

References

Afrika

SEALY 2010

Judith Sealy, *Isotopic Evidence for the Antiquity of Cattle-Based Pastoralism in Southernmost Africa*. [Journal of African Archaeology](#) **8** (2010), 65–81.

Pastoralist Khoekhoe people in southern Africa are well known from 17th and 18th century records from the Cape, and from later descendent communities. The Cape Khoekhoen kept large herds of sheep and cattle, which constituted wealth and provided the dairy products that formed dietary staples. The origins and development of this way of life remain contentious. This paper addresses the issue by means of stable carbon and nitrogen isotope analyses of 160 adult human skeletons from the coastal forelands of southernmost Africa. Prior to 2000 bp, hunter-gatherers ate varying mixes of marine and terrestrial foods, but terrestrial C4 grasses (and animals grazing on them) were of relatively minor importance. Sheep (and probably cattle) first appeared in archaeological sites around 2000 bp, but whatever their role in peoples' diets, there was no significant shift in the isotope ratios of human skeletons in the first millennium AD. From the early second millennium AD, people began to eat significantly more C4 based foods, probably in the form of animal products (dairy and meat) from animals grazing on C4 grasses. I argue that the most likely reason is that domestic stock – especially cattle – became more important in peoples' diets at this time. There is evidence for a new style of burial, in which the body was interred in a seated, flexed position, and the grave capped with stones. Thus, although living sites remain elusive, important elements of the historically documented Khoekhoe way of life can be identified for the first time in the early second millennium AD. This evidence also shows that a cattle-based economy emerged centuries before Europeans seeking animals to slaughter increased the demand for stock.

Keywords: Later Stone Age | Khoe | diet | domestic stock | herd

Aktuell

DOWD 2020

Jennifer Beam Dowd, Liliana Andriano, David M. Brazel, Valentina Rotondi, Per Block, Xuejie Ding & Melinda C. Mills, *A renewed call for detailed social and demographic COVID-19 data from all countries, Reply to Nepomuceno et al.* [PNAS](#) **117** (2020), 13884–13885. [DOI:10.1073/pnas.2009408117](#).

We disagree with the authors' interpretation that we "implicitly assumed the age prevalence of underlying comorbidities is similar in Italy, Brazil, and Nigeria" in our illustrations of variations in total deaths dependent on population age structure. Our direct comparison was in fact between Brazil and Nigeria, chosen as two countries with similar population sizes but different age structures.

GARBE 2020

Lisa Garbe, Richard Rau & Theo Toppe, *Influence of perceived threat of Covid-19 and HEXACO personality traits on toilet paper stockpiling*. [PLoS ONE 15 \(2020\), e234232](#). DOI:10.1371/journal.pone.0234232.

Following the fast spread of Covid-19 across Europe and North America in March 2020, many people started stockpiling commodities like toilet paper. Despite the high relevance for public authorities to adequately address stockpiling behavior, empirical studies on the psychological underpinnings of toilet paper stockpiling are still scarce. In this study, we investigated the relation between personality traits, perceived threat of Covid-19, and stockpiling of toilet paper in an online survey (N = 996) across 22 countries. Results suggest that people who felt more threatened by Covid-19 stockpiled more toilet paper. Further, a predisposition towards Emotionality predicted the perceived threat of Covid-19 and affected stockpiling behavior indirectly. Finally, Conscientiousness was related to toilet paper stockpiling, such that individuals higher in Conscientiousness tended to stockpile more toilet paper. These results emphasize the importance of clear communication by public authorities acknowledging anxiety and, at the same time, transmitting a sense of control.

NEPOMUCENO 2020

Marília R. Nepomuceno, Enrique Acosta, Diego Alburez-Gutierrez, José Manuel Aburto, Alain Gagnon & Cássio M. Turra, *Besides population age structure, health and other demographic factors can contribute to understanding the COVID-19 burden*. [PNAS 117 \(2020\), 13881–13883](#). DOI:10.1073/pnas.2008760117.

As a result, the prevalence of chronic diseases at any given age can be expected to differ substantially in high-, low-, and middle-income settings.

NEWS 2020

Mathematicians urge colleagues to boycott police work in wake of killings. [nature 582 \(2020\), 465](#).

In recent years, mathematicians, statisticians and computer scientists have been developing algorithms that crunch data and claim to help police reduce crime — for instance, by suggesting where crime is most likely to occur and focusing more resources in those areas. Software based on such algorithms is used by police departments across the United States, but many contest its effectiveness.

