

References

Aktuell

FOWLER 2015

Anthony Fowler & B. Pablo Montagnes, *College football, elections, and false-positive results in observational research*. [PNAS 112 \(2015\), 13800–13804](#).

A recent, widely cited study [Healy AJ, Malhotra N, Mo CH (2010) *Proc Natl Acad Sci USA* 107(29):12804–12809] finds that college football games influence voting behavior. Victories within 2 weeks of an election reportedly increase the success of the incumbent party in presidential, senatorial, and gubernatorial elections in the home county of the team. We reassess the evidence and conclude that there is likely no such effect, despite the fact that Healy et al. followed the best practices in social science and used a credible research design. Multiple independent sources of evidence suggest that the original finding was spurious—reflecting bad luck for researchers rather than a shortcoming of American voters. We fail to estimate the same effect when we leverage situations where multiple elections with differing incumbent parties occur in the same county and year. We also find that the purported effect of college football games is stronger in counties where people are less interested in college football, just as strong when the incumbent candidate does not run for reelection, and just as strong in other parts of the state outside the home county of the team. Lastly, we detect no effect of National Football League games on elections, despite their greater popularity. We conclude with recommendations for evaluating surprising research findings and avoiding similar false-positive results.

Keywords: elections | voting | false-positive results

Significance: We reassess the surprising finding that college football games influence incumbent support in subsequent elections. Because independent replication is impossible for such nonexperimental findings, we proceed by testing multiple independent hypotheses that should hold if college football games indeed influence elections. In each case, the evidence suggests that the original finding was a false positive. For example, if college football games indeed influence elections, this effect should be greatest in places where the public is most interested in college football. However, we find the opposite. We conclude with general recommendations for evaluating surprising research findings and avoiding similar false-positive results—particularly for nonexperimental work in the social sciences where independent replication is impossible.

LIBERMAN 2015

M. Charles Liberman, *Versteckter Hörverlust*. [Spektrum der Wissenschaft 2015, xi, 29–35](#).

Verstehen Sie gesprochene Sprache schlecht – obwohl Sie Töne und Geräusche noch gut wahrnehmen? Dann könnten Sie von einem Phänomen betroffen sein, das Hirnforschern bisher verborgen geblieben war.

PÖPPE 2015

Christoph Pöppe, *Unordentliche Fünfeckspflasterungen*. [Spektrum der Wissenschaft 2015, xi, 62–66](#).

Nach jahrzehntelanger Pause ist ein neuer, fünfeckiger Stein entdeckt worden, mit dem man die Ebene lückenlos bedecken kann – aber nur auf komplizierte Weise.

SCHLICHTING 2015

H. Joachim Schlichting, *Wirbel auf dem Honigbrot*. [Spektrum der Wissenschaft](#) **2015**, xi, 52–53.

Der Strahl einer fallenden, zähen Flüssigkeit kann sich falten und zu Spiralen winden. Dabei wirken sein zugleich fester und flüssiger Charakter zusammen.

SINGH 2015

Meenesh R. Singh, Ezra L. Clark & Alexis T. Bell, *Thermodynamic and achievable efficiencies for solar-driven electrochemical reduction of carbon dioxide to transportation fuels*. [PNAS](#) **112** (2015), E6111–E6118.

Thermodynamic, achievable, and realistic efficiency limits of solar-driven electrochemical conversion of water and carbon dioxide to fuels are investigated as functions of light-absorber composition and configuration, and catalyst composition. The maximum thermodynamic efficiency at 1-sun illumination for adiabatic electrochemical synthesis of various solar fuels is in the range of 32–42%. Single-, double-, and triple-junction light absorbers are found to be optimal for electrochemical load ranges of 0–0.9 V, 0.9–1.95 V, and 1.95–3.5 V, respectively. Achievable solar-to-fuel (STF) efficiencies are determined using ideal double- and triple-junction light absorbers and the electrochemical load curves for CO₂ reduction on silver and copper cathodes, and water oxidation kinetics over iridium oxide. The maximum achievable STF efficiencies for synthesis gas (H₂ and CO) and Hythane (H₂ and CH₄) are 18.4% and 20.3%, respectively. Whereas the realistic STF efficiency of photoelectrochemical cells (PECs) can be as low as 0.8%, tandem PECs and photovoltaic (PV) electrolyzers can operate at 7.2% under identical operating conditions. We show that the composition and energy content of solar fuels can also be adjusted by tuning the band-gaps of triple-junction light absorbers and/or the ratio of catalyst-to-PV area, and that the synthesis of liquid products and C₂H₄ have high profitability indices.

