Liste erstellt am 2020-01-17

References

Anthropologie

Hora 2020

Martin Hora, Herman Pontzer, Cara M. Wall-Scheffler & Vladimír Sládek, *Dehydration and persistence hunting in Homo erectus*. Journal of Human Evolution **138** (2020), 102682, 1–21.

JHumEvo138-a102682-Supplement.pdf

Persistence hunting has been suggested to be a key strategy for meat acquisition in Homo erectus. However, prolonged locomotion in hot conditions is associated with considerable water losses due to sweating. Consequently, dehydration has been proposed to be a critical limiting factor, effectively curtailing the usefulness of persistence hunting prior to the invention of water containers. In this study, we aimed to determine the extent to which dehydration limited persistence hunting in H. erectus. We simulated ambient conditions and spatiotemporal characteristics of nine previously reported persistence hunts in the Kalahari. We used a newly developed and validated heat exchange model to estimate the water loss in H. erectus and a recent Kalahari hunter. Water loss equivalent to 10 % of the hunter's body mass was considered the physiological limit of a hunt with no drinking. Our criterion for ruling dehydration out of being a limit for persistence hunting was the ability to hunt without drinking for at least 5 h, as this was the longest duration reported for a successful persistence hunt of large prey. Our results showed that H. erectus would reach the dehydration limit in 5.5–5.7 h of persistence hunting at the reported Kalahari conditions, which we argue represent a conservative model also for Early Pleistocene East Africa. Maximum hunt duration without drinking was negatively related to the relative body surface area of the hunter. Moreover, H. erectus would be able to persistence hunt over 5 h without drinking despite possible deviations from modern-like heat dissipation capacity, aerobic capacity, and locomotor economy. We conclude that H. erectus could persistence hunt large prey without the need to carry water.

Keywords: Endurance | Energetics | Running | Sweating | Thermoregulation | Water loss

Archäologie

Studia Troica 1992

. Studia Troica 2 (Mainz 1992).

Bibel

ʿAssāf 1990

ʿAlī Abū ʿAssāf, *Der Tempel von ʿAin Dārā*. Damaszener Forschungen 3 (Mainz 1990).

BAS 2020
Herod's Death, Jesus' Birth and a Lunar Eclipse, *Letters to the Editor debate dates of Herod's death and Jesus' birth*. Bible History Daily **2020**, Jan. 10.

den Hertog 2003
Cornelis G. den Hertog, Ulrich Hübner & Stefan Münger (Hrsg.), *Saxa loquentur – Studien zur Archäologie Palästinas/Israels*, *Festschrift für Volkmar Fritz zum 65. Geburtstag*. Alter Orient und Altes Testament 32 (Münster 2003).

Na'aman 2003
Nadav Na'aman, *Ostracon 40 From Arad Reconsidered*. In: Cornelis G. den Hertog, Ulrich Hübner & Stefan Münger (Hrsg.), *Saxa loquentur – Studien zur Archäologie Palästinas/Israels*, *Festschrift für Volkmar Fritz zum 65. Geburtstag*. Alter Orient und Altes Testament 32 (Münster 2003), 199–204.

The article suggests a new date, transliteration and translation for Ostracon 40 from Arad. In light of the date and textual analysis, a reconstruction of the historical situation reflected in the text is offered and the information gained from Ostracon 40 is combined with that of Ostracon 24. The two ostraca illustrate the state of emergency in the Negeb of Judah in the last years of the kingdom of Judah, when the high command found it difficult to impose its authority on the local fort commanders and was obliged to issue strict orders and even threaten them with the death penalty for its commands to be obeyed.

Ussishkin 2003
David Ussishkin, *The Level V 'Sanctuary' and 'High Place' at Lachish*, *A Stratigraphic Analysis*. In: Cornelis G. den Hertog, Ulrich Hübner & Stefan Münger (Hrsg.), *Saxa loquentur – Studien zur Archäologie Palästinas/Israels*, *Festschrift für Volkmar Fritz zum 65. Geburtstag*. Alter Orient und Altes Testament 32 (Münster 2003), 205–211.

It is therefore clear that the underlying pit and the cultic vessels are earlier than Level III, and probably date to Level IV (theoretically they could also date to Level V but this seems unlikely). The exact date of Level IV is a matter of speculation: the overlying Level III was destroyed by the Assyrian army in 701 BCE. It follows that the earlier, underlying Level IV dates probably to the 9th century, and the earlier part of the 8th centuries BCE. This is probably the date of the pit and the cult objects it contained.