PRATHER 2020

Kimberly A. Prather, Chia C. Wang & Robert T. Schooley, *Reducing transmission of SARS-CoV-2*. [science 368 \(2020\), 1422–1424](#). DOI:10.1126/science.abc6197.

Masks and testing are necessary to combat asymptomatic spread in aerosols and droplets.

However, a large proportion of the spread of coronavirus disease 2019 (COVID-19) appears to be occurring through airborne transmission of aerosols produced by asymptomatic individuals during breathing and speaking (1–3). Aerosols can accumulate, remain infectious in indoor air for hours, and be easily inhaled deep into the lungs. For society to resume, measures designed to reduce aerosol transmission must be implemented, including universal masking and regular, widespread testing to identify and isolate infected asymptomatic individuals.

ZHANG 2020

Juanjuan Zhang et al., *Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China*. *science* **368** (2020), 1481–1486. DOI:10.1126/science.abb8001.

s368-1481-Supplement.pdf

Intense nonpharmaceutical interventions were put in place in China to stop transmission of the novel coronavirus disease 2019 (COVID-19). As transmission intensifies in other countries, the interplay between age, contact patterns, social distancing, susceptibility to infection, and COVID-19 dynamics remains unclear. To answer these questions, we analyze contact survey data for Wuhan and Shanghai before and during the outbreak and contact-tracing information from Hunan province. Daily contacts were reduced seven- to eightfold during the COVID-19 social distancing period, with most interactions restricted to the household. We find that children 0 to 14 years of age are less susceptible to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection than adults 15 to 64 years of age (odds ratio 0.34, 95% confidence interval 0.24 to 0.49), whereas individuals more than 65 years of age are more susceptible to infection (odds ratio 1.47, 95% confidence interval 1.12 to 1.92). Based on these data, we built a transmission model to study the impact of social distancing and school closure on transmission. We find that social distancing alone, as implemented in China during the outbreak, is sufficient to control COVID-19. Although proactive school closures cannot interrupt transmission on their own, they can reduce peak incidence by 40 to 60% and delay the epidemic.

Juanjuan Zhang, Maria Litvinova, Yuxia Liang, Yan Wang, Wei Wang, Shanlu Zhao, Qianhui Wu, Stefano Merler, Cécile Viboud, Alessandro Vespignani, Marco Ajelli & Hongjie Yu

Datierung

KUITEMS 2020

Margot Kuitems, Andrei Panin, Andrea Scifo, Irina Arzhantseva, Yury Kononov, Petra Doeve, Andreas Neocleous & Michael Dee, *Radiocarbon-based approach capable of subannual precision resolves the origins of the site of Por-Bajin*. *PNAS* **117** (2020), 14038–14041.

pnas117-14038-Supplement.pdf

Inadequate resolution is the principal limitation of radiocarbon dating. However, recent work has shown that exact-year precision is attainable if use can be made of past increases in atmospheric radiocarbon concentration or so-called Miyake events. Here, this nascent method is applied to an archaeological site of previously unknown age. We locate the distinctive radiocarbon signal of the year 775 common era (CE) in wood from the base of the Uyghur monument of Por-Bajin in Russia. Our analysis shows that the construction of Por-Bajin started in the summer of 777 CE, a foundation date that resolves decades of debate and allows the origin and purpose of the building to be established.

Keywords: radiocarbon dating | exact-year precision | archaeology | Miyake event | Por-Bajin

Significance: The problem with radiocarbon dating is that its resolution is only centennial or, at the very best, decadal. Thus, the method is incapable of resolving many historical problems. Here, we use recent developments in atmospheric science to date the construction of a renowned archaeological site to the exact year, in fact, to the exact season. Such precision opens up new possibilities for the broader

study of human history. Achieving dates on an annual scale will offer the potential for new assessments to be made of considerable archaeological significance.

Judentum

KLAWANS 2015

Jonathan Klawans, *Theology Versus Law in Ancient Judaism*. *Biblical Archaeology Review* **41** (2015), i, 26.

O'NEILL 2000

J. C. O'Neill, "Who Is Comparable to Me in My Glory?", *4Q491 Fragment 11 (4Q491C) and the New Testament*. *Novum Testamentum* **42** (2000), 24–38.