Keywords: artificial photosynthesis | electrochemical CO₂ reduction | solar-to-fuel efficiency | photoelectrochemical cells | photovoltaic-electrolyzer

Significance: Direct capture of CO₂ from the air and its conversion to fuels using solar energy offers a means for mitigating global warming while also supporting future energy demands. Whereas natural photosynthesis converts CO₂ and water to carbohydrates, this process is only 0.5–2.0% efficient and the energy content of the resulting biomass is low. Increasing CO₂ levels in the atmosphere combined with rising energy needs motivate the search for an artificial photosynthetic system that is at least 10 times as efficient as that used by nature. Identification of light absorbers that provide a photocurrent density >10 mA cm⁻² and a photovoltage >2 V are prerequisites for a >10% efficient artificial photosynthetic system.

Altpaläolithikum

COLE 2015

James Cole, *Examining the Presence of Symmetry within Acheulean Handaxes, A Case Study in the British Palaeolithic*. [Cambridge Archaeological Journal](#) **25** (2015), 713–732.

This paper examines the relationship between the presence of symmetry and the Acheulean biface within a predominantly British Lower Palaeolithic context. There has been a longstanding notion within Palaeolithic studies that Acheulean handaxes are symmetrical and become increasingly so as time progresses as a reflection of increasing hominin cognitive and behavioural complexity. Specifically, the presence of symmetry within Acheulean handaxes is often seen as one of the first examples of material culture being used to mediate social relationships. However, this notion has never been satisfactorily tested against a large data set. This paper seeks to address the issue by conducting an analysis of some 2680 bifaces across a chronological and geographical span. The results from the sample presented here are that symmetrical bifaces do not appear to have a particularly strong presence in any assemblage and do not appear to increase as time progresses. These results have significant implications for modern researchers assessing the cognitive and behavioural complexities of Acheulean hominins.

Amerika

TACKNEY 2015

Justin C. Tackney et al., *Two contemporaneous mitogenomes from terminal Pleistocene burials in eastern Beringia*. [PNAS 112 \(2015\), 13833–13838](#).

[pnas112-13833-Supplement1.xlsx](#), [pnas112-13833-Supplement2.xlsx](#)

Justin C. Tackney, Ben A. Potter, Jennifer Raff, Michael Powers, W. Scott Watkins, Derek Warner, Joshua D. Reuther, Joel D. Irish & Dennis H. O'Rourke

Pleistocene residential sites with multiple contemporaneous human burials are extremely rare in the Americas. We report mitochondrial genomic variation in the first multiple mitochondrial genomes from a single prehistoric population: two infant burials (USR1 and USR2) from a common interment at the Upward Sun River Site in central Alaska dating to $\approx 11,500$ cal B.P. Using a targeted capture method and next-generation sequencing, we determined that the USR1 infant possessed variants that define mitochondrial lineage C1b, whereas the USR2 genome falls at the root of lineage B2, allowing us to refine younger coalescence age estimates for these two clades. C1b and B2 are rare to absent in modern populations of northern North America. Documentation of these lineages at this location in the Late Pleistocene provides evidence for the extent of mitochondrial diversity in early Beringian populations, which supports the expectations of the Beringian Standstill Model.

Keywords: Pleistocene burials | ancient mitochondrial DNA | paleogenomics | peopling | Americas

Significance: Beringia gave rise to the first Western Hemisphere colonists, although the genetic characterization of that source population has remained obscure. We report two mitogenomes from human remains within Beringia, with an age ($\approx 11,500$ cal B.P.) that postdates the end of the initial colonization by only a few millennia. The mitochondrial lineages identified (B2, C1b) are rare to absent in modern northern populations, indicating greater genetic diversity in early Beringia than in modern populations of the region. The antiquity and geographic location of these two burials, and the combined genomic and archaeological analyses, provide new perspectives on the link between Asia and the Americas, and the genetic makeup of the first Americans.

Anthropologie

LOMBARD 2015

Marlize Lombard, *Hunting and Hunting Technologies as Proxy for Teaching and Learning During the Stone Age of Southern Africa*. [Cambridge Archaeological Journal](#) **25** (2015), 877–887.

