

References

Aktuell

ENGZELL 2019

Per Engzell & Felix C. Troup, *Heritability of education rises with intergenerational mobility*. [PNAS](#) **116** (2019), 25386–25388.

As an indicator of educational opportunity, social scientists have studied intergenerational mobility—the degree to which children’s attainment depends on that of their parents—and how it varies across place or time. We combine this research with behavior genetics to show that societal variation in mobility is rooted in family advantages that siblings share over and above genetic transmission. In societies with high intergenerational mobility, less variance in educational attainment is attributable to the shared sibling environment. Variance due to genetic factors is largely constant, but its share as a part of total variance, heritability, rises with mobility. Our results suggest that environmental differences underlie variation in intergenerational mobility, and that there is no tension between egalitarian policies and the realization of individual genetic potential.

Keywords: educational attainment | intergenerational mobility | heritability

FITCH 2019

W. Tecumseh Fitch & Tudor Popescu, *The world in a song*. [science](#) **366** (2019), 944–945.

GASTEL 2019

Barbara Gastel, *Giving thanks in China*. [science](#) **366** (2019), 1162.

Golden autumn. The best time of year in Beijing. I’d just flown in from the United States to start a position teaching scientific writing in English. I hadn’t been to China before, much less taught there, so I didn’t know what to expect. “Will I be able to establish rapport with my students?” I wondered. “Will we communicate adequately?” At the start of my first class, I looked around at my students: 17 scientists. The year was 1983, and some wore jackets that resembled the type popularized by the late Chinese leader Mao Zedong. The students gave me hesitant but welcoming smiles, and I proceeded to tell them that my main goal was to help them publish internationally. I hoped this venture would work out for them—and me.

KANNAN 2019

Ragupathy Kannan, *Sidestepping politics to teach climate*. [science](#) **366** (2019), 1042.

I sat down at my desk to read the student evaluations for my undergraduate biology courses. “Please leave politics out of it. Not all Republicans deny science,” one student wrote. “I didn’t pay to take this class to hear him bash Republicans,” wrote another. I had received similar comments in previous years, implying that my lectures about Earth’s climate—and how it’s changing—were unfairly infused with politics. But they still made me think. How can I teach controversial topics such as climate change at a state university in Arkansas, where denial of climate change is rampant, without sounding partisan to some students?

MEHR 2019

Samuel A. Mehr et al., *Universality and diversity in human song. science* **366** (2019), 970.

s366-0970-Supplement.pdf

What is universal about music, and what varies? We built a corpus of ethnographic text on musical behavior from a representative sample of the world's societies, as well as a discography of audio recordings. The ethnographic corpus reveals that music (including songs with words) appears in every society observed; that music varies along three dimensions (formality, arousal, religiosity), more within societies than across them; and that music is associated with certain behavioral contexts such as infant care, healing, dance, and love. The discography—analyzed through machine summaries, amateur and expert listener ratings, and manual transcriptions—reveals that acoustic features of songs predict their primary behavioral context; that tonality is widespread, perhaps universal; that music varies in rhythmic and melodic complexity; and that elements of melodies and rhythms found worldwide follow power laws.

Samuel A. Mehr, Manvir Singh, Dean Knox, Daniel M. Ketter, Daniel Pickens-Jones, S. Atwood, Christopher Lucas, Nori Jacoby, Alena A. Egner, Erin J. Hopkins, Rhea M. Howard, Joshua K. Hartshorne, Mariela V. Jennings, Jan Simson, Constance M. Bainbridge, Steven Pinker, Timothy J. O'Donnell, Max M. Krasnow & Luke Glowacki

PERKINS 2019

Sid Perkins, *Albedo is a simple concept that plays complicated roles in climate and astronomy. PNAS* **116** (2019), 25369–25371.

The scope and magnitude of feedbacks such as these, both on a regional and a global scale, are some of the largest uncertainties in current climate models, according to the Intergovernmental Panel on Climate Change. For instance: As the planet warms, what effect will rising global temperatures have on the amount and brightness of Earth's cloud cover? How might droughts or deforestation change Earth's albedo in some regions? And because climate is such a complicated system, how will these feedbacks influence each other? "We should never be looking at feedbacks in isolation, because everything depends on everything else," says Serreze.

STOKSTAD 2019

Erik Stokstad, *After 20 years, Golden Rice nears approval. science* **366** (2019), 934.

