

## References

### Afrika

NIANG 2023

Khady Niang, James Blinkhorn, Mark D. Bateman & Christopher A. Kiahtipes, *Longstanding behavioural stability in West Africa extends to the Middle Pleistocene at Bargny, coastal Senegal*. [Nature Ecology & Evolution](#) **7** (2023), 1141–1151.

[NatEcoEvo07-1141-Supplement.pdf](#)

Middle Stone Age (MSA) technologies first appear in the archaeological records of northern, eastern and southern Africa during the Middle Pleistocene epoch. The absence of MSA sites from West Africa limits evaluation of shared behaviours across the continent during the late Middle Pleistocene and the diversity of subsequent regionalized trajectories. Here we present evidence for the late Middle Pleistocene MSA occupation of the West African littoral at Bargny, Senegal, dating to 150 thousand years ago. Palaeoecological evidence suggests that Bargny was a hydrological refugium during the MSA occupation, supporting estuarine conditions during Middle Pleistocene arid phases. The stone tool technology at Bargny presents characteristics widely shared across Africa in the late Middle Pleistocene but which remain uniquely stable in West Africa to the onset of the Holocene. We explore how the persistent habitability of West African environments, including mangroves, contributes to distinctly West African trajectories of behavioural stability.

### Aktuell

WATANABE 2023

Atsuyuki Watanabe, Masao Iwagami, Jun Yasuhara, Hisato Takagi & Toshiki Kuno, *Protective effect of COVID-19 vaccination against long COVID syndrome, A systematic review and meta-analysis*. [Vaccine](#) **41** (2023), 1783–1790. DOI:10.1016/j.vaccine.2023.02.008.

[Vaccine41-1783-Supplement.docx](#)

**Background:** The relationship between coronavirus disease 2019 (COVID-19) vaccination and long COVID has not been firmly established. We conducted a systematic review and meta-analysis to evaluate the association between COVID-19 vaccination and long COVID.

**Methods:** PubMed and EMBASE databases were searched on September 2022 without language restrictions (CRD42022360399) to identify prospective trials and observational studies comparing patients with and without vaccination before severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection. We also included studies reporting symptomatic changes of ongoing long COVID following vaccination among those with a history of SARS-CoV-2 infection. Odds ratios (ORs) for each outcome were synthesized using a random-effects model. Symptomatic changes after vaccination were synthesized by a one-group meta-analysis.

**Results:** Six observational studies involving 536,291 unvaccinated and 84,603 vaccinated (before SARS-CoV-2 infection) patients (mean age, 41.2–66.6; female, 9.0–67.3 %) and six observational studies involving 8,199 long COVID patients (mean age, 40.0 to 53.5; female, 22.2–85.9 %) who received vaccination after SARS-CoV-2 infection were included. Two-dose vaccination was associated with a lower risk of long COVID compared to no vaccination (OR, 0.64; 95 % confidence interval [CI], 0.45–0.92) and one-dose vaccination (OR, 0.60; 95 % CI, 0.43–0.83). Two-dose vaccination compared to no vaccination was associated with a lower risk of persistent fatigue (OR, 0.62; 95 % CI, 0.41–0.93) and pulmonary disorder (OR, 0.50; 95 % CI, 0.47–0.52). Among those with ongoing long COVID symptoms, 54.4 % (95 % CI, 34.3–73.1 %) did not report symptomatic changes following vaccination, while 20.3 % (95 % CI, 8.1–42.4 %) experienced symptomatic improvement after two weeks to six months of COVID-19 vaccination.

**Conclusions:** COVID-19 vaccination before SARS-CoV-2 infection was associated with a lower risk of long COVID, while most of those with ongoing long COVID did not experience symptomatic changes following vaccination.

**Keywords:** COVID-19 | Vaccine | SARS-CoV-2 | Long COVID | Post-acute sequelae of COVID-19

## Anthropologie

RUFF 2023

Christopher B. Ruff & Bernard A. Wood, *The estimation and evolution of hominin body mass*. [Evolutionary Anthropology](#) **32** (2023), 223–237.

Body mass is a critical variable in many hominin evolutionary studies, with implications for reconstructing relative brain size, diet, locomotion, subsistence strategy, and social organization. We review methods that have been proposed for estimating body mass from true and trace fossils, consider their applicability in different contexts, and the appropriateness of different modern reference samples. Recently developed techniques based on a wider range of modern populations hold promise for providing more accurate estimates in earlier hominins, although uncertainties remain, particularly in non-Homo taxa. When these methods are applied to almost 300 Late Miocene through Late Pleistocene specimens, the resulting body mass estimates fall within a 25–60 kg range for early non-Homo taxa, increase in early Homo to about 50–90 kg, then remain constant until the Terminal Pleistocene, when they decline.

