

References

Aktuell

LEMIEUX 2021

Jacob E. Lemieux et al., *Phylogenetic analysis of SARS-CoV-2 in Boston Highlights the impact of superspreading events.* [science](#) **371** (2021), 588. DOI:10.1126/science.abe3261.

s371-0588-Supplement.pdf

Rationale: Superspreading is recognized as an important driver of SARS-CoV-2 transmission, but the determinants of superspreading—why apparently similar circumstances can lead to very different outcomes—are poorly understood. The broader impact of such events, both on local transmission and on the overall trajectory of the pandemic, can also be difficult to determine. Our dataset includes hundreds of cases that resulted from superspreading events with different epidemiological features, which allowed us to investigate the nature and effect of superspreading events in the first wave of the pandemic in the Boston area and to track their broader impact.

Analysis of 772 complete severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) genomes from early in the Boston-area epidemic revealed numerous introductions of the virus, a small number of which led to most cases. The data revealed two superspreading events. One, in a skilled nursing facility, led to rapid transmission and significant mortality in this vulnerable population but little broader spread, whereas other introductions into the facility had little effect. The second, at an international business conference, produced sustained community transmission and was exported, resulting in extensive regional, national, and international spread. The two events also differed substantially in the genetic variation they generated, suggesting varying transmission dynamics in superspreading events. Our results show how genomic epidemiology can help to understand the link between individual clusters and wider community spread.

Jacob E. Lemieux, Katherine J. Siddle, Bennett M. Shaw, Christine Loreth, Stephen F. Schaffner, Adrienne Gladden-Young, Gordon Adams, Timelia Fink, Christopher H. Tomkins-Tinch, Lydia A. Krasilnikova, Katherine C. DeRuff, Melissa Rudy, Matthew R. Bauer, Kim A. Lagerborg, Erica Normandin, Sinéad B. Chapman, Steven K. Reilly, Melis N. Anahtar, Aaron E. Lin, Amber Carter, Cameron Myhrvold, Molly E. Kemball, Sushma Chaluvadi, Caroline Cusick, Katelyn Flowers, Anna Neumann, Felecia Cerrato, Maha Farhat, Damien Slater, Jason B. Harris, John A. Branda, David Hooper, Jessie M. Gaeta, Travis P. Baggett, James O'Connell, Andreas Gnirke, Tami D. Lieberman, Anthony Philippakis, Meagan Burns, Catherine M. Brown, Jeremy Luban, Edward T. Ryan, Sarah E. Turbett, Regina C. LaRocque, William P. Hanage, Glen R. Gallagher, Lawrence C. Madoff, Sandra Smole, Virginia M. Pierce, Eric Rosenberg, Pardis C. Sabeti, Daniel J. Park & Bronwyn L. MacInnis

Amerika

FERNANDES 2021

Daniel M. Fernandes et al., *A genetic history of the pre-contact Caribbean.* [nature](#) **590** (2021), 103–110.

Humans settled the Caribbean about 6,000 years ago, and ceramic use and intensified agriculture mark a shift from the Archaic to the Ceramic Age at around 2,500 years ago^{1–3}. Here we report genome-wide data from 174 ancient individuals from The Bahamas, Haiti and the Dominican Republic (collectively, Hispaniola), Puerto Rico, Curaçao and Venezuela, which we co-analysed with 89 previously published ancient individuals. Stone-tool-using Caribbean people, who first entered the Caribbean during the Archaic Age, derive from a deeply divergent population that is closest to Central and northern South American individuals; contrary to previous work⁴, we find no support for ancestry contributed by a population related to North American individuals. Archaic-related lineages were >98% replaced by a genetically homogeneous ceramic-using population related to speakers of languages in the Arawak family from northeast South America; these people moved through the Lesser Antilles and into the Greater Antilles at least 1,700 years ago, introducing ancestry that is still present. Ancient Caribbean people avoided close kin unions despite limited mate pools that reflect small effective population sizes, which we estimate to be a minimum of 500–1,500 and a maximum of 1,530–8,150 individuals on the combined islands of Puerto Rico and Hispaniola in the dozens of generations before the individuals who we analysed lived. Census sizes are unlikely to be more than tenfold larger than effective population sizes, so previous pan-Caribbean estimates of hundreds of thousands of people are too large^{5,6}. Confirming a small and interconnected Ceramic Age population⁷, we detect 19 pairs of cross-island cousins, close relatives buried around 75 km apart in Hispaniola and low genetic differentiation across islands. Genetic continuity across transitions in pottery styles reveals that cultural changes during the Ceramic Age were not driven by migration of genetically differentiated groups from the mainland, but instead reflected interactions within an interconnected Caribbean world^{1,8}.