Bangladesh may become the first country to adopt transgenic rice enriched in vitamin A. Golden Rice was developed in the late 1990s by German plant scientists Ingo Potrykus and Peter Beyer to combat vitamin A deficiency, the leading cause of childhood blindness. If all goes smoothly, farmers might have Golden Rice seed to plant by 2021.

Archäologie

DÖRFLER 2008

WALTER DÖRFLER & JOHANNES MÜLLER (Hrsg.), *Umwelt–Wirtschaft–Siedlungen im dritten vorchristlichen Jahrtausend Mitteleuropas und Südschwedens, Internationale Tagung Kiel 4.–6. November 2005*. Untersuchungen aus dem Institut für Ur- und

Bibel

FANTALKIN 2008

Alexander Fantalkin, *The Appearance of Rock-Cut Bench Tombs in Iron Age Judah as a Reflection of State Formation*. In: ALEXANDER FANTALKIN & ASSAF YASUR-LANDAU (Hrsg.), *Bene Israel, Studies in the Archaeology of Israel and the Levant during the Bronze and Iron Ages in Honour of Israel Finkelstein*. Culture and History of the Ancient Near East 31 (Leiden 2008), 17–44.

It has been emphasized that bench tombs can serve as a reliable indicator in attempting to reconstruct the boundaries of the Kingdom of Judah near the end of the Iron Age (Yezerki 1999). Their distribution throughout the kingdom near the end of the Iron Age matches, on the whole, the spatial distribution of the material finds clearly identified as Judahite (cf. Kletter 1999). In this paper I have tried to point out several features that allow us to make a connection between the widespread appearance of rock-cut bench tombs throughout the Kingdom of Judah from the 8th century BCE until the Babylonian conquest and Judah's emergence as a fully developed state with a material culture of its own. I suggested that Judah's expansion into the area of the Shephelah and the latter's integration into the Kingdom of Judah near the end of the 9th century BCE might be seen as a major event in Judah's transformation into a fully developed state. It should be clearly stated, however, that the appearance of rock-cut bench tombs in Iron Age Judah does not itself indicate state formation. It should be considered rather as just one of the signs of statehood in Iron Age Judah, in addition to the appearance of monumental architecture, urbanization, widespread writing, literacy, etc. (cf. Finkelstein 2002b with earlier references). Thus, as I have argued that during the formative stages, the elites of the newly emerged Judahite state adopted this type of burial. Thereafter, this modified burial practice became normative and ritualized and, as such, was characterized by uniformity in both the belief in the afterlife and the material expression thereof.

Biologie

GEREMIA 2019

Chris Geremia, Jerod A. Merkle, Daniel R. Eacker, Rick L. Wallen, P. J. White, Mark Hebblewhite & Matthew J. Kauffman, *Migrating bison engineer the green wave*. *PNAS* 116 (2019), 25707–25713.

pnas116-25707-Supplement.pdf

Newly emerging plants provide the best forage for herbivores. To exploit this fleeting resource, migrating herbivores align their movements to surf the wave of spring green-up. With new technology to track migrating animals, the Green Wave Hypothesis has steadily gained empirical support across a diversity of migratory taxa. This hypothesis assumes the green wave is controlled by variation in climate, weather, and topography, and its progression dictates the timing, pace, and extent of migrations. However, aggregate grazers that are also capable of engineering grassland ecosystems make some of the world's most impressive migrations, and it

is unclear how the green wave determines their movements. Here we show that Yellowstone's bison (*Bison bison*) do not choreograph their migratory movements to the wave of spring green-up. Instead, bison modify the green wave as they migrate and graze. While most bison surfed during early spring, they eventually slowed and let the green wave pass them by. However, small-scale experiments indicated that feedback from grazing sustained forage quality. Most importantly, a 6-fold decadal shift in bison density revealed that intense grazing caused grasslands to green up faster, more intensely, and for a longer duration. Our finding broadens our understanding of the ways in which animal movements underpin the foraging benefit of migration. The widely accepted Green Wave Hypothesis needs to be revised to include large aggregate grazers that not only move to find forage, but also engineer plant phenology through grazing, thereby shaping their own migratory movements.