The presence of the cultic vessels in the pit can be convincingly explained. It seems that the pit contained the cultic equipment of a sanctuary, which was dumped or buried in it when the sanctuary fell into disuse. A parallel, nearly contemporary case was uncovered at the fortress in 'En Haseva, where the cultic vessels of an Edomite shrine were apparently found thrown into a pit (Na'aman 1997). Significantly, no other remains associated with cult have so far been uncovered in Levels V and IV.

The conclusions reached above are important not only for the stratigraphy and history of ancient Lachish. The number of known Judean and Israelite cult places and sanctuaries is small, and hence further information on each one of them forms

a significant contribution to the study of cult and religion in Israel and Judah during the First Temple period.

Datierung

Blockley 2011

S. P. E. Blockley & R. Pinhasi, *A revised chronology for the adoption of agriculture in the Southern Levant and the role of Lateglacial climatic change*. Quaternary Science Reviews **30** (2011), 98–108.

This paper re-examines the chronology and environmental context for the transition to agriculture in the Southern Levant, seen as the likely starting point for the adoption of agriculture in Europe and the Near East. The role in this process of abrupt late Quaternary climate change has been discussed widely, but limitations on the archaeological and palaeoenvironmental chronologies have led to varying interpretations. Here we attempt to clarify the situation by first testing the available radiocarbon database for the archaeological transitions from the Natufian through to the PPNA. We apply internationally accepted radiocarbon quality assurance procedures and find that a significant number of the published dates fall bellow acceptable standards. The cleaning process significantly clarifies and constrains the reported time ranges for the Natufian, Late Natufian and PPNA. We then apply the new IntCal09 calibration curve and Bayesian calibration methods, using the archaeological phasing to constrain the data and calculate the most likely timing of the transitions between each phase. We then compare the onset and duration of archaeological phases to data representing the key Northern Hemisphere climatic transitions, using the new GICC05 Greenland Ice core timescale and the timing of transitions between wet and dry phases in the southern Levant from published high precision isotopic analyses of Speleothem data. The results of this exercise present the currently best available chronology for these events and suggest that during the second part of the Lateglacial interstadial, drying of the southern Levant may have triggered the transition to the Late Natufian, when hunter-gatherer communities resorted to a more mobile lifestyle. The Late Natufian culture appears to have disappeared from the southern Levant during the Younger Dryas, as drying intensified. There is then a gap in well dated evidence for human occupation until a reappearance of humans at the onset of the Pre-Pottery Neolithic A (PPNA) period at the beginning of the Holocene. Thus the onset of the Holocene can be hypothesised to be the driver behind the onset of the Neolithic in this region.

Rizal 2020

Yan Rizal et al., *Last appearance of Homo erectus at Ngandong, Java, 117,000–108,000 years ago*. nature **577** (2020), 381–385.

n577-0381-Supplement.pdf

Homo erectus is the founding early hominin species of Island Southeast Asia, and reached Java (Indonesia) more than 1.5 million years ago1,2. Twelve H. erectus calvaria (skull caps) and two tibiae (lower leg bones) were discovered from a bone bed located about 20 m above the Solo River at Ngandong (Central Java) between 1931 and 19333,4, and are of the youngest, most-advanced form of H. erectus5–8. Despite the importance of the Ngandong fossils, the relationship between the fossils, terrace fill and ages have been heavily debated9–14. Here, to resolve the age of the Ngandong evidence, we use Bayesian modelling of 52 radiometric age estimates to establish—to our knowledge—the first robust chronology at regional, valley and local scales. We used uranium-series dating

of speleothems to constrain regional landscape evolution; luminescence, 40argon/39argon (40Ar/39Ar) and uranium-series dating to constrain the sequence of terrace evolution; and applied uranium-series and uranium series–electron-spin resonance (US–ESR) dating to non-human fossils to directly date our re-excavation of Ngandong5,15. We show that at least by 500 thousand years ago (ka) the Solo River was diverted into the Kendeng Hills, and that it formed the Solo terrace sequence between 316 and 31 ka and the Ngandong terrace between about 140 and 92 ka. Non-human fossils recovered during the re-excavation of Ngandong date to between 109 and 106 ka (uranium-series minimum)16 and 134 and 118 ka (US–ESR), with modelled ages of 117 to 108 thousand years (kyr) for the H. erectus bone bed, which accumulated during flood conditions3,17. These results negate the extreme ages that have been proposed for the site and solidify Ngandong as the last known occurrence of this longlived species.

