

References

Afrika

PARGETER 2019

Justin Pargeter & Jamie Hampson, *Quartz crystal materiality in Terminal Pleistocene Lesotho*. [Antiquity 93 \(2019\), 11–27](#).

The motivations of prehistoric hunter-gatherers for selecting particular lithic raw materials are often explained in rigidly functional or symbolic terms. By examining the exploitation of crystal quartz at two Terminal Pleistocene rockshelter sites (Ntloana Tšoana and Sehonghong) in Lesotho, southern Africa, the authors reveal that lithic reduction required a form of engagement unique to that material's specific properties. The preferential use of quartz crystals—irrespective of the availability of a wider range of raw materials—demonstrates agency and variability in the technological decisions.

Keywords: Lesotho | Terminal Pleistocene | quartz crystal | ethnohistory | materiality

WADE 2019

Lizzie Wade, *Did Black Death strike sub-Saharan Africa?* [science 363 \(2019\), 1022](#).

An interdisciplinary cadre of researchers suggests medieval plague transformed societies.

Whatever calamity struck medieval sub-Saharan Africa, its impact was lasting. Akrokrowa was abandoned by about 1365, and Kirikongo was never the same. The settlement stayed small, the ceramics got much simpler, and the culture changed to more closely resemble that of the nearby Mali Empire. “It does seem to be a break,” Dueppen says. He hopes more archaeologists will start to focus on the 14th century in Africa, looking for hints of plague—or evidence that rules it out. “This is just the beginning of the story,” Dueppen says.

Aktuell

AGUILLON 2019

Stephanie M. Aguilon, *Fighting through the gray*. [science 363 \(2019\), 1114](#).

I roll over in bed and reach for my phone to check the time. “It’s 8:30 a.m.!” I say to myself. “How did that happen? I must have turned my alarm off and fallen back to sleep.” After some deep breaths, I manage to drag myself out of bed, get dressed, and make breakfast. At work I try to focus, but most of the day I just sit in a fog, struggling to stay awake. When I head home, I lack the motivation to go to the gym, do errands, or hang out with friends. Instead, I fall asleep on the couch shortly after dinner, only making it to bed after some gentle prodding from my dog.

AMICHAY 2019

Oriya Amichay, Doron Ben-Ami, Yana Tchekhanovets, Ruth Shahack-Gross, Daniel Fuks & Ehud Weiss, *A bazaar assemblage, Reconstructing*

*consumption, production and trade from mineralised seeds in Abbasid Jerusalem. [Antiquity](#) **93** (2019), 199–217.*

Recent excavations in the historic centre of ancient Jerusalem have revealed evidence of an Abbasid (eighth- to tenth-century AD) marketplace. Refuse pits and cesspits have yielded an exceptionally well-preserved archaeobotanical assemblage—the first to be recovered from a Levantine marketplace, and the first in the region to be almost entirely preserved by mineralisation. Among several rare species identified is the earliest discovery of aubergine in the Levant. The assemblage includes staple and luxury food plants, medicinal herbs and plants used for industrial production, illuminating patterns of consumption, production, trade and the socioeconomic structure of Abbasid Jerusalem.

Keywords: Jerusalem | Early Islamic | Abbasid | archaeobotany | mineralisation

GOLDMAN 2019

Gretchen T. Goldman & Francesca Dominici, *Don't abandon evidence and process on air pollution policy, Who decides how to establish causality?* [science](#) **363** (2019), 1398–1400.