Keywords: bison | grazing lawn | green wave | migration | surfing

Significance: The Green Wave Hypothesis (GWH) says the green wave—the progression of spring green-up from low to high elevations or latitudes—dictates the pace of herbivore migrations worldwide. Animals move in sync with the wave because young vegetation provides the best forage. We show the GWH needs to be revised to include group-forming grazers that not only move to find forage, but create forage by how they move. Bison, by moving and grazing en masse, release themselves from the need to “surf the wave.” Their movements and grazing stimulate plant growth and delay plant maturation, which allows them to eat high-quality foods despite falling behind the wave while also modifying the progression of the green wave itself.

SPERRY 2019

John S. Sperry, Martin D. Venturas, Henry N. Todd, Anna T. Trugman, William R. L. Anderegg, Yujie Wang & Xiaonan Tai, *The impact of rising CO₂ and acclimation on the response of US forests to global warming*. [PNAS 116 \(2019\), 25734–25744](#).

[pnas116-25734-Supplement.pdf](#)

The response of forests to climate change depends in part on whether the photosynthetic benefit from increased atmospheric CO₂ (ΔC_a = future minus historic CO₂) compensates for increased physiological stresses from higher temperature (ΔT). We predicted the outcome of these competing responses by using optimization theory and a mechanistic model of tree water transport and photosynthesis. We simulated current and future productivity, stress, and mortality in mature monospecific stands with soil, species, and climate sampled from 20 continental US locations. We modeled stands with and without acclimation to ΔC_a and ΔT , where acclimated forests adjusted leaf area, photosynthetic capacity, and stand density to maximize productivity while avoiding stress. Without acclimation, the ΔC_a -driven boost in net primary productivity (NPP) was compromised by ΔT -driven stress and mortality associated with vascular failure. With acclimation, the ΔC_a -driven boost in NPP and stand biomass (C storage) was accentuated for cooler futures but negated for warmer futures by a ΔT -driven reduction in NPP and biomass. Thus, hotter futures reduced forest biomass through either mortality or acclimation. Forest outcomes depended on whether projected climatic $\Delta C_a/\Delta T$ ratios were above or below physiological thresholds that neutralized the negative impacts of warming. Critically, if forests do not acclimate, the $\Delta C_a/\Delta T$ must be above ca. 89 ppm • °C.1 to avoid chronic stress, a threshold met by 55 % of climate projections. If forests do acclimate, the $\Delta C_a/\Delta T$ must rise above ca. 67 ppm • °C.1 for NPP and biomass to increase, a lower threshold met by 71 % of projections.

Keywords: acclimation | climate change | drought | forest resilience | vegetation modeling

Significance: The benefit of climate change for forests is that higher atmospheric CO₂ allows trees to use less water and photosynthesize more. The problem of climate change is that warmer temperatures make trees use more water and photosynthesize less. We predicted the outcome of these opposing influences using a physiologically realistic model which accounted for the potential adjustment in forest leaf area and related traits to future conditions. If forests fail to adjust, only 55 % of climate projections predict a CO₂ increase large enough to prevent warming from causing significant drought and mortality. If forests can adjust, the percentage of favorable outcomes rises to 71 %. However, uncertainty remains in whether trees can adjust rapidly and in the scatter among climate projections.

Datierung

CZEBRESZUK 2001

JANUSZ CZEBRESZUK & JOHANNES MÜLLER (Hrsg.), *Die absolute Chronologie in Mitteleuropa 3000–2000 v. Chr.* Studien zur Archäologie in Ostmitteleuropa 1 ([Rahden 2001](#)).

Judentum

BACH 2020

Melissa Sayyad Bach, *4Q246 and Collective Interpretation*. In: METTE BUNDTVAD & KASPER SIEGISMUND (Hrsg.), *Vision, Narrative, and Wisdom in the Aramaic Texts from Qumran, Essays from the Copenhagen Symposium, 14–15 August, 2017*. Studies on the Texts of the Desert of Judah 131 ([Leiden 2020](#)), 221–241.

In this article I have demonstrated a reading of the preserved text of 4Q246 as a narrative. My reading has shown that the small fragment has a simplistic and repetitive vocabulary. This feature creates small but imperative movements within the narrative both with regard to the time of tribulation and the time of peace. The destruction is described as a rage approaching earth and spreading from the top down and infecting the cities. The uprising of the “People of God” causes the time of peace, and it happens within earth and spreads and repels the destruction in the opposing direction. Furthermore, I have sought to demonstrate the decisive role of the “People of God” in the eschatological scene of 4Q246 regardless of how the “Son of God” figure is identified. This interpretation seems doable in the light of the narrative structure of 4Q246 itself, and of the Old Testament and the War Scroll. Consequently, the idea of collective interpretation presents itself as the most attractive option.