In the fragments from Cave Four at Qumran, in John 3:13, and in Heb. 1-2 we find transcriptions of ancient but living traditions about the incomparably great one who both reigns in heaven and lived on earth in the Holy Congregation. He speaks in the first person because he speaks from his exalted throne in heaven. Seers on earth have had a vision of his glory and have heard him speak (cf. Rev. 1:17; 2:1ff., 8ff.; 12ff., 18ff.; 3:1ff., 7ff., 14ff.; 3:11; 22:7, 12, 13, 16, 20; Odes of Solomon 8:8ff.; 10:4ff.; 17:6ff.; 22; 28:9ff.; 31:6ff.; 36:3ff.; 41:8ff.; 42:3ff.). These traditions cannot have originated after the death and resurrection of Jesus for they never betray the slightest hint that they know of his resurrection.

ROBIN 2015

Christian Julien Robin, *Quel judaïsme en Arabie? Des juifs ignorés par la tradition rabbinique*. In: CHRISTIAN JULIEN ROBIN (Hrsg.), *Le judaïsme de l'Arabie antique, Actes du colloque de Jérusalem (février 2006)*. Judaïsme ancien et origines du christianisme 3 (Turnhout 2015), 15–295.

Klima

HAMLINGTON 2020

Benjamin D. Hamlington, Christopher G. Piecuch & Thomas Frederikse et al., *Origin of interannual variability in global mean sea level*. *PNAS* **117** (2020), 13983–13990.

[pnas117-13983-Supplement.pdf](#)

The two dominant drivers of the global mean sea level (GMSL) variability at interannual timescales are steric changes due to changes in ocean heat content and barostatic changes due to the exchange of water mass between land and ocean. With Gravity Recovery and Climate Experiment (GRACE) satellites and Argo profiling floats, it has been possible to measure the relative steric and barostatic contributions to GMSL since 2004. While efforts to "close the GMSL budget" with satellite altimetry and other observing systems have been largely successful with regards to trends, the short time period covered by these records prohibits a full understanding of the drivers of interannual to decadal variability in GMSL. One particular area of focus is the link between variations in the El Niño-Southern Oscillation (ENSO) and GMSL. Recent literature disagrees on the relative importance of steric and barostatic contributions to interannual to decadal variability in GMSL. Here, we use a multivariate data analysis technique to estimate

variability in barystatic and steric contributions to GMSL back to 1982. These independent estimates explain most of the observed interannual variability in satellite altimeter-measured GMSL. Both processes, which are highly correlated with ENSO variations, contribute about equally to observed interannual GMSL variability. A theoretical scaling analysis corroborates the observational Results. The improved understanding of the origins of interannual variability in GMSL has important implications for our understanding of long-term trends in sea level, the hydrological cycle, and the planet's radiation imbalance.

Keywords: sea level | climate variability | global mean sea level | satellite altimetry

Benjamin D. Hamlington, Christopher G. Piecuch, John T. Reager, Hrishi Chandanpurkar, Thomas Frederikse, R. Steven Nerem, John T. Fasullo & Se-Hyeon Cheon

Significance: Extended records of global mean steric and barystatic sea level are produced and exhibit strong agreement with satellite altimeter-observed global mean sea level (GMSL). The GMSL contributions derived from these datasets show that there are correlated steric and barystatic GMSL contributions of similar magnitudes. These variations are closely related to the El Niño-Southern Oscillation (ENSO) and provide observational support for past studies indicating important steric and barystatic GMSL contributions associated with ENSO. The improved understanding of the origins of interannual variability in GMSL established here has important implications for our understanding of long-term trends in sea level, the hydrological cycle, and the planet's radiation imbalance.

O'CONNELL 2020

James F. O'Connell, *Aboriginal fires modify an ideal free distribution*. [PNAS 117 \(2020\), 13873–13875](#).

Bliege Bird et al.'s recent results challenge this picture by suggesting less rapid resource depletion associated with initial burns around early occupied sites, allowing more time to gain the benefits of resource regeneration. A 10-km daily foraging radius around a permanent water source contains thousands of potential 3-ha burn locations. It would take a group of 50 people setting 10 fires a week over several 6-mo burning seasons to cover a significant fraction of that catchment, long enough for burned areas to begin to display the enhanced foraging returns associated with a serial recovery process. This would reduce the incentive to move away from the improving patch and the social networks it supports. Understanding constraints like this should aid the development of increasingly realistic, archaeologically testable models of the pattern and pace of continental colonization and its ecological consequences.

SINCLAIR 2008

Lawrence A. Sinclair, *Climate at Qumran During the Hellenistic and Roman Periods*. [Revue de Qumrân 23 \(2008\), 415–427](#).