Daniel M. Fernandes, Kendra A. Sirak, Harald Ringbauer, Jakob Sedig, Nadin Rohland, Olivia Cheronet, Matthew Mah, Swapan Mallick, Iñigo Olalde, Brendan J. Culleton, Nicole Adamski, Rebecca Bernardos, Guillermo Bravo, Nasreen Broomandkhoshbacht, Kimberly Callan, Francesca Candilio, Lea Demetz, Kellie Sara Duffett Carlson, Laurie Eccles, Suzanne Freilich, Richard J. George, Ann Marie Lawson, Kirsten Mandl, Fabio Marzaioli, Weston C. McCool, Jonas Oppenheimer, Kadir T. Özdoğan, Constanze Schattke, Ryan Schmidt, Kristin Stewardson, Filippo Terrasi, Fatma Zalzal, Carlos Arredondo Antúnez, Ercilio Vento Canosa, Roger Colten, Andrea Cucina, Francesco Genchi, Claudia Kraan, Francesco La Pastina, Michaela Lucci, Marcio Veloz Maggiolo, Beatriz Marcheco-Teruel, Clenis Tavares Maria, Christian Martínez, Ingeborg París, Michael Pate-man, Tanya M. Simms, Carlos Garcia Sivoli, Miguel Vilar, Douglas J. Kennett, William F. Keegan, Alfredo Coppa, Mark Lipson, Ron Pinhasi & David Reich

Bibel

DERSHOWITZ 2010

Idan Dershowitz, *A Land Flowing with Fat and Honey*. *Vetus Testamentum* **60** (2010), 172–176.

The author contends that the word hlb in the phrase ‘rs zbt hlb wdbs should be read heleb (fat), and not halab (milk), drawing support from biblical and Ugaritic texts.

Keywords: milk and honey | fat | oil | Canaan | land | pointing

FINKELSTEIN 2011

Israel Finkelstein, *Stages in the Territorial Expansion of the Northern Kingdom*. [Vetus Testamentum 61 \(2011\), 227–242](#).

The article presents textual and archaeological evidence for three phases in the territorial expansion of the Northern Kingdom. In the initial, pre-Omride phase Israel expanded only into the Jezreel Valley. Under the Omrides, the territory of the Northern Kingdom covered the northern valleys as far as Hazor and the mountainous Galilee. In the first half of the 8th century BCE, Israel expanded further north, to the area of Dan and possibly beyond.

Keywords: Northern Kingdom | Israel | Aram Damascus | Omrides

GUIL 2017

Shlomo Guil, *The Shapira Scroll was an Authentic Dead Sea Scroll*. [Palestine Exploration Quarterly 149 \(2017\), 6–27](#).

Wilhelm Shapira astonished the European academic world in 1883 by offering for sale fifteen or sixteen leather fragments of an ancient Hebrew scroll containing parts of Deuteronomy, but in a version that deviated from the Masorah. The script of the scroll, known to us today as paleo-Hebrew, is an archaism of the pre-exilic Hebrew script. The sale offer was made to the British Museum and the asking price was one million British pounds. The British museum was willing to consider the offer and appointed Christian David Ginsburg to ascertain the authenticity of the scroll.