**Keywords:** Australopithecus | body size | Homo | human evolution | ontogeny | scaling | skeleton

## Bibel

JOOSTEN 2006

Jan Joosten, *The Old Testament in the New, The Syriac versions of the New Testament as a witness to the text of the Old Testament Peshitta*. In: B. TER HAAR ROMENY (Hrsg.), *The Peshitta: Its Use in Literature and Liturgy, Papers Read at the Third Peshitta Symposium*. (Leiden 2006), 99–106. Reprinted in J. Joosten, *Language and Textual History of the Syriac Bible. Collected Studies, Texts and Studies* 9 (Piscataway).

The Syriac Old Testament and the Syriac New Testament, although they are distinct corpora deriving from different periods and backgrounds, are intimately linked both historically and textually. Notably, the Syriac New Testament is the first recoverable stage in the reception history of the OTP. The earliest translators of the New Testament knew and revered the Syriac Old Testament and let their writing be influenced by it.

In the present study, one aspect of this influence has been discussed. In the New Testament's Old Testament quotations, the earliest Syriac translators tended to follow the text of the OTP. Subsequently, the text of the quotations was corrected toward the Greek New Testament text, but the OTP basis is still clearly visible in many instances. This makes the early versions of the New Testament potential witnesses for the text of the OTP.

#### MCKINNY 2023

Chris McKinny, Aharon Tavger, Nahshon Szanton & Joe Uziel, *The Millo, Jerusalem's Lost Monument*. [Biblical Archaeology Review 49 \(2023\), iii, 34–41](#).

According to the Bible, the Millo was one of Jerusalem's most recognizable monuments. For most of the last two centuries, explorers and archaeologists have been searching for it, filling books and journals with their theories. In light of new evidence, we believe the search has finally ended—at the Spring Tower, the place where ancient Jerusalemites found a secure source of water during the time of the biblical kings.

#### RENDSBURG 2023

Gary A. Rendsburg, *Moses as Pharaoh's Equal—Horns and All*. [Biblical Archaeology Review 49 \(2023\), iii, 60–62](#).

Once again, the Bible wishes to portray Moses as Pharaoh's equal. Just as the facial skin of Egyptian kings was horned, so was the facial skin of the leader of the people of Israel. So Pharaoh, so Moses. At every turn, the biblical narrative directs the reader to understand Moses as the equal to his Egyptian counterpart—from the birth story in Exodus 2 to the horns in Exodus 34.

Western Christians throughout the Middle Ages and the Renaissance read the Bible in Latin, with the expression *cornuta esset facies sua* well known to them. So it was only natural for the great artists to portray Moses with horns, as an indication of the ancient prophet's honor and prestige.

#### STAHL 2023

Michael J. Stahl, *Yahweh or Baal, Who Was the God of Northern Israel?* [Biblical Archaeology Review 49 \(2023\), iii, 42–48](#).

The Omride dynasty's elevation of Yahweh as Israel's patron deity and Yahweh's image as a warrior storm god (like Baal) is to be situated in this broader historical context. Ironically, then, not only did the Omrides not seek to bring Israelite worship of Yahweh to an end, but they laid the Yahwistic foundation for the kingdoms of Israel and Judah, only to be accused by the later authors of 1 and 2 Kings of being ardent worshippers of Baal.

## Datierung

EASTON 2023

Donald Easton & Bernhard Weninger, *Troy III–V, New radiocarbon dates confirm a gap in Blegen’s sequence*. [Documenta Praehistorica \(2023\), preprint, 2–25. DOI:10.4312/dp.50.14.](#)

To investigate the dating of Troy III–V, and in particular to test whether in Blegen’s Troy sequence a gap exists between Troy III and Troy IV, 26 bone samples covering Troy III to VIa from the University of Cincinnati excavations were submitted for 14C-AMS analysis. Excluding outliers, they yield dates that are consistent with a chronological scheme which includes a  $110 \pm 20$  year gap after Troy III, with Troy IV beginning  $2060 \pm 10$  cal BC. The hypothesis of a Proto-IV period which might bridge the gap, featuring deposits known only from the more recent excavations, can therefore be entertained.