KRAEMER 2012

JOEL L. KRAEMER & MICHAEL G. WECHSLER (Hrsg.), *Pesher Nahum – Texts and Studies in Jewish History and Literature from Antiquity through the Middle Ages, Presented to Norman (Nahum) Golb*. Studies in Ancient Oriental Civilization 66 ([Chicago 2012](#)).

PALADINO 2016

Gian Nicola Paladino, *Messianic Expectations in the Second Temple Period applied to Jesus of Nazareth*. [unknown \(2016\), preprint](#), 1–21. .

Although Jesus was a very orthodox Jew, there were major aspects of his teachings, which drove people away because they considered him an apostate.

First of all the preaching of the resurrection, which was an immediate red flag to the Sadducees and their followers because they denied any possibility of resurrection.

Secondly Jesus' rhetoric about the temple's destruction would have been at least astonishing to any Jew who heard. He claimed: "Destroy the temple, and in three days I will raise it up" (Jn 2: 19). The temple was supposed to be the dwelling place for God among the Jews so Jesus' claim would have been regarded as spectacular and heretical.

Thirdly and finally, by claiming to be divine, Jesus was committing a fatal sin. Leviticus 24.16 is very clear: "One who blasphemes the name of the Lord shall be put to death; the whole congregation shall stone the blasphemer". Each statement claiming that God was on the same level of a human being was heretical and so the reaction of the Jewish people did technically follow Levitical law, the only difference being the vehicle of punishment.

Even if some Jews had seen Jesus as "anointed", plenty of his teachings would have been viewed as heterodox. Hence it is not surprising he was rejected as the Messiah.

TOMASINO 2009

Anthony J. Tomasino, *Rethinking the Jewish Background of the "Son of God"*. [unknown \(2009\), preprint, 1–28](#). .

But if I can offer a brief summary, it appears that most scholars would agree:

—**The** identification of Jesus as "son of God" was made quite early, and may even go back to Jesus himself. This idea has even been espoused by those of the "History of Religions" school, who would nonetheless deny that the title originally implied Jesus' divinity (an idea they would attribute to Paul).⁴⁸

—**The** title was understood in various ways by New Testament writers. In some cases, it was associated with Jesus' unique authority (Matt 4:3, 6; 14:33; 27:54; Mk 3:11; Jn 5:25). In other cases, it seems to be based on his obedience to God (Matt 3:17; Heb 1:8). Some verses connect Jesus' Sonship with his exaltation to Heaven after his resurrection (1 Thess 1:10; Heb 1:3-4).

—**In** spite of these various uses of the title, however, the messianic use of "Son of God" seems to have been derived exegetically from 2 Samuel 7 and Psalms 2 and 89, which were interpreted in Second Temple Jewish literature as messianic prophecies.

—**In** the New Testament, the title "Son of God" is never connected with the notion of the Virgin Birth. Contrary to an often expressed opinion, this statement is even true of Luke 1:26-38, where the concept of the Virgin Birth and the sonship of the Messiah occur in the same context. Mary is told that her child shall be conceived by the Holy Spirit, but then she is

—**Nonetheless**, the prominence of the Son of God title in Christianity cannot be attributed to exegesis alone. There are surely factors that differentiated Christian messianic titles from the expectations of the greater Jewish community. One of those factors might well be the Roman state cult. The Emperor's arrogation of the divine title might well have inspired the Christians living in a Greco-Roman context to elevate this aspect of the messianic hope to a place it never had held and never would hold in Judaism.

TOMASINO 2012

Anthony J. Tomasino, *An Aramaic Apocalypse (4Q246) and the Perils of Premature Consensus*. In: JOEL L. KRAEMER & MICHAEL

G. WECHSLER (Hrsg.), *Pesher Nahum – Texts and Studies in Jewish History and Literature from Antiquity through the Middle Ages, Presented to Norman (Nahum) Golb*. Studies in Ancient Oriental Civilization 66 (Chicago 2012), 223–236.