Ginsburg analyzed the fragments of the Shapira scroll for almost three weeks but it was Charles Clermont-Ganneau, the renowned French scholar, who publicly announced on 21 August 1883 that the scroll is a forgery. On the following day, Ginsburg wrote to Bond, the director of the British Museum, that the manuscript is in fact a forgery.

This article attempts to demonstrate that the Shapira scroll was an authentic manuscript by presenting circumstantial evidence in favour of the scroll. The evidence focuses upon physical characteristics of the scroll as well as upon paleographic aspects.

Keywords: Shapira fragments | Dead Sea Scrolls | paleo-Hebrew | forgeries | British Museum | Palestine Exploration Fund

KOENEN 1999

Klaus Koenen, *Eherne Schlange und goldenes Kalb, Ein Vergleich der Überlieferungen*. [Zeitschrift für die Alttestamentliche Wissenschaft 111 \(1999\), 353–372](#).

Eherne Schlange und goldenes Kalb sind zwei Kultgegenstände, die ebenso wie die mit ihnen verbundenen Überlieferungen eine wechselvolle, aber weithin parallel verlaufende Geschichte erlebt haben. Ursprünglich kanaänisch wurden sie von der Jahwe-Religion als Symbole des wirkmächtig helfenden Gottes übernommen. Ätiologien verlegten die Herstellung der Bilder in die als Ursprungsepoche verstandene Wüstenzeit: Aaron hat das goldene Kalb als Bild Jahwes hergestellt und Mose die eherne Schlange auf Geheiß Jahwes. Im 8. Jh. wurden beide Bilder unter unterschiedlichen Umständen beseitigt. Die damit obsolet gewordenen Ätiologien konnten nur als Spolien weiterleben. Die des Nechuschtans wurde zu einer Murrerzählung, die des Stierbilds zu einer polemischen Erzählung, die jetzt eine Ätiologie für den Untergang des Nord-Reichs bietet.

RÖMER 2017

Thomas Römer, *How Jeroboam II became Jeroboam I*. [Hebrew Bible and Ancient Israel 6 \(2017\), 372–382](#).

The Deuteronomistic redactors of the book of Kings are almost silent about the reign of Jeroboam II. This can be explained by the fact that they transferred the foundation of the sanctuaries of Dan and Bethel to the time of Jeroboam I. The exodus tradition and the Jacob narrative in the Northern kingdom were made “official” under Jeroboam II.

Keywords: Jeroboam | Northern tradition | Jacob | Exodus | 1 Kings 12 | 2 Kings 14 | Hosea 12

VEIJOLA 1988

Timo Veijola, *Das Opfer des Abraham, Paradigma des Glaubens aus dem nachexilischen Zeitalter*. *Zeitschrift für Theologie und Kirche* 85 (1988), 129–164.

Weiterhin verdient die Rolle des Engels in Gen 22,11–12 besondere Erwähnung. Anders als sonst in den Erzvätererzählungen, ist dieser Engel (mal’ak) nicht ein Bote Gottes, der leibhaft auf der Erde erscheint (vgl. Gen 16,7–13; 19,1–22; 28,12; 31,11–13; 32,2; 48,16), sondern ein wirklicher “Engel”, ein himmlisches Wesen, das Abraham vom Himmel her anredet. Diese Vorstellung, die von den sonstigen Erzväterüberlieferungen abweicht, gehört auf eine spätere Stufe in der Entwicklung der Angelologie.

Islam

GEBHARDT 2014

Joseph Glen Gebhardt, *The Syriac Clementine Recognitions and Homilies, The First Complete Translation of the Text*. (Nashville 2014).