KUANG 2019

Yun Kuang et al., *Solar-driven, highly sustained splitting of seawater into hydrogen and oxygen fuels. [PNAS](#) **116** (2019), 6624–6629.*

[pnas116-06624-Supplement.pdf](#)

Yun Kuang, Michael J. Kenney, Yongtao Meng, Wei-Hsuan Hung, Yijin Liu, Jianan Erick Huang, Rohit Prasanna, Pengsong Li, Yaping Li, Lei Wang, Meng-Chang Lin, Michael D. McGehee, Xiaoming Sun & Hongjie Dai

Electrolysis of water to generate hydrogen fuel is an attractive renewable energy storage technology. However, grid-scale freshwater electrolysis would put a heavy strain on vital water resources. Developing cheap electrocatalysts and electrodes that can sustain seawater splitting without chloride corrosion could address the water scarcity issue. Here we present a multilayer anode consisting of a nickel–iron hydroxide (NiFe) electrocatalyst layer uniformly coated on a nickel sulfide (NiS_x) layer formed on porous Ni foam (NiFe/NiS_x-Ni), affording superior catalytic activity and corrosion resistance in solar-driven alkaline seawater electrolysis operating at industrially required current densities (0.4 to 1 A/cm²) over 1,000 h. A continuous, highly oxygen evolution reaction-active NiFe electrocatalyst layer drawing anodic currents toward water oxidation and an in situ-generated polyatomic sulfate and carbonate-rich passivating layers formed in the anode are responsible for chloride repelling and superior corrosion resistance of the salty-water-splitting anode.

Keywords: seawater splitting | hydrogen production | electrocatalysis | anticorrosion | solar driven

Significance: Electrolysis of water to generate hydrogen fuel could be vital to the future renewable energy landscape. Electrodes that can sustain seawater splitting without chloride corrosion could address the issue of freshwater scarcity on Earth. Herein, a hierarchical anode consisting of a nickel–iron hydroxide electrocatalyst layer uniformly coated on a sulfide layer formed on Ni substrate was developed, affording superior catalytic activity and corrosion resistance in seawater electrolysis. In situ-generated polyanion-rich passivating layers formed in the anode are responsible for chloride repelling and high corrosion resistance, leading to new directions for designing and fabricating highly sustained seawater-splitting electrodes and providing an opportunity to use the vast seawater on Earth as an energy carrier.

PARKER PEARSON 2019

Mike Parker Pearson et al., *Megalith quarries for Stonehenge's bluestones*. *Antiquity* **93** (2019), 45–62.

Mike Parker Pearson, Josh Pollard, Colin Richards, Kate Welham, Chris Casswell, Charles French, Duncan Schlee, Dave Shaw, Ellen Simmons, Adam Stanford, Richard Bevins & Rob Ixer

Geologists and archaeologists have long known that the bluestones of Stonehenge came from the Preseli Hills of west Wales, 230km away, but only recently have some of their exact geological sources been identified. Two of these quarries—Carn Goedog and Craig Rhos-yfelin—have now been excavated to reveal evidence of megalith quarrying around 3000 BC—the same period as the first stage of the construction of Stonehenge. The authors present evidence for the extraction of the stone pillars and consider how they were transported, including the possibility that they were erected in a temporary monument close to the quarries, before completing their journey to Stonehenge.

Keywords: Britain | Preseli Hills | Stonehenge | Neolithic | bluestones | dolerite | megaliths | prehistoric quarrying

PENNISI 2019

Elizabeth Pennisi, *Grazing animals shown to inhabit a 'landscape of fear'*. *science* **363** (2019), 1025.

In a Mozambique park, researchers test how predators can reshape an ecosystem by affecting prey behavior.

PITULKO 2019

Vladimir V. Pitulko, Yaroslav V. Kuzmin, Michael D. Glascock, Elena Yu. Pavlova & Andrei V. Grebennikov, *'They came from the ends of the earth', Long-distance exchange of obsidian in the High Arctic during the Early Holocene*. *Antiquity* **93** (2019), 28–44.

Zhokhov Island in the Siberian High Arctic has yielded evidence for some of the most remote prehistoric human occupation in the world, as well as the oldest-known dog-sled technology. Obsidian artefacts found on Zhokhov have been provenanced using XRF analysis to allow comparison with known sources of obsidian from north-eastern Siberia. The results indicate that the obsidian was sourced from Lake Krasnoe—%

approximately 1500km distant—and arrived on Zhokhov Island c. 8000 BP. The archaeological data from Zhokhov therefore indicate a super-long-distance Mesolithic exchange network.