The aramaic apocalypse is but a single fragmentary manuscript of dubious meaning, it is not the missing link between Judaism and christianity.

Furthermore, the interpretation of this text should still be very much in doubt. as demonstrated above, there is ample reason to believe that the messianic interpretation has not been demonstrated with any level of certainty. But as this interpretation has come to be regarded as the consensus, we increasingly find that the identification of the “son of God” figure as the Messiah is made without the necessary caveats. due to the uncritical promulgation of this interpretation, a whole series of textbooks shall remain in circulation for many years disseminating the incorrect notion that the pre-christian messianic use of the “son of God” title has been conclusively demonstrated.

The principal danger in the consensus, however, is that it can quell further investigation of alternatives. For many scholars, the issue of the son of God’s identification seems to have been closed, particularly by collins’ treatment of the text. students or scholars who have not thoroughly studied the issue may assume that the final word has already been spoken, and that there will be little gained by further pursuit of the matter. such a state of affairs would be unfortunate indeed. Much is undoubtedly yet to be learned from an unprejudiced investigation of this most intriguing text.

Although it is not my primary purpose, i would like to propose an alternative reading to the messianic approach.

We can easily demonstrate how this interpretation of 4Q246 accords with the historical realities of Judean society in the early roman period. to the Jews, the coming of the romans had brought nothing but strife. With the conquest of Pompey, the struggles among the triumvirs, the ambitions of cleopatra, the uprisings of the last of the hasmoneans, and battles against the Parthians and the nabateans, Judea had known constant conflict since the appearance of rome on the scene. From this morass the figure of octavian emerged finally supreme. octavian’s consolidation of the empire certainly brought some respite to Judea, but the memory of violence was still very real in the Jewish mind, and the passion for revolt still burned in the Jewish hearts. unlike epiphanes, octavian did not actually persecute the Jews, and 4Q246 acknowledges this fact by refraining from vilification of the emperor. nonetheless, his claim of the title “son of God” was a blatant demonstration of hubris that could not fail to attract Jewish indignation. it may be no accidental irony that 4Q246 emphasizes issues that were featured in rome’s propaganda: the establishment of peace and order, and the divinity of caesar.

An identification of this figure with the roman emperor has to my knowledge been suggested by a very small number of scholars, but no specialists in the field have championed the theory. Most Qumranologists, it seems, are reluctant to assign the composition of the text to such a late date. it should be noted, however, that the manuscript has been dated on palaeographic grounds to the last third of the first century b.c.e. While i personally question whether palaeographic dating can provide the kind of precise dating of texts that some scholars would claim, there would seem to be little call for Qumranologists to dismiss the possibility of a roman-era provenance for this text out of hand. obviously, our text is a copy, not an autograph, and must have been composed some time before the time to which we date the manuscript — but how long? There is no compelling reason to insist that the text must have been composed before the roman era.

Jungpaläolithikum

AUBERT 2019

Maxime Aubert & Adam Brumm et al., *Earliest hunting scene in prehistoric art.* *nature* **576** (2019), 442–445.

n576-0442-Supplement1.pdf, n576-0442-Supplement2.xlsx

Humans seem to have an adaptive predisposition for inventing, telling and consuming stories¹. Prehistoric cave art provides the most direct insight that we have into the earliest storytelling^{2–5}, in the form of narrative compositions or ‘scenes’^{2,5} that feature clear figurative depictions of sets of figures in spatial proximity to each other, and from which one can infer actions taking place among the figures⁵. The Upper Palaeolithic cave art of Europe hosts the oldest previously known images of humans and animals interacting in recognizable scenes^{2,5}, and of therianthropes^{6,7}—abstract beings that combine qualities of both people and animals, and which arguably communicated narrative fiction of some kind (folklore, religious myths, spiritual beliefs and so on). In this record of creative expression (spanning from about 40 thousand years ago (ka) until the beginning of the Holocene epoch at around 10 ka), scenes in cave art are generally rare and chronologically late (dating to about 21–14 ka)⁷, and clear representations of therianthropes are uncommon⁶—the oldest such image is a carved figurine from Germany of a human with a feline head (dated to about 40–39 ka)⁸. Here we describe an elaborate rock art panel from the limestone cave of Leang Bulu’ Sipong 4 (Sulawesi, Indonesia) that portrays several figures that appear to represent therianthropes hunting wild pigs and dwarf bovids; this painting has been dated to at least 43.9 ka on the basis of uranium-series analysis of overlying speleothems. This hunting scene is—to our knowledge—currently the oldest pictorial record of storytelling and the earliest figurative artwork in the world.