The Syriac Clementine Recognitions and Homilies is the first ever complete translation into a modern language of this important historical document relating to the origins of Judaism and Christianity. Found within the pages of the world’s oldest-dated manuscript, in any language, The Syriac Clementine Recognitions and Homilies tells the first-century story of a young Roman philosopher, Clement. Leaving his native land, Clement travels to the Middle East to meet the Apostles and records details of the original teachings of Jesus’ earliest followers. Clement also relays the travels of the Apostle Peter in his attempt to stop a false version of Christianity from being spread throughout the Roman Empire by an insidious deceiver. The narrative concludes with an amazing life story retold by the author. This astonishing document, having been suppressed for nearly two millennia, contains revelations about the formative years leading up to the split between Jews and Christians, and has the potential to revolutionize modern understandings of religion and philosophy. The text is written in Syriac, a dialect of the Aramaic language spoken by Jesus and his Apostles. The Clementine Recognitions and Homilies has previously only been available through altered Greek and Latin recensions and has become a topic of great controversy among Biblical scholars for the past five centuries. Now, for the first time, the oldest text-type is made accessible to the public in a complete English translation.

Judentum

GEBHARDT 2020

Joseph G. Gebhardt, סֵפֶר תּוֹלְדוֹת יֵשׁוּעַ הַנוֹצְרִי, *The Book of the Generations (Toldot) of Yeshua the Notzrite: The Huldreich Text*. (unpublished 2020).

The stories on which the literature is based undoubtedly began circulating at an early period, as their refutation occupied some of the second- and third-century Christian polemicists: notably, Justin Martyr, Tertullian, and Origen. References to the Toldot Yeshu stories have surfaced time and again in the writings of Christian and Islamic controversialists and historiographers, finally erupting into open religious debate and suppression around the time of the Reformation. While in past ages these writings have frequently been used for their incendiary effect on Jewish-Christian relations, the study of their literary origins, development, and relationship to other literature has been sorely neglected. The controversial nature of their motivation and subject matter as counter-histories to the Christian gospels has singled them out, ironically enough, for a tacit suppression by institutions of secular modernity. Such attitudes are unbecoming of the modern world with its core values of freedom of speech and intellectual enlightenment. It is with the goal of liberating these poorly understood texts that the current editor has sought to produce a literal and idiomatic translation of some part of their corpus.

Klima

GEIBERT 2021

Walter Geibert, Jens Matthiessen, Ingrid Stimac, Jutta Wollenburg & Ruediger Stein, *Glacial episodes of a freshwater Arctic Ocean covered by a thick ice shelf*. [nature 590 \(2021\), 97–102](#).

Following early hypotheses about the possible existence of Arctic ice shelves in the past^{1–3}, the observation of specific erosional features as deep as 1,000 metres below the current sea level confirmed the presence of a thick layer of ice on the Lomonosov Ridge in the central Arctic Ocean and elsewhere^{4–6}. Recent modelling studies have addressed how an ice shelf may have built up in glacial periods, covering most of the Arctic Ocean^{7,8}. So far, however, there is no irrefutable marine-sediment characterization of such an extensive ice shelf in the Arctic, raising doubt about the impact of glacial conditions on the Arctic Ocean. Here we provide evidence for at least two episodes during which the Arctic Ocean and the adjacent Nordic seas were not only covered by an extensive ice shelf, but also filled entirely with fresh water, causing a widespread absence of thorium-230 in marine sediments. We propose that these Arctic freshwater intervals occurred 70,000–62,000 years before present and approximately 150,000–131,000 years before present, corresponding to portions of marine isotope stages 4 and 6. Alternative interpretations of the first occurrence of the calcareous nannofossil *Emiliana huxleyi* in Arctic sedimentary records would suggest younger ages for the older interval. Our approach explains the unexpected minima in Arctic thorium-230 records⁹ that have led to divergent interpretations of sedimentation rates^{10,11} and hampered their use for dating purposes. About nine million cubic kilometres of fresh water is required to explain our isotopic interpretation, a calculation that we support with estimates of hydrological fluxes and altered boundary conditions. A freshwater mass of this size—stored in oceans, rather than land—suggests that a revision of sea-level reconstructions based on freshwater-sensitive stable oxygen isotopes may be required, and that large masses of fresh water could be delivered to the north Atlantic Ocean on very short timescales.