Keywords: Siberia | Zhokhov Island | Early Holocene | obsidian | provenancing | transport and | exchange

PRINGLE 2019

Robert M. Pringle, *A mountain of ecological interactions*. *nature* **568** (2019), 38–39.

A detailed biological assessment of Africa's highest mountain explores how climate modulates the effects of human land use on plants, animals, microorganisms and a diverse array of ecosystem functions.

RODRIGUEZ-ITURBE 2019

Ignacio Rodriguez-Iturbe, Zijuan Chen, Ann Carla Stave & Simon Asher Levin, *Tree clusters in savannas result from islands of soil moisture*. *PNAS* **116** (2019), 6679–6683.

pnas116-06679-Supplement.pdf

Tree clusters in savannas are commonly found in sizes that follow power laws with well-established exponents. We show that their size distributions could result from the space–time probabilistic structure of soil moisture, estimated over the range of rainfall observed in semiarid savannas; patterns of soil moisture display islands whose size, for moisture thresholds above the mean, follows power laws. These islands are the regions where trees are expected to exist and they have a fractal structure whose perimeter–area relationship is the same as observed in field data for the clustering of trees. When the impact of fire and herbivores is accounted for, as acting through the perimeter of the tree clusters, the power law of the soil moisture islands is transformed into a power law with the same exponents observed in the tree cluster data.

Keywords: savannas | tree clusters | soil moisture | patterns | hydrology

Significance: Patterns of tree clusters in savannas display well-established characteristics that are explained by exogenous dynamics related to hot spots of soil moisture. These characteristics are related to the probability distribution of the cluster sizes and the fractal dimension of the cluster perimeters, both of which have a narrow range of variation regardless of specific climates. Such characteristics match very well those of the hot spots of high soil moisture when accounting for the impact of fire and herbivores.

Bibel

FINKELSTEIN 2016

Israel Finkelstein, *Jerusalem and Judah 600–200 BCE, Implications for Understanding Pentateuchal Texts*. In: PETER DUBOVSKÝ, DOMINIK MARKL & JEAN-PIERRE SONNET (Hrsg.), *The Fall of Jerusalem and the Rise of the Torah*. Forschungen zum Alten Testament (Tübingen 2016), 3–18.

This question brings me to the issue of composition of biblical texts in Yehud of the Persian period, in fact also in Judea of early Hellenistic times. As I have already shown, there is almost no evidence for Hebrew writing in Yehud in c. 586–350 BCE, and very little evidence until c. 200 BCE. This should come as no surprise: the destruction of Judah brought about the collapse of the kingdom’s bureaucracy and deportation of many of the educated intelligentsia – the literati; the “vinedressers and ploughmen” who remained in the land were hardly capable of producing written documents. This should serve as a warning signal to those who tend to place much biblical material in Persian period Yehud.

FINKELSTEIN 2016

Israel Finkelstein & Thomas Römer, *Early North Israelite “Memories” of Moab*. In: JAN C. GERTZ, BERNARD M. LEVINSON, DALIT ROM-SHILONI & KONRAD SCHMID (Hrsg.), *The Formation of the Pentateuch, Bridging the Academic Cultures of Europe, Israel, and North America*. Forschungen zum Alten Testament (Tübingen 2016), 711–727.

Apparently, the Deuteronomists considered the Jordan to be a “theological” border (see the crossing of the Jordan in Josh 3–4); it seems that they had no interest, after 587 BCE, in claiming Moabite or Ammonite territory 33 But later revisions in the context of the Hexateuch did.

FINKELSTEIN 2016

Israel Finkelstein, *The Old Jephthah Tale in Judges, Geographical and Historical Considerations*. *Biblica* **97** (2016), 1–15.