Yan Rizal, Kira E. Westaway, Yahdi Zaim, Gerrit D. van den Bergh, E. Arthur Bettis III, Michael J. Morwood, O. Frank Huffman, Rainer Grün, Renaud Joannes-Boyau, Richard M. Bailey, Sidarto, Michael C. Westaway, Iwan Kurniawan, Mark W. Moore, Michael Storey, Fachroel Aziz, Suminto, Jian-xin Zhao, Aswan, Maija E. Sipola, Roy Larick, John-Paul Zonneveld, Robert Scott, Shelby Putt & Russell L. Ciochon

Islam

Aphrahat ≈345

Aphrahat, *Unterweisungen – Erster Teilband, Übersetzt und eingeleitet von Peter Bruns.* Fontes Christiani 25/1 (Freiburg 1991).

Aphrahat ≈345

Aphrahat, *Unterweisungen – Zweiter Teilband, Übersetzt und eingeleitet von Peter Bruns.* Fontes Christiani 25/2 (Freiburg 1991).

Kupfer

Begemann 1992

Friedrich Begemann, Sigrid Schmitt-Strecker & Ernst Pernicka, *The Metal Finds from Thermi III–V, A Chemical and Lead-Isotope Study.* Studia Troica 2 (Mainz 1992), 219–239.

Fourty five metal artefacts have been analyzed for a number of trace elements and the isotopic composition of their Pb. Of the stratified samples three (one from Town III and two from Town V) contain between 4.2 % and 12.2 % Sn and thus qualify as tin bronzes. All three are exceptionally low in As. Otherwise, the As content of the stratified specimens is remarkably constant, between 0.6 % and 4.4 %, suggesting that already at the very beginning of the third millennium B.C., Sn and As were used as alternate alloying elements to produce superior-quality bronzes.

Two of the tin bronzes as well as four other objects contain more than 1 % zinc, with a maximum of 16.9 %. At least three of these objects appear to come from well-stratified layers (Thermi III and IV) where the probability for an intrusion of later objects seems to remote. We consider this to be a chance occurrence, not the beginning of intentional brass technology.

Comparison of lead isotope data and trace element contents with similar results on copper artefacts from Poliochni indicates that the settlement at Thermi may

have been rather short-lived, with Thermi V being over by the time of Poliochni "giallo".

A similar comparison with ore data reveals several ore deposits in near-by North-Western Anatolia that qualify, from the isotopic composition of their lead, as potential sources for the Thermi metal. There are problems, however, with the trace element abundances so that as yet no entirely satisfactory ore deposit(s) can be suggested.

We also report two radiocarbon results of archaeological relevance, one for a charred fig from Poliochni "azzurro" (4145 ± 70 years) and one for charcoal, probably from the oldest excavated floor at Thermi (4261 ± 106 years). The ages correspond to calibrated dates of 2910-2672 B.C. and 3022-2700 B.C., respectively.

Knabb 2019

Kyle A. Knabb, *Human and Environmental Impacts of Ancient Copper Metallurgy, A Case Study from Southern Jordan.* Current Anthropology **60** (2019), 840–848.

Recent research in Wadi Faynan, a copper mining and smelting region of southern Jordan, indicates that the issues of ancient pollution and contamination are far from straightforward. Whereas previous studies have stated that metal production led to widespread heavy metal contamination of the environment and of humans, this paper argues that lead contamination, a byproduct of smelting local ore, is found only in microlocales and affected a small fraction of the local population. Geochemical analysis of agricultural soils revealed an increase of lead in isolated locations due to floodwaters that were contaminated by mining upstream. Distance from copper production areas was not a factor. Analysis of human remains also shows that lead contamination was restricted to a small number of individuals who were directly involved in the copper smelting. These findings suggest that the scale of environmental degradation was not proportional to the scale of economic exploitation.

Religion

Zwickel 2003

Wolfgang Zwickel, *Der Ort Besonderer Heiligkeit.* In: Cornelis G. den Hertog, Ulrich Hübner & Stefan Münger (Hrsg.), *Saxa loquentur – Studien zur Archäologie Palästinas/Israels, Festschrift für Volkmar Fritz zum 65. Geburtstag.* Alter Orient und Altes Testament 32 (Münster 2003), 311–319.

Die Markierungen heiligster Orte im Tempelbereich hängen somit eng mit der jeweiligen theologischen Entwicklung zusammen. Podien haben den Sinn, dass die auf ihnen abgestellten Dinge, seien es Opfergaben oder Götterbilder, erhöht werden und ihnen eine besondere Bedeutung zukommt. Nischen, die sich in der zentralen Rückwand eines Gebäudes befinden, betonen dagegen die Distanz zwischen dem am Eingang des Tempels stehenden Beter und dem in der Nische aufgestellten Götterbild. Im salomonischen Tempel hat man schließlich eine architektonische Ausdrucksweise gefunden, die den ohnehin bildlos dargestellten Gott JHWH noch transzendenter machte.