HOFFMANN 2021

Sharon Hoffmann, *Evidence of a freshwater Arctic Ocean*. [nature 590 \(2021\), 37–38](#).

A geochemical study of sediments suggests that, during recent glacial periods, the Arctic Ocean was completely isolated from the world ocean, with fresh water filling the basin for thousands of years.

Methoden

PERKEL 2021

Jeffrey M. Perkel, *Five Reasons to Love the Command Line*. [nature 590 \(2021\), 173–174](#).

The text interface is intimidating, but can save researchers from mundane computing tasks. Just be sure you know what you’re doing.

All researchers who use computers can benefit from it, says Jeroen Janssens, principal instructor of Data Science Workshops in Rotterdam, the Netherlands, and author of the 2014 book *Data Science at the Command Line*. “The mouse doesn’t scale,” Janssens explains.

Religion

LUHRMANN 2021

Tanya Marie Luhrmann et al., *Sensing the presence of gods and spirits across cultures and faiths*. [PNAS 118 \(2021\), e2016649118](#).

[pnas118-e2016649118-Supplement0.pdf](#), [pnas118-e2016649118-Supplement1.csv](#), [pnas118-e2016649118-Supplement2.csv](#), [pnas118-e2016649118-Supplement3.csv](#), [pnas118-e2016649118-Supplement4.csv](#)

Hearing the voice of God, feeling the presence of the dead, being possessed by a demonic spirit—such events are among the most remarkable human sensory experiences. They change lives and in turn shape history. Why do some people report experiencing such events while others do not? We argue that experiences of spiritual presence are facilitated by cultural models that represent the mind as “porous,” or permeable to the world, and by an immersive orientation toward inner life that allows a person to become “absorbed” in experiences. In four studies with over 2,000 participants from many religious traditions in the United States, Ghana, Thailand, China, and Vanuatu, porosity and absorption played distinct roles in determining which people, in which cultural settings, were most likely to report vivid sensory experiences of what they took to be gods and spirits.

Keywords: religion | porosity | absorption | spiritual experience | voices

Tanya Marie Luhrmann, Kara Weisman, Felicity Aulino, Joshua D. Brahinsky, John C. Dulin, Vivian A. Dzokoto, Cristine H. Legare, Michael Lifshitz, Emily Ng, Nicole Ross-Zehnder & Rachel E. Smith

Significance: The sensory presence of gods and spirits is central to many of the religions that have shaped human history—in fact, many people of faith report having experienced such events. But these experiences are poorly understood by social scientists and rarely studied empirically. We present a multiple-discipline, multiple-methods program of research involving thousands of people from diverse cultures and religions which demonstrates that two key factors—cultural models of the mind and personal orientations toward the mind—explain why some people are more likely than others to report vivid experiences of gods and spirits. These results demonstrate the power of culture, in combination with individual differences, to shape something as basic as what feels real to the senses.

Sprachlehre

KOLLER 2018

Aaron Koller, *The Diffusion of the Alphabet in the Second Millennium BCE, On the Movements of Scribal Ideas from Egypt to the Levant, Mesopotamia, and Yemen*. [Journal of Ancient Egyptian Interconnections](#) **20** (2018), 1–14.

The non-impact of the alphabet has garnered a lot of attention recently: how could an invention so revolutionary do so little? Researchers have been led to wonder whether the alphabet may not have been as revolutionary as had been thought, or perhaps that it was not invented as early as had been thought. Recent discoveries, however, coupled with a re-evaluation of data that has been long known, lead to a different conclusion: the alphabet did spread across the entire Near East, from Egypt, through Syria, into southern Mesopotamia, within a few centuries of its invention. The exact chronology differed from place to place, but the transmission is always seen to follow the opening of trade routes. Interestingly, the alphabetic script is typically seen in the hands of scribes, not formerly illiterate people. Thus the alphabet's revolutionary impact was limited by class structures, not geography.