In this article I intend to reveal the old, orally-transmitted heroic tale that lies behind the Jephthah story in the Book of Judges, which is obscured by massive Deuteronomistic and post-Deuteronomistic additions and redactions. The old story deals with a conflict on the settlement boundary between Israelites and Ammonites in Transjordan, around the towns of Gilead and Mizpah. It probably reflects realities before, or in the early days of the Northern kingdom.

Jephthah's vow in 11.30-31.34-40 is post-Deuteronomistic, possibly as late as hellenistic in date, influenced by the Iphigenia legend. In other words, this may be the hand of a second — and latest — post-Deuteronomistic author.

FINKELSTEIN 2016

Israel Finkelstein, *Does Rehob of the Beth-Shean Valley appear in the Bible?* *Biblische Notizen* **169** (2016), 3–9.

Rehob in the Beth-shean Valley was a center of a Late Bronze city-state and is later mentioned in the Sheshonq I list. Tel Rehov is one of the most prominent Bronze and Iron Ages sites in Canaan / Israel. Yet, according to the conventional wisdom Rehob is not mentioned in the Bible. Here I suggest that Rehob of 2Sam 10:6, 8 refers to the town in the Beth-shean Valley. I also propose to view these verses and the tradition regarding Hadadezer king of Zobah in 2Sam 8:3, 5, 12; 1Kgs 11:23 as a case in biblical historiography, in which the author created a story from separate “memories”, that originated from different centuries.

Rehob im Beth-Sean-Tal war das Zentrum eines spätbronzen Stadt-Staates und wird später in der Scheschonq I Liste erwähnt. Tel Rehov ist einer der bedeutendsten Orte der Bronze- und Eisenzeit in Kanaan / Israel. Und dennoch wird Rehob in der Bibel nicht erwähnt. Hier nehme ich an, Rehob in 2Sam 10,6.8 bezieht sich auf die Stadt im Beth-Sean-Tal. Weiters schlage ich vor, diese Verse und die Überlieferung über Hadadeser, dem König von Zoba in 2Sam 8,3.5.12 und 1Kgs 11,23, als einen Fall der biblischen Geschichtsschreibung zu betrachten, in welcher der Autor eine Geschichte aus separaten, aus verschiedenen Jahrhunderten stammenden “Erinnerungen” erschafft.

JANZEN 2005

David Janzen, *Why the Deuteronomist Told about the Sacrifice of Jephthah's Daughter*. *Journal for the Study of the Old Testament* **29** (2005), iii, 339–357.

In response to Thomas Römer's assertion that the story of Jephthah's sacrifice is a Hellenistic insertion into the Deuteronomistic History, this article argues that the presence of the story is best explained as an original part of the history. The portrayal of the sacrifice fits the pattern of moral decline in the book of Judges, and it forms an integral and interconnected part of the story of Jephthah as a whole. Moreover, as part of this whole it reflects an important theme stressed elsewhere by the history: when Israel sacrifices like foreigners do, it will act like foreigners, as well. This is why the story of Jephthah's sacrifice is followed immediately by the story of the tribe of Ephraim, which acts just like the Ammonites, the foreign nation in this account, by invading Gilead.

RÖMER 1998

Thomas C. Römer, *Why Would the Deuteronomists Tell About the Sacrifice of Jephthah's Daughter?* *Journal for the Study of the Old Testament* **23** (1998), 77, 27–38.

It is commonly assumed that the story of Jephthah's vow refers to an 'old tradition' that was integrated into the Deuteronomistic History. But such a view is contrary to Dtr ideology which is absolutely hostile to any human sacrifice (2 Kgs 16.3; 17.17, 31; 21.6 etc.). A literary-critical approach to Judges 11 shows that vv. 30-31 [32] and 34-40 may be considered as post-Dtr.

The author of Judg. 11.30-40 seems to know the story of the Aqedah, but he is not willing to make a happy ending. There is a tragic dimension in the story and quite an Hellenistic atmosphere (the best parallels to Judg. 11.30-40 may be found in Hellenistic texts). So this text should be considered an insertion from the end of the Persian or beginning of the Hellenistic periods. The author tends to show that Jewish classics can be as tragic as Greek ones.