This article describes the evidence for a wet-cool climate at Qumran during the Hellenistic and Roman Periods. It is clear that the Qumran Community did not experience desert or semi-desert conditions.

In light of the above discussion of scientific data and collaborative evidence, it is clear that there was significant climate change in Palestine between 300-200 BCE and 100 CE, Hellenistic and Roman Periods or the Late Second Temple Period. This climate change was an increase in the average annual precipitation leading to wet and cool conditions in the land. Areas in southern Palestine which were desert or semi-desert, such as Qumran, received more rain and enough to grow crops. The assumption that there was no climate change in Palestine since the last glacier,

or the last two millennia, or for the last two centuries has now been put to rest. Therefore, any reconstruction of the social and cultural conditions of ancient Israel during the Hellenistic and Roman Periods needs to take into account the climate.

Kultur

BLASWEILER 2012

Joost Blasweiler, *Map Languages Anatolia, North Syria and Upper Mesopotamia c. 1700 BC*. (Online 2012). <<http://www.academia.edu/1050689/>> (2020-06-25).

The map (a co-production with Alessio Palmisano) shows the language situation shortly after the destruction of the karum and the city of Kanesh around 1700 BC.

Ostasien

LAWLER 2020

Andrew Lawler, *Dawn of the chicken revealed in Southeast Asia*. *science* **368** (2020), 1411.

Chicken domestication—debated since Charles Darwin—tracked by genomic survey.

Fuller doubts the bird was fully domesticated before the arrival of rice and millet farming in northern Southeast Asia about 4500 years ago. Hanotte acknowledges that “we need the help of archaeologists” to understand the human events that triggered domestication.

But Jonathan Kenoyer, an archaeologist and Indus expert at the University of Wisconsin, Madison, remains skeptical that the chicken arose in Southeast Asia. “They need to get ancient DNA” to back up their claims, he says, because genomes of modern birds may provide limited clues to early events in chicken evolution.

Sprachlehre

AMADASI GUZZO 2014

Maria Giulia Amadasi Guzzo, *Punic Scripts*. In: JO ANN HACKETT & WALTER E. AUFRECHT (Hrsg.), “An Eye for Form”, *Epigraphic Essays in Honor of Frank Moore Cross*. (Winona Lake 2014), 314–333.

In conclusion, a script differing from the Phoenician tradition of writing is first attested in the west toward the middle to the end of the 6th century B.C.E., when a specific dialect begins to appear in writing. Its links with Carthage are ascertained by the Pyrgi inscription, while its origin is still not clear. The distinctive features of this script continue to be represented by the few Carthaginian documents of the late 5th century B.C.E., while outside Carthage, alongside a somewhat similar development in Phoenicia itself, local variants are not rare. It is with the 4th century B.C.E., though perhaps as early as the end of the 5th century B.C.E. (fig. 1:10; CIS nos. 5510, 5511; Motya coins [fig. 2:1–5]), that a specific Carthaginian tradition of script seems to be established. This tradition, probably originating from an official calligraphy on perishable material, was transferred to stone and is represented mainly by the tariffs, the official documents of sanctuaries (Peckham 1968: 180–81, pl. 13). It was adopted by the 3rd century B.C.E. (probably even as early as the 4th century B.C.E.) by the other Phoenician colonies: it

is particularly well attested at Sardinia, and it also appears at Malta, Sicily, and perhaps Spain.

ROLLSTON 2014

Christopher A. Rollston, *Northwest Semitic Cursive Scripts of Iron II*. In: JO ANN HACKETT & WALTER E. AUFRECHT (Hrsg.), “An Eye for Form”, *Epigraphic Essays in Honor of Frank Moore Cross*. (Winona Lake 2014), 202–234.

This article is intended to be a synoptic compendium of the target scripts (especially the major corpora of Old Hebrew), not an exhaustive discussion. Nevertheless, numerous typological features of the “national” scripts will be discussed in some detail, with the focus being a diachronic analysis of the regnant (i.e., standard) cursive forms for the various scripts. Various graphemic exemplars will be provided in the margins to augment the analyses.⁴ Since the tenets of the paleographic method are discussed at length elsewhere (Cross 1982; Rollston 2003: 150-57; this volume, pp. 1-4; forthcoming), they are not reiterated here. Finally, it should be noted that the morphology of certain Northwest Semitic scripts for which there are few data is not treated in this article.