Keywords: Troy | Aegean chronology | Anatolian chronology | Early Bronze Age | radiocarbon dating | correspondence analysis

## Energie

GIBB 2023

Duncan Gibb, Jan Rosenow, Richard Lowes & Neil J. Hewitt, *Coming in from the cold, Heat pump efficiency at low temperatures*. [Joule \(2023\), preprint, 1–12. DOI:10.1016/j.joule.2023.08.005.](#)

For climates that experience extreme cold temperatures, performance testing has shown that heat pumps can operate with a COP between 1.5 and 2. However, considering the related increase in heating demand and decrease in device efficiency, some form of back-up heating may be required.

IBÁÑEZ-RIOJA 2023

Alejandro Ibáñez-Rioja, Lauri Järvinen, Pietari Puranen, Antti Kosonen, Vesa Ruuskanen, Katja Hynynen, Jero Ahola & Pertti Kau, *Off-grid solar PV-wind power-battery-water electrolyzer plant, Simultaneous optimization of component capacities and system control*. [Applied Energy 345 \(2023\), 121277, 1–15.](#)

Green hydrogen production systems will play an important role in the energy transition from fossil-based fuels to zero-carbon technologies. This paper investigates a concept of an off-grid alkaline water electrolyzer plant integrated with solar photovoltaic(PV), wind power, and a battery energy storage system(BESS). The operation of the plant is simulated over 30 years with 5 min time resolution based on measured power generation data collected from a solar photovoltaic installation and a wind farm located in south eastern Finland. Levelized cost of hydrogen (LCOH) is calculated based on the capital expenditures (CAPEX), the operating expenses (OPEX), and the respective learning curves for each of the components. Component degradation and replacements during the operational lifetime are included in the model, and the capacity of the components and the system control are simultaneously optimized to obtain the minimum LCOH. A sensitivity analysis performed over different installation years and discount rates reveals that for the off-grid alkaline system, the implementation of a wind farm as the sole power supply is the most economical solution until the installation years 2035–2040. Solar PV and a BESS are found to increase the full-load hours of the electrolyzer and reduce the electricity curtailed in the off-grid plant to less than 8%. However, with

the current component prices and the climate in the studied region, they are not economically beneficial. It is found that the cost of hydrogen can be reduced to 2 E/kg by the year 2030.

**Keywords:** Green hydrogen | Levelized cost of hydrogen | Alkaline water electrolysis | Solar PV-wind power | Battery energy storage system | Off-grid system optimization

## Judentum

KOHLER 2020

George Y. Kohler, *The Claim to “Hidden Truths” as the Reason for the Rejection of Kabbalah by the Wissenschaft des Judentums*. [Jewish Thought 2 \(2020\), 133–155](#).

The essay analyses several reasons for the well-known rejection of the theological “worth” of kabbalah by two of the leading scholars of the 19th century German-Jewish movement of Wissenschaft des Judentums: Heinrich Graetz and Abraham Geiger. Kabbalistic esotericism, resting on fraudulent claims to authorship and masking the irrationality of its doctrines, was among the major objections of these historians. Dealing in mysticism was understood to ruin the morality of human relations by leading to a secretive, elitist individualism instead of creating a healthy human society —kabbalah focused on the capturing of imaginary worlds instead of improving the existing world. Particularly disturbing was that kabbalah often blurred the boundary between the bodily and the spiritual, specifically by formulating a new, hallowed dialectic relation between human limbs and the human intellect that was purportedly superior to common morality. Eventually, both scholars agreed that kabbalah could therefore not promote the modern Judaism that nineteenth-century German Jews wished to see as a viable, ethical alternative to traditional religion, a Judaism that is capable of survival in the modern age.

We may define science as the analysis and explanation of the laws of nature, as well as the rules that govern human society and history, with Results that lay open this research’s methodology and allow the scientific outcome to be reproduced. Given this definition, science in essence becomes the ultimate disclosure of all secrets. Esotericism anchored in revelation or a purported authoritative tradition that can be known only by the initiate thus stands in contradiction to scientific research. The kabbalist, who speaks of “hidden truths” which he believes to be universally true but not in need of or even open to rational proof, is not only being irrational from a scientific perspective but also falsely pretentious. The present study will look into the exciting question of what happened when these two methods of knowledge, the scientific and the kabbalistic, came for the first time in close contact within the realm of Judaism.

MIZZI 2023

Dennis Mizzi, *Were Temple Offerings Buried at Qumran?* [Biblical Archaeology Review 49 \(2023\), iii, 54–58](#).

In any case, the evidence reflects a dynamic picture and serves as a pointed reminder to avoid static reconstructions of daily life at Qumran.