SASS 2016

Benjamin Sass & Israel Finkelstein, *The swan-song of Proto-Canaanite in the ninth century BCE in light of an alphabetic inscription from Megiddo*. *Semitica et Classica* 9 (2016), 19–42.

An early alphabetic inscription has recently been found in an Iron IIA context at Megiddo. Though only two letters survived, the inscription is of significance:

1/ It was retrieved from a well-dated context at a time with very few stratified inscriptions.

2/ It documents the transition from Proto-Canaanite to cursive writing.

In this article we report the find and deal with broader aspects of the alphabet related to it. In certain cases, new evidence calls for updates of our previous scheme for the early alphabetic inscriptions.

Datierung

MCANENEY 2019

Jonny McAneney & Mike Baillie, *Absolute tree-ring dates for the Late Bronze Age eruptions of Aniakchak and Thera in light of a proposed revision of ice-core chronologies*. *Antiquity* 93 (2019), 99–112.

[Antiquity093-0099-Supplement.pdf](#)

By linking ice-core volcanic horizons with precisely dated frost damage in bristlecone pines, the authors have revised the dating of the principal Greenland ice-core chronologies back to c. 2000 BC. This revision has implications for establishing an absolute calendar date for the Bronze Age eruption of Thera. Three volcanic horizons (1653, 1627 and 1610 BC) are now coincident with the seventeenth-century BC radiocarbon dating of Thera, but none of these horizons is likely to result from the Thera eruption. In particular, a volcanic event at c. 1627 BC—a date associated with Thera for over 30 years—can now probably be attributed to the Aniakchak II volcano in Alaska.

Keywords: Santorini | Thera | chronology | radiocarbon dating | ice cores | tree rings

Grabung

COHEN 2010

Chaim Cohen, Joseph Maran & Melissa Vettors, *An Ivory Rod with a Cuneiform Inscription, Most Probably Ugaritic, from a Final Palatial*

Workshop in the Lower Citadel of Tiryns. [Archäologischer Anzeiger 2010, ii, 1–22.](#)

The subject of this contribution is the fragment of an ivory rod with six cuneiform signs that was found in 2002. The rod came to light in a destruction layer dating to LH III B Final within a workshop for skilled crafting inside Building XI which is situated in the northernmost part of the Lower Citadel of Tiryns. The inscription is interpreted as the first example of an Ugaritic text found outside of the Levant. The text is written from left to right combining Akkadian logographic numerical signs and at least one letter of the regular Ugaritic alphabet. After discussing different possibilities concerning the object's function, an interpretation as a 'tally stick' is proposed, i. e. a mnemonic device to document numbers, quantities or possibly a message, that was used by Levantine or Cypriote specialists for skilled crafting who were working in Building XI on behalf of the palace. The find assemblage in Building XI serves as a reminder that it would be highly misleading to regard oriental objects like the ivory rod with cuneiform signs or wall brackets appearing in a Mycenaean harbor town such as Tiryns as mere 'exotica'. Instead, contextual analysis demonstrates that the users were well aware of the special significance attached to such objects in the east and employed them in accordance with practices of Near Eastern or Cypriote origin, thus signaling their cultural affiliations.

Keywords: Tiryns | Ugarit | Ugaritic.Alphabet | Akkadian | abbreviations | Late Helladic III B | tally stick | East Mediterranean Trade

Klima

HASENFRATZ 2019

Adam P. Hasenfratz et al., *The residence time of Southern Ocean surface waters and the 100,000-year ice age cycle.* [science 363 \(2019\), 1080–1084.](#)

s363-1080-Supplement.pdf

Adam P. Hasenfratz, Samuel L. Jaccard, Alfredo Martínez-García, Daniel M. Sigman, David A. Hodell, Derek Vance, Stefano M. Bernasconi, Helga F. Kleiven, F. Alexander Haumann & Gerald H. Haug