Human hunting represents one of the most difficult foraging activities. It is a skill-intensive pursuit with an extended learning process. Different from other animals, Stone Age hunter-gatherers used complex strategies and technologies to outsmart and pursue their prey. Such strategies and technologies were grounded in extensive knowledge that facilitated context-specific solutions during different phases of weapon production and hunting. Apart from subsistence behaviour, Stone Age hunting technologies also inform on a suite of associated skills, behaviours and levels of cognition. At least since the start of the Holocene in southern Africa, and probably much earlier, behaviours associated with hunting permeated almost every sphere of hunter-gatherer life, and I argue that the theme is a suitable angle from which to explore broader aspects of the evolution of teaching and learning. I provide a brief overview and broad timeline of the ‘evolution’ of hunting technologies associated with the southern African Stone Age record and present some ethnographic hunter-gatherer examples of teaching and learning associated with hunting. The aim is to start situating the archaeological and ethnographic data within a theoretical framework of teaching and learning evolution.

Datierung

FINKELSTEIN 1995

Israel Finkelstein, *The date of the settlement of the Philistines in Canaan*. [Tel Aviv: Archaeology](#) **22** (1995), 213–239.

USSISHKIN 2007

David Ussishkin, *Lachish and the date of the Philistine settlement in Canaan*. In: MANFRED BIETAK & ERNST CZERNY (Hrsg.), *The synchronisation of civilisations in the Eastern Mediterranean in the second millennium B.C. III, Proceedings of the SCIEM 2000 – 2nd EuroConference Vienna, 28th of May – 1st of June 2003*. Contributions to the Chronology of the Eastern Mediterranean 9 ([Wien 2007](#)), 601–607.

In my view all the above data are conclusive, indicating how unlikely the commonly accepted concept of dating is. My argumentation can be summarized in three questions, asked in challenge of the “MazarSinger-Stager concept”, defined by Bunimovitz and Faust as the “cultural segregation concept”: First, how could the Egyptians have maintained their hegemony in Lachish and other parts of southern Canaan, including Megiddo and Beth-Shan, if they lost control of the Coastal Plain and the southern parts of the Via Maris which were invaded and occupied at that time by the Sea Peoples? Second, how is it possible that thriving cities such as Canaanite Lachish and Philistine Gath prospered at such geographical proximity to one another without a single piece of Philistine pottery imported to Lachish from Gath? Thirdly, how is it possible that extensive trade existed between Lachish and the Coastal Plain as well as the Mediterranean ports, including the importation of fresh marine fish, without even a single Philistine piece of

pottery being imported to Lachish? In summary, the dating of the Monochrome as well as the Bichrome Philistine pottery, and therefore the dating of the Philistine settlement in the Coastal Plain, to after ca. 1130 BCE, seems to be established on the basis of the evidence from Lachish. It appears that the settlement of the Philistines in the Coastal Plain followed the collapse of the Egyptian hegemony of the 20th Dynasty in southern Canaan, and the destruction of the Lachish Level VI Canaanite city which prospered under the aegis of Egypt's hegemony.

Judentum

FRIEDMAN 2014

Shamma Friedman, *Now You See it, Now You Don't, Can Source-Criticism Perform Magic on Talmudic Passages about Sorcery?* In: RONIT NIKOLSKY & TAL ILAN (Hrsg.), *Rabbinic Traditions between Palestine and Babylonia*. Ancient Judaism and Early Christianity 89 (Leiden 2014), 32–83.

The calf vignette is a fanciful literary creation, inspired by the sectarian prowess in calf magic as described in the Yerushalmi, and the witticism voiced there that it is real only if you can eat it. The narrative has rabbis outdo the sectarian, and create an edible calf, indeed a delicacy, through holy halakhic means. This is a polished literary creation, polemic rhetoric in the form of narrative. Scholarship can devote itself to analysis of its composition, and need not overly concern itself with documenting the appearance of Sefer Yetzirah or formulating a theology for the sages mentioned here or for their contemporaries.

What we do document in this survey is the heroic status accorded by the amora'im to magical rabbis, evinced in detail by the fabulous tales in the Yerushalmi, and in the Bavli expressed in the theological stance announced by Rabbi Hanina, through the attribution to Rabbi Eliezer of flashy cucumber magic by reworking a tannaitic tradition, and elegantly presented in the calfcreation episode ascribed to the sage-pair, Rav Hanina and Rav Oshaia.

