of the Ark was composed in the time of Jeroboam II to legitimize the site of Kiriath Jearim as the new location of the Ark after the destruction of Shiloh.

If it was only Josiah who brought the Ark from Kiriath Jearim to Jerusalem as part of his centralization policy, that would also explain why the books of Kings are silent about the Ark, other than the claim that Solomon placed it in the Temple: Because it only arrived there 50 years before the destruction of the Temple, during the reign of Josiah.

According to the book of Chronicles, King Josiah, when conducting his reform, gives a strange order. This strange remark in 2 Chronicles 35:3 has been explained by rabbis and church fathers in various ways.

The best explanation is that this verse preserves a memory of the Ark being brought into the Jerusalem temple under Josiah. It is possible that Psalm 132, which alludes to the transport of the Ark and to which Mowinckel paid much attention, was written in the same context in order to legitimate its transfer from Kiriath Jearim to Jerusalem.

However, the most plausible hypothesis is that the Ark disappeared during the destruction of the temple by the Babylonians. Since it is not mentioned among the objects of the Temple that the Persians gave back to the Judeans (Ezra 1:7–11; 5:13–15), it does not seem that the Ark was taken as spoil to Babylon,²⁷ but that it was destroyed during the burning of Temple.

The book of Jeremiah contains a mention of the Ark that may well fit to the beginning of the Persian period, when the Persian king allowed and even encouraged the reconstruction of the Jerusalem temple. It suggests that the Ark should not be remade (Jer 3:14–18).

Biologie

DAMUTH 2023

John Damuth, *Wild mammals through the lens of biomass rather than biodiversity*. [PNAS 120 \(2023\), e2301652120](#).

There is a third ecological measure by which species may be compared: the trophic energy flux through each species. Trophic energy requirements and rates of production of new biomass are the best measures of the direct impact that species have on each other, as consumers or as resources, and also represent the trophic energy cost (to the community, region, or biosphere) of supporting a particular species. In general, species energy-use and productivity do not scale proportionally

to biomass. The same volume of biomass metabolizes, and turns over, at a slower rate if that biomass is in a large species as opposed to a small one.

GREENSPOON 2023

Lior Greenspoon, Eyal Krieger, Shai Meiri, Uri Roll, Elad Noor & Ron Milo et al., *The global biomass of wild mammals*. [PNAS 120 \(2023\), e2204892120](#).

[pnas120-e2204892120-Supplement.pdf](#)

Wild mammals are icons of conservation efforts, yet there is no rigorous estimate available for their overall global biomass. Biomass as a metric allows us to compare species with very different body sizes, and can serve as an indicator of wild mammal presence, trends, and impacts, on a global scale. Here, we compiled estimates of the total abundance (i.e., the number of individuals) of several hundred mammal species from the available data, and used these to build a model that infers the total biomass of terrestrial mammal species for which the global abundance is unknown. We present a detailed assessment, arriving at a total wet biomass of ≈ 20 million tonnes (Mt) for all terrestrial wild mammals (95% CI 13-38 Mt), i.e., ≈ 3 kg per person on earth. The primary contributors to the biomass of wild land mammals are large herbivores such as the white-tailed deer, wild boar, and African elephant. We find that even-hoofed mammals (artiodactyls, such as deer and boars) represent about half of the combined mass of terrestrial wild mammals. In addition, we estimated the total biomass of wild marine mammals at ≈ 40 Mt (95% CI 20-80 Mt), with baleen whales comprising more than half of this mass. In order to put wild mammal biomass into perspective, we additionally estimate the biomass of the remaining members of the class Mammalia. The total mammal biomass is overwhelmingly dominated by livestock (≈ 630 Mt) and humans (≈ 390 Mt). This work is a provisional census of wild mammal biomass on Earth and can serve as a benchmark for human impacts.

Keywords: ecology | biomass | biosphere | quantitative biology

Lior Greenspoon, Eyal Krieger, Ron Sender, Yuval Rosenberg, Yinon M. Bar-On, Uri Moran, Tomer Antman, Shai Meiri, Uri Roll, Elad Noor & Ron Milo

Significance: Mammals include some of the best-known species of animals, and are icons of conservation efforts. Despite their status, there is no rigorous estimate available for their overall global biomass. We quantified absolute wild mammalian biomass and its distribution across different taxa and continents. Such data can serve as a holistic benchmark to analyze temporal trends. This quantitative global view of wildlife, when contrasted for example to the mass of humanity and its livestock, can help dispel notions about the seemingly endless ubiquity of wildlife and provide a quantitative argument for the urgency of nature conservation efforts.

Grabung

ADAMS 2023

Matthew J. Adams, *The three temples in antis at Megiddo*. [Journal of Ancient Egyptian Interconnections 37 \(2023\), 17–38](#).