From 1.25 million to 700,000 years ago, the ice age cycle deepened and lengthened from 41,000- to 100,000-year periodicity, a transition that remains unexplained. Using surface- and bottom-dwelling foraminifera from the Antarctic Zone of the Southern Ocean to reconstruct the deep-to-surface supply of water during the ice ages of the past 1.5 million years, we found that a reduction in deep water supply and a concomitant freshening of the surface ocean coincided with the emergence of the high-amplitude 100,000-year glacial cycle. We propose that this slowing of deep-to-surface circulation (i.e., a longer residence time for Antarctic surface waters) prolonged ice ages by allowing the Antarctic halocline to strengthen, which increased the resistance of the Antarctic upper water column to orbitally paced drivers of carbon dioxide release.

MENVIEL 2019

Laurie Menviel, *The southern amplifier.* [science 363 \(2019\), 1040–1041.](#)

Greater Southern Ocean stratification may have lowered the atmospheric CO concentration and prolonged ice ages.

Kultur

FAY 2019

Nicolas Fay, Naomi De Kleine, Bradley Walker & Christine A. Caldwell, *Increasing population size can inhibit cumulative cultural evolution*. *PNAS* **116** (2019), 6726–6731.

[pnas116-06726-Supplement.pdf](#)

The extent to which larger populations enhance cumulative cultural evolution (CCE) is contentious. We report a large-scale experiment ($n = 543$) that investigates the CCE of technology (paper planes and their flight distances) using a transmission-chain design. Population size was manipulated such that participants could learn from the paper planes constructed by one, two, or four models from the prior generation. These social-learning conditions were compared with an a-social individual-learning condition in which individual participants made repeated attempts at constructing a paper plane, without having access to any planes produced by other participants. Larger populations generated greater variation in plane performance and gave participants access to better-adapted planes, but this did not enhance CCE. In fact, there was an inverse relationship between population size and CCE: plane flight distance did not improve over the experimental generations in the 2-Model and 4-Model conditions, but did improve over generations in the 1-Model social-learning condition. The incremental improvement in plane flight distance in the 1-Model social-learning condition was comparable to that in the Individual Learning condition, highlighting the importance of trial-and-error learning to artifact innovation and adaptation. An exploratory analysis indicated that the greater variation participants had access to in the larger populations may have overwhelmed their working memory and weakened their ability to selectively copy the best-adapted plane(s). We conclude that larger populations do not enhance artifact performance via CCE, and that it may be only under certain specific conditions that larger population sizes enhance CCE.

Keywords: population size | demography | cumulative cultural evolution | success bias | cultural evolution

Significance: Cumulative cultural evolution (CCE)—the social-learning process through which adaptive modifications accumulate over historical time—is crucial to the advancement of the human species, and yet little is known about the factors important to CCE. Larger populations may enhance CCE, although this is contentious. We report a large-scale experiment that manipulates population size and tests its effect on artefact performance using a paper plane construction task. Over the experimental generations, smaller populations showed the strongest improvements in plane performance (indexed by flight distance). We conclude that larger populations do not enhance artefact performance via CCE and that it may be only under certain specific conditions that larger population sizes enhance CCE.

Mesolithikum

GRIMM 2017

Sonja Grimm & Daniela Holst, *Umbrüche am Ende der Eiszeit*. *Spektrum der Wissenschaft* **2017**, i, 76–82.

Als dichte Wälder entstanden, wo zuvor eisige Tundren mit großen Herden von Beutetieren vorherrschten, mussten die Menschen ihre Lebensweise anpassen. Neue Untersuchungen zeigen erstmals, wie zögerlich man aber Traditionen aufgab. Eine Erkenntnis, die auch heutzutage relevant ist.

Metallzeiten

KIENLIN 2019

Tobias L. Kienlin, *On Europe, the Mediterranean, and the myth of passive peripheries*. In: XOSE-LOIS ARMADA, MERCEDES MURILLO-BARROSO & MIKE CHARLTON (Hrsg.), *Metals, Minds and Mobility, Integrating Scientific Data With Archaeological Theory*. (Oxford 2019), 19–36.