Maxime Aubert, Rustan Lebe, Adhi Agus Oktaviana, Muhammad Tang, Basran Burhan, Hamrullah, Andi Jusdi, Abdullah, Budianto Hakim, Jian-xin Zhao, I. Made Geria, Priyatno Hadi Sulistyarto, Ratno Sardi & Adam Brumm

Kultur

BOHN 2019

Manuel Bohn, Gregor Kachel & Michael Tomasello, *Young children spontaneously recreate core properties of language in a new modality.* *PNAS* **116** (2019), 26072–26077.

pnas116-26072-Supplement.pdf

How the world’s 6,000+ natural languages have arisen is mostly unknown. Yet, new sign languages have emerged recently among deaf people brought together in a community, offering insights into the dynamics of language evolution. However, documenting the emergence of these languages has mostly consisted of studying the end product; the process by which ad hoc signs are transformed into a structured communication system has not been directly observed. Here we show how young children create new communication systems that exhibit core features of natural languages in less than 30 min. In a controlled setting, we blocked the possibility of using spoken language. In order to communicate novel messages, including abstract concepts, dyads of children spontaneously created novel gestural signs. Over usage, these signs became increasingly arbitrary and conventionalized. When confronted with the need to communicate more complex meanings, children began to grammatically structure their gestures. Together with previous work,

these results suggest that children have the basic skills necessary, not only to acquire a natural language, but also to spontaneously create a new one. The speed with which children create these structured systems has profound implications for theorizing about language evolution, a process which is generally thought to span across many generations, if not millennia.

Keywords: language | evolution | gesture | cognitive development

Significance: Human social and cultural life rests on a unique set of communicative abilities. Newly emerging communication systems provide a window into the cognitive and interactional basis of these skills. In a muted video call setup, children were required to convey meaning to a partner while being unable to use spoken language. The gestural code systems that children created ad hoc within a 30-min test session exhibited core features of natural language and emergent sign languages: referential signals for objects, actions, and abstract concepts, conventional use of these signals, and grammatical structure. These results demonstrate that language-like communication systems can emerge rapidly out of social interaction.

Mittelalter

MORDECHAI 2019

Lee Mordechai, Merle Eisenberg, Timothy P. Newfield, Adam Izdebski, Janet E. Kay & Hendrik Poinar, *The Justinianic Plague, An inconsequential pandemic?* [PNAS 116 \(2019\), 25546–25554](#).

[pnas116-25546-Supplement.pdf](#)

Existing mortality estimates assert that the Justinianic Plague (circa 541 to 750 CE) caused tens of millions of deaths throughout the Mediterranean world and Europe, helping to end antiquity and start the Middle Ages. In this article, we argue that this paradigm does not fit the evidence. We examine a series of independent quantitative and qualitative datasets that are directly or indirectly linked to demographic and economic trends during this two-century period: Written sources, legislation, coinage, papyri, inscriptions, pollen, ancient DNA, and mortuary archaeology. Individually or together, they fail to support the maximalist paradigm: None has a clear independent link to plague outbreaks and none supports maximalist reconstructions of late antique plague. Instead of large-scale, disruptive mortality, when contextualized and examined together, the datasets suggest continuity across the plague period. Although demographic, economic, and political changes continued between the 6th and 8th centuries, the evidence does not support the now commonplace claim that the Justinianic Plague was a primary causal factor of them.

Keywords: Justinianic Plague | first plague pandemic | Late Antiquity | plague | *Yersinia pestis*

Significance: The Justinianic Plague (circa 541 to 750 CE) has recently featured prominently in scholarly and popular discussions. Current consensus accepts that it resulted in the deaths of between a quarter and half of the population of the Mediterranean, playing a key role in the fall of the Roman Empire. Our contribution argues that earlier estimates are founded on a small subset of textual evidence and are not supported by many other independent types of evidence (e.g., papyri, coins, inscriptions, and pollen archaeology). We therefore conclude that earlier analyses of the mortality and social effects of the plague are exaggerated, and that the nontextual evidence suggests plague did not play a significant role in the transformation of the Mediterranean world or Europe.