Klima

POTTS 2015

Richard Potts & J. Tyler Faith, *Alternating high and low climate variability, The context of natural selection and speciation in Plio-Pleistocene hominin evolution*. *Journal of Human Evolution* 87 (2015), 5–20.

Interaction of orbital insolation cycles defines a predictive model of alternating phases of high- and lowclimate variability for tropical East Africa over the past 5 million years. This model, which is described in terms of climate variability stages, implies repeated increases in landscape/resource instability and intervening periods of stability in East Africa. It predicts eight prolonged (>192 kyr) eras of intensified habitat instability (high variability stages) in which hominin evolutionary innovations are likely to have occurred, potentially by variability selection. The prediction that repeated shifts toward high climate variability affected paleoenvironments and evolution is tested in three ways. In the first test, deep-sea records of northeast African terrigenous dust flux (Sites 721/722) and eastern Mediterranean sapropels (Site 967A) show increased and decreased variability in concert with

predicted shifts in climate variability. These regional measurements of climate dynamics are complemented by stratigraphic observations in five basins with lengthy stratigraphic and paleoenvironmental records: the mid-Pleistocene Olorgesailie Basin, the Plio-Pleistocene Turkana and Olduvai Basins, and the Pliocene Tugen Hills sequence and Hadar Basins all of which show that highly variable landscapes inhabited by hominin populations were indeed concentrated in predicted stages of prolonged high climate variability. Second, stringent null-model tests demonstrate a significant association of currently known first and last appearance datums (FADs and LADs) of the major hominin lineages, suites of technological behaviors, and dispersal events with the predicted intervals of prolonged high climate variability. Palynological study in the Nihewan Basin, China, provides a third test, which shows the occupation of highly diverse habitats in eastern Asia, consistent with the predicted increase in adaptability in dispersing Oldowan hominins. Integration of fossil, archeological, sedimentary, and paleolandscape evidence illustrates the potential influence of prolonged high variability on the origin and spread of critical adaptations and lineages in the evolution of Homo. The growing body of data concerning environmental dynamics supports the idea that the evolution of adaptability in response to climate and overall ecological instability represents a unifying theme in hominin evolutionary history.

Keywords: Adaptability | Climate variability stages | East Africa | Environmental dynamics | Null models | Variability selection

Kultur

LAWSON 2015

David W. Lawson, Susan James, Esther Ngadaya, Bernard Ngowi, Sayoki G.M. Mfinanga & Monique Borgerhoff Mulder, *No evidence that polygynous marriage is a harmful cultural practice in northern Tanzania*. [PNAS 112 \(2015\), 13827–13832](#).

[pnas112-13827-Supplement.xlsx](#)

Polygyny is cross-culturally common and a topic of considerable academic and policy interest, often deemed a harmful cultural practice serving the interests of men contrary to those of women and children. Supporting this view, large-scale studies of national African demographic surveys consistently demonstrate that poor child health outcomes are concentrated in polygynous households. Negative population-level associations between polygyny and well-being have also been reported, consistent with the hypothesis that modern transitions to socially imposed monogamy are driven by cultural group selection. We challenge the consensus view that polygyny is harmful, drawing on multilevel data from 56 ethnically diverse Tanzanian villages. We first demonstrate the vulnerability of aggregated data to confounding between ecological and individual determinants of health; while across villages polygyny is associated with poor child health and low food security, such relationships are absent or reversed within villages, particularly when children and fathers are coresident. We then provide data indicating that the costs of sharing a husband are offset by greater wealth (land and livestock) of polygynous households. These results are consistent with models of polygyny based on female choice. Finally, we show that village-level negative associations between polygyny prevalence, food security, and child health are fully accounted for by underlying differences in ecological vulnerability (rainfall) and socioeconomic marginalization (access to education). We highlight the need for improved, culturally sensitive measurement tools and appropriate scales of analysis in studies of polygyny and other purportedly

harmful practices and discuss the relevance of our results to theoretical accounts of marriage and contemporary population policy.

Keywords: evolutionary anthropology | public health | family structure | child health | food security

Significance: Polygynous marriage is commonly regarded as a harmful cultural practice, detrimental to women and children at the individual and group level. We present counterevidence that polygyny is often positively associated with food security and child health within communities and that, although polygyny and health are negatively associated at the group level, such differences are accounted for by alternative socioecological factors. These results support models of polygyny based on female choice and suggest that, in some contexts, prohibiting polygyny could be costly for women and children by restricting marital options. Our study highlights the dangers of naive analyses of aggregated population data and the importance of considering locally realizable alternatives and context dependency when considering the health implications of cultural practices.