Beyond local meanings and uses of foreign objects, however, the more general implication of this critique is that we are clearly entitled to assume long-term stability of local traditions and the continued co-existence of structurally different societies and cultures even if some kind of contact and/or exchange between them can be established. Often there is a misfit between the prehistoric situation under study and the ethnographic model applied.

Quite to the contrary, every occasional import ind of Mycenaean origin which may come to light in Bronze Age groups to the north must not be used to overcome the fundamental divide that sets palatial society of the Aegean Bronze Age apart from such segmentary ‘tribal’ groups. Rather than being a weak reflection of palatial society, and like the Mediterranean sequence itself, Bronze Age settlement in the Carpathian Basin is a complex and variable phenomenon – in chronological and regional terms as well as in socio-political and cultural ones. This tends to be ignored when likeness with Mediterranean development is expected.

In any case, there is no overarching pattern or logic of development that binds together both Bronze Age Europe and the Mediterranean. Approaches that have us believe so impoverish our understanding of prehistoric Europe, and ultimately of the Mediterranean too.

Methoden

DUFFY 2019

Paul R. Duffy, Györgyi M. Parditka, Julia I. Giblin & László Paja, *The problem with tells, Lessons learned from absolute dating of Bronze Age mortuary ceramics in Hungary*. *Antiquity* **93** (2019), 63–79.

[Antiquity093-0063-Supplement.pdf](#)

Prehistoric population decline is often associated with social collapse, migration and environmental change. Many scholars have assumed that the abandonment of the fortified tell sites of the Great Hungarian Plain c. 1500–1450 BC led to significant regional depopulation. The authors investigate the veracity of this assumption by dating graves from Békés 103—a recently excavated Bronze Age cemetery in eastern Hungary. Using decorative motifs and radiocarbon dates to measure changing ceramic styles over more than 1300 years, they consider the implications for non-tell sites known only through surface survey. The results suggest that, even though people abandoned tell sites, regional populations were maintained.

Keywords: Hungary | Békés 103 | Bronze Age | tell settlement | radiocarbon dating

ZAVODNY 2019

Emily Zavodny, Brendan J. Culleton, Sarah B. McClure, Douglas J. Kennett & Jacqueline Balen, *Recalibrating grave-good chronologies*,

New AMS radiocarbon dates from Late Bronze Age burials in Lika, Croatia. [Antiquity 93 \(2019\), 113–127.](#)

[Antiquity093-0113-Supplement.pdf](#)

Grave-good typologies have traditionally formed the basis for chronological frameworks in many areas of the world, including the Lika region of Croatia. Here, the authors report the first AMS radiocarbon dates from Late Bronze Age Lika (c. 1200–800 BC)—a period assumed to be synonymous with the emergence of the local Iapodian culture. Comparisons between the absolute dates and the relative chronological assignments of key burial contexts show inconsistencies between the dating Methods that lead the authors to propose an alternative narrative for Iapodian emergence and socio-political reorganisation at the end of the Bronze Age.

Keywords: Croatia | Bronze Age | Iron Age | Iapodian | radiocarbon dating | burials

Religion

NIXEY 2017

Catherine Nixey, *The Darkening Age, The Christian destruction of the Classical world.* (London 2018).

The little-known—and deeply shocking—story of how a militant religion deliberately tried to extinguish the teachings of the Classical world, ushering in unquestioning adherence to the ‘one true faith’.

The Roman Empire had been generous in embracing and absorbing new creeds. But with the coming of Christianity, everything changed. This new faith, despite preaching peace, was violent, ruthless and intolerant. And once it became the religion of empire, its zealous adherents set about the destruction of the old gods. Their altars were upturned, their temples demolished and their statues hacked to pieces. Books, including great works of philosophy and science, were consigned to the pyre. It was an annihilation.