## Klima

BUZZANGA 2023

Brett Buzzanga, David P.S. Bekaert, Benjamin D. Hamlington, Robert E. Kopp, Marin Govorcin & Kenneth G. Miller, *Localized*

*uplift, widespread subsidence, and implications for sea level rise in the New York City metropolitan area.* [Science Advances 9 \(2023\), eadi8259.](#) DOI:10.1126/sciadv.adi8259.

SciAdv09-eadi8259-Supplement.pdf

Regional relative sea level rise is exacerbating flooding hazards in the coastal zone. In addition to changes in the ocean, vertical land motion (VLM) is a driver of spatial variation in sea level change that can either diminish or enhance flood risk. Here, we apply state-of-the-art interferometric synthetic aperture radar and global navigation satellite system time series analysis to estimate velocities and corresponding uncertainties at 30-m resolution in the New York City metropolitan area, revealing VLM with unprecedented detail. We find broad subsidence of 1.6 mm/year, consistent with glacial isostatic adjustment to the melting of the former ice sheets, and previously undocumented hot spots of both subsidence and uplift that can be physically explained in some locations. Our results inform ongoing efforts to adapt to sea level rise and reveal points of VLM that motivate both future scientific investigations into surface geology and assessments of engineering projects.

## SCHMIDT 2023

Morgan J. Schmidt, Samuel L. Goldberg & J. Taylor Perron et al., *Intentional creation of carbon-rich dark earth soils in the Amazon.* [Science Advances 9 \(2023\), eadh8499.](#) DOI:10.1126/sciadv.adh8499.

SciAdv09-eadh8499-Supplement1.pdf, SciAdv09-eadh8499-Supplement2.zip

Fertile soil known as Amazonian dark earth is central to the debate over the size and ecological impact of ancient human populations in the Amazon. Dark earth is typically associated with human occupation, but it is uncertain whether it was created intentionally. Dark earth may also be a substantial carbon sink, but its spatial extent and carbon inventory are unknown. We demonstrate spatial and compositional similarities between ancient and modern dark earth and document modern Indigenous practices that enrich soil, which we use to propose a model for the formation of ancient dark earth. This comparison suggests that ancient Amazonians managed soil to improve fertility and increase crop productivity. These practices also sequestered and stored carbon in the soil for centuries, and we show that some ancient sites contain as much carbon as the above-ground rainforest biomass. Our results demonstrate the intentional creation of dark earth and highlight the value of Indigenous knowledge for sustainable rainforest management.

Morgan J. Schmidt, Samuel L. Goldberg, Michael Heckenberger, Carlos Fausto, Bruna Franchetto, Jennifer Watling, Helena Lima, Bruno Moraes, Wetherbee B. Dorshow, Joshua Toney, Yamalui Kuikuro, Kumessi Waura, Huke Kuikuro, Taku Wate Kuikuro, Takumã Kuikuro, Yahila Kuikuro, Afukaka Kuikuro, Wenceslau Teixeira, Bruna Rocha, Vinicius Honorato, Hugo Tavares, Marcos Magalhães, Carlos Augusto Barbosa, João Aires da Fonseca, Kelton Mendes, Luís Reynaldo Ferracciú Alleoni, Carlos Eduardo Pellegrino Cerri, Manuel Arroyo-Kalin, Eduardo Neves & J. Taylor Perron

## Kupfer

### NAHAL-MISHMAR 2023

*Nahal Mishmar Hoard.* [Biblical Archaeology Review 49 \(2023\), iii, 32.](#)

BAR49.3-032-Nahal-Mishmar.jpg

Just a good quality photograph for presentation.

## Neolithikum

MITHEN 2023

Steven Mithen, Amy Richardson & Bill Finlayson, *The flow of ideas, Shared symbolism during the Neolithic emergence in Southwest Asia: WF16 and Göbekli Tepe*. *Antiquity* **97** (2023), 829–849.

During the Late Epipalaeolithic and Early Neolithic, societies across the Levant transformed their social, cultural and economic organisation, with new forms of food production, architecture and material culture. But to what extent were regional developments connected and how, in particular, did ideas and objects flow between the most southern and northern reaches of Southwest Asia? Finds from the Pre-Pottery Neolithic site of WF16 in southern Jordan resonate with those from Göbekli Tepe and other sites hundreds of kilometres to the north. Emphasising shared symbolism and ideology, the authors explore how connections may have arisen and how they were maintained, revealing expansive social networks spanning Southwest Asia that underpinned the emergence of farming.

Keywords: Levant | Epipalaeolithic | Neolithic | iconography | cultural connectivity