ROBB 2015

John Robb, *Prehistoric Art in Europe, A Deep-Time Social History. American Antiquity* **80** (2015), 635–654.

Although many researchers have studied prehistoric European art, there has been virtually no attention paid to the broad prehistory of art as a specialized form of material culture; virtually all studies focus narrowly on single bodies of art. This paper presents a new approach to analyzing prehistoric art: quantitative deep time study. It analyzes a database of 211 art traditions from across Europe and from 40,000 B.C. to 0 A.D. to identify changes in the amount, nature, and use of prehistoric art. The results reveal clear long-term trends. The amount of art made increased sharply with the origins of sedentary farming and continued to rise throughout prehistory. New forms of art arise in conjunction with new ways of life; “period genres” are closely tied into patterns of social change. There are also long-term shifts in aesthetics and the uses of art (such as a gradual shift from arts of ritual and concealment to arts of surface and display). These results, though preliminary, show that a deep-time approach familiar from topics such as climate change is applicable to art; the resulting social history can illuminate both art and its social context.

Methoden

LO 2015

Adeline Lo, Herman Chernoff, Tian Zheng & Shaw-Hwa Lo, *Why significant variables aren't automatically good predictors. PNAS* **112** (2015), 13892–13897.

Thus far, genome-wide association studies (GWAS) have been disappointing in the inability of investigators to use the results of identified, statistically significant variants in complex diseases to make predictions useful for personalized medicine. Why are significant variables not leading to good prediction of outcomes? We point out that this problem is prevalent in simple as well as complex data, in the sciences as well as the social sciences. We offer a brief explanation and some statistical insights on why higher significance cannot automatically imply stronger predictivity and illustrate through simulations and a real breast cancer example. We also demonstrate that highly predictive variables do not necessarily appear as highly significant, thus evading the researcher using significance-based methods. We point out that what makes variables good for prediction versus significance

depends on different properties of the underlying distributions. If prediction is the goal, we must lay aside significance as the only selection standard. We suggest that progress in prediction requires efforts toward a new research agenda of searching for a novel criterion to retrieve highly predictive variables rather than highly significant variables. We offer an alternative approach that was not designed for significance, the partition retention method, which was very effective predicting on a long-studied breast cancer data set, by reducing the classification error rate from 30 % to 8 %.

Keywords: statistical significance | prediction | high-dimensional data | variable selection classification

Significance: A recent puzzle in the big data scientific literature is that an increase in explanatory variables found to be significantly correlated with an outcome variable does not necessarily lead to improvements in prediction. This problem occurs in both simple and complex data. We offer explanations and statistical insights into why higher significance does not automatically imply stronger predictivity and why variables with strong predictivity sometimes fail to be significant. We suggest shifting the research agenda toward searching for a criterion to locate highly predictive variables rather than highly significant variables. We offer an alternative approach, the partition retention method, which was effective in reducing prediction error from 30 % to 8 % on a long-studied breast cancer data set.

LYMAN 2015

R. Lee Lyman, *Location and Position in Archaeology, Revisiting the original association of a Folsom point with bison ribs*. [American Antiquity](#) **80** (2015), 732–744.

The proveniences (locations) of artifacts have long been critically important to archaeological interpretation. Although of major importance to site formation studies, positional attributes of artifacts (e.g., orientation, dip, which side is up) are seldom mentioned. When discovered in 1927, the in situ association of a Folsom projectile point with two ribs of a Pleistocene form of bison was interpreted as indicative of the contemporaneity of the three items, and thus was taken as evidence for the Pleistocene age of humans in North America. The locational and positional attributes of the two ribs and the point relative to one another suggest it is improbable that the point was deposited simultaneously with the two ribs as a result of it being embedded in the animal's flank, which is not to say the three items are not positionally and temporally associated. Previously unmentioned positional attributes of the items making up the original Folsom association exemplify the importance of such attributes. New understanding of the original association underscores that actualistic research is required to identify the kinds of positional attributes important to questions regarding site formation and site structure.

SCHLUMMER 2014

Manuela Schlummer et al., *From point to area, Upscaling approaches for Late Quaternary archaeological and environmental data*. [Earth Science Reviews](#) **131** (2014), 22–48.