The date of the Stratum XV Triple-Temple Complex at Megiddo has been the subject of debate since it was first uncovered by the University of Chicago in the 1930s. Generally, an Early Bronze Age III date became the status quo interpretation, but several problems with this date are apparent. First, there was already significant EB III stratigraphy at the site, consisting of a well-planned palace, elite quarter, and temple complex. The construction of the Triple-Temple complex completely put this EB III palatial phase out of commission. Therefore, if an EB III

date for the temples is preferred, this infers that a completely new urban plan was envisioned within that period – a phenomenon not seen elsewhere for EB III palatial centers. Second, it leaves a significant architectural gap at the site during the EB IV/Intermediate Bronze Age, a period for which Megiddo produced a significant amount of material culture. The solution presented itself when the Tel Aviv University Megiddo Expedition discovered a cache of Egyptianized pottery below the temple complex. Originally thought to have come from underlying EB IB strata, ongoing excavation at the site and refinement of the stratigraphy of the cultic area led the present author to conclude that the pottery cache was a foundation deposit associated with the Stratum XV Triple-Temple Complex. The cache, fitting well, typologically, with Egyptian foundation deposits from the late Old Kingdom/First Intermediate Period, supports, in turn, an EB IV/IB date for the construction of the Megiddo Triple-Temple Complex. This paper returns to this issue to properly place the architecture of the Triple-Temple Complex into its Northern Levantine EB IV world as temples in antis and to consider Northern Levantine and Egyptian contacts from the unique perspective of Megiddo.

Keywords: Megiddo | Early Bronze Age | Byblos | Intermediate Bronze Age

NEUGEBAUER-MARESCH 2016

Christine Neugebauer-Maresch, Thomas Einwögerer, Jürgen Richter, Andreas Maier & Shumon T. Hussain, *Kammern-Grubgraben, Neue Erkenntnisse zu den Grabungen 1985–1994*. *Archaeologia Austriaca* **100** (2016), 224–254.

The open-air site of Kammern-Grubgraben is a rare example of a detailed glimpse of Ice-Age hunter-gatherer lifestyles during the latter part of the last glaciation of the northern hemisphere. Archaeological excavations were initially conducted between 1985 and 1990 (A. Montet-White/F. Brandtner) and from 1993 to 1994 (F. Brandtner/ B. Klíma). After the death of F. Brandtner, however, the inventory of the more recent excavations in the collection went without close examination. In a joint project between the Institute for Oriental and European Archaeology of the Austrian Academy of Sciences (Neugebauer-Maresch, Einwögerer) and the University of Cologne (Richter, Hussain) and University of Erlangen (Maier), this extensive find material was comprehensively documented and inventoried for the first time on behalf of the state of Lower Austria (MAMUZ), its legal owner. The contributions of Haesaerts and Damblon as well as Haesaerts et al. supplement this examination with a re-contextualisation and re-interpretation of the chronostratigraphy obtained during the initial excavations.

Keywords: Last Glacial Maximum (LGM) | open air site | technology | typology | Kammern-Grubgraben | Lower Austria.

Die Freilandfundstelle Kammern-Grubgraben zählt zu den wenigen Fundplätzen, die einen Einblick in das Leben der eiszeitlichen Jäger- und SammlerInnen im späten Abschnitt der letzten Vereisung der nördlichen Hemisphäre erlauben. Umfangreiche archäologische Ausgrabungen am Grubgraben fanden erst zwischen 1985 und 1990 (A. Montet-White/F. Brandtner) und von 1993 bis 1994 (F. Brandtner/B. Klíma) statt. Nach dem Tod F. Brandtners im Jahre 2000 verblieb das Fundmaterial der jüngeren Grabungen jedoch unbearbeitet und weitgehend unaufbereitet im Sammlungsbestand. In Zuge eines Kooperationsprojekts des Instituts für Orientalische und Europäische Archäologie der Österreichischen Akademie der Wissenschaften (Neugebauer-Maresch, Einwögerer) mit den Universitäten Köln (Richter, Hussain) und Erlangen (Maier) wurde das Fundmaterial nun erstmals gesamtheitlich gesichtet und für den gesetzlichen Eigentümer, das Land Niederösterreich (MAMUZ), inventarisiert. Dieser Beitrag gibt den derzeitigen Bearbeitungsstand dieser wichtigen Fundinventare wieder und erörtert erste Ergebnisse in

ihrem kulturhistorischen Kontext. Die Beiträge von Haesaerts und Damblon sowie Haesaerts et al. in diesem Band fassen die chronostratigraphischen Untersuchungen dieser Altgrabungen zusammen und bemühen sich um eine Neueinordnung und -beurteilung.

Keywords: Letzteiszeitliches Maximum (LGM) | Freilandfundstelle | Technologie | Typologie | Kammern-Grubgraben | Niederösterreich.