Manuela Schlummer, Thomas Hoffmann, Richard Dikau, Michael Eickmeier, Peter Fischer, Renate Gerlach, Jörg Holzkämper, Arie J. Kalis, Inga Kretschmer, Franziska Lauer, Andreas Maier, Janina Meesenburg, Jutta Meurers-Balke, Ulla Münch, Stefan Pätzold, Florian Steininger, Astrid Stobbe & Andreas Zimmermann

The study of past socio-environmental systems integrates a variety of terrestrial archives. To understand regional or continental socio-environmental interactions proxy data from local archives need to be transferred to larger spatial scales. System properties like spatial heterogeneity, historical and spatial contingency, non-

linearity, scale dependency or emergence make generalizations from local observations to larger scales difficult. As these are common properties of natural and social systems, the development of an interdisciplinary upscaling framework for socio-environmental systems remains a challenge. For example, the integration of social and environmental data is often hindered by divergent methodological, i.e. qualitative and quantitative, approaches and discipline-specific perceptions of spatial scales. Additionally, joint approaches can be hampered by differences in the predictability of natural systems, which are subject to physical laws, and social systems, which depend on humans' decisions and communication.

Here we present results from an interdisciplinary discussion of upscaling approaches in socio-environmental research with a special focus on the migration of modern humans in Central Europe during the last 30,000 years. Based on case studies from different disciplines, we develop a classification system for upscaling approaches used in past socio-environmental research. Finally, we present an initial upscaling framework that fosters the development of an interdisciplinary concept of scales and allows for a consideration of system properties like scale dependency, nonlinearity and contingency. The upscaling framework includes the following steps: i) the identification of relevant spatial and temporal scales at which socio-environmental interactions operate; ii) the definition of appropriate parameters to describe scale-specific interactions; iii) a comparison of process and observation scales to evaluate the potential of local archive data for larger scale generalization and for reconstructing scale-specific past socio-environmental interactions; iv) the identification and adaption of appropriate upscaling approaches for the relevant scales; v) the development of scale-specific models of socio-environmental interactions, and vi) the connection of models in a nested hierarchy. Our intention is not to present final results, but rather to stimulate future discussions and to provide a basic reference on scale issues in the emerging field of integrated socio-environmental research.

Keywords: Upscaling | Socio-environmental interaction | Central Europe | Geomorphology | Soil science | Palaeobotany

Politik

POLISAR 2015

Daniel Polisar, *What Do Palestinians Want?* [Mosaic Monthly Essays 2015, Nov. 2.](#)

It's time to take a close look at an often ignored subject: what ordinary Palestinians think about Israel, Jews, and terrorist attacks on civilians.

Palestinians consistently distinguished themselves from other Arabs in rejecting the term terrorism for such jihadist operations as the "Madrid train explosions" (March 2004, 191 killed) and the "London underground explosions" (July 2005, 52 dead). In both cases, a majority of Palestinians averred these were not acts of terror, whereas comparable figures in the other Arab publics ranged from 17 percent down to 2 percent.

In December 2012, after the second [Gaza] war, 84 percent responded affirmatively to AWRAD pollsters asking whether "the results of the Gaza conflict will lead to tangible progress toward Palestinian independence," and despite a slight decline the figure remained robust for months afterward. Following the 2014 war, as I noted earlier, PSR reported that 79 percent saw Hamas as the winner.

Palestinian support for violence, and the attitudes underlying that support, have developed and become entrenched over a period of decades. Altering those attitudes can only begin once the attitudes are recognized for what they are, without blinking and without excuses.

Story or Book

MILNER 2015

George R. Milner, *Violence and Warfare among Hunter-Gatherers*. [American Antiquity](#) **80** (2015), 787–788.

Violence and Warfare among Hunter-Gatherers. Mark W. Allen and Terry L. Jones, editors. 2014. Left Coast Press, Walnut Creek, California. 391 pp. \$ 39.95 (cloth), ISBN 978-1-61132-939-1.

The Paleolithic and Mesolithic distinction nicely captures an important point raised by editors Mark Allen and Terry Jones. What is of interest is not whether people in prehistory fought one another. That has been well documented by archaeological work around the world. Instead, the critical issue is whether there was a “short” or “long” chronology of war.

More than anything else, this volume highlights how our understanding of prehistoric warfare has grown in recent decades, but also how much we still have to learn about the hunter-gatherers who dominated most of human existence. As a measure of what is best regarded as a work in progress, this book has earned a place on the bookshelves of all archaeologists.