

Literatur

Aktuell

BALTER 2013

Michael Balter, *Archaeologists Say the ‘Anthropocene’ Is Here—But It Began Long Ago*. [science](#) **340** (2013), 261–262.

GIGUÈRE 2013

Gyslain Giguère & Bradley C. Love, *Limits in decision making arise from limits in memory retrieval*. [PNAS](#) **110** (2013), 7613–7618.

Some decisions, such as predicting the winner of a baseball game, are challenging in part because outcomes are probabilistic. When making such decisions, one view is that humans stochastically and selectively retrieve a small set of relevant memories that provides evidence for competing options. We show that optimal performance at test is impossible when retrieving information in this fashion, no matter how extensive training is, because limited retrieval introduces noise into the decision process that cannot be overcome. One implication is that people should be more accurate in predicting future events when trained on idealized rather than on the actual distributions of items. In other words, we predict the best way to convey information to people is to present it in a distorted, idealized form. Idealization of training distributions is predicted to reduce the harmful noise induced by immutable bottlenecks in people’s memory retrieval processes. In contrast, machine learning systems that selectively weight (i.e., retrieve) all training examples at test should not benefit from idealization. These conjectures are strongly supported by several studies and supporting analyses. Unlike machine systems, people’s test performance on a target distribution is higher when they are trained on an idealized version of the distribution rather than on the actual target distribution. Optimal machine classifiers modified to selectively and stochastically sample from memory match the pattern of human performance. These results suggest firm limits on human rationality and have broad implications for how to train humans tasked with important classification decisions, such as radiologists, baggage screeners, intelligence analysts, and gamblers.

categorization | cognitive modeling | uncertainty | diffusion modeling

HUNTER 2013

Elizabeth A. Hunter, James P. Gibbs, Linda J. Cayot & Washington Tapia, *Equivalency of Galápagos Giant Tortoises Used as Ecological Replacement Species to Restore Ecosystem Functions*. [Conservation Biology](#) (2013), preprint, 1–9. DOI:10.1111/cobi.12038.

Loss of key plant–animal interactions (e.g., disturbance, seed dispersal, and herbivory) due to extinctions of large herbivores has diminished ecosystem functioning nearly worldwide. Mitigating for the ecological consequences of large herbivore losses through the use of ecological replacements to fill extinct species’ niches and thereby replicate missing ecological functions has been proposed. It is unknown how different morphologically and ecologically a replacement can be from the extinct species and still provide similar functions. We studied niche equivalency between 2 phenotypes of Galápagos giant tortoises (domed and saddlebacked) that

were translocated to Pinta Island in the Gal'apagos Archipelago as ecological replacements for the extinct saddlebacked giant tortoise (*Chelonoidis abingdonii*). Thirty-nine adult, nonreproductive tortoises were introduced to Pinta Island in May 2010, and we observed tortoise resource use in relation to phenotype during the first year following release. Domed tortoises settled in higher, moister elevations than saddlebacked tortoises, which favored lower elevation arid zones. The areas where the tortoises settled are consistent with the ecological conditions each phenotype occupies in its native range. Saddlebacked tortoises selected areas with high densities of the arboreal prickly pear cactus (*Opuntia galapageia*) and mostly foraged on the cactus, which likely relied on the extinct saddlebacked Pinta tortoise for seed dispersal. In contrast, domed tortoises did not select areas with cactus and therefore would not provide the same seed-dispersal functions for the cactus as the introduced or the original, now extinct, saddlebacked tortoises. Interchangeability of extant megaherbivores as replacements for extinct forms therefore should be scrutinized given the lack of equivalency we observed in closely related forms of giant tortoises. Our results also demonstrate the value of trial introductions of sterilized individuals to test niche equivalency among candidate analog species. **Keywords:** *Chelonoidis* spp., ecological replacement species, ecosystem restoration, niche equivalency, saddlebacked giant tortoise

REDMOND 2013

Elsa M. Redmond & Charles S. Spencer, *Early (300–100 B.C.) temple precinct in the Valley of Oaxaca, Mexico*. [PNAS 110 \(2013\), E1707–E1715](#).

Archaeological investigations during the past two decades in Mexico's Valley of Oaxaca have documented the appearance of key public buildings, such as the royal palace and multiroom temple, associated with the rise of an archaic state at ca. 300-100 B.C. A fuller picture is now emerging from the site of El Palenque, where recent excavations have defined a temple precinct on the east side of the site's plaza. This precinct exhibits characteristics similar to those of the temple precincts of later Mesoamerican states described by Colonial period sources. The excavation data document a walled enclosure containing three multiroom temples, two special residences identified as priests' residences, and an array of ritual features and activity areas. The temple precinct's components are interpreted as comprising a hierarchy of temples staffed by a specialized priesthood. A series of radiocarbon dates indicate that the precinct's differentiated components were all in use during the 300-100 B.C. period of archaic state emergence. The El Palenque temple precinct is the earliest temple precinct excavated thus far in the Valley of Oaxaca. Zapotec religion | state institutions | Mesoamerican archaeology

SHENK 2013

Mary K. Shenk, Mary C. Towner, Howard C. Kress & Nurul Alam, *A model comparison approach shows stronger support for economic models of fertility decline*. [PNAS 110 \(2013\), 8045–8050](#).

The demographic transition is an ongoing global phenomenon in which high fertility and mortality rates are replaced by low fertility and mortality. Despite intense interest in the causes of the transition, especially with respect to decreasing fertility rates, the underlying mechanisms motivating it are still subject to much debate. The literature is crowded with competing theories, including causal models that emphasize (i) mortality and extrinsic risk, (ii) the economic costs and benefits of investing in self and children, and (iii) the cultural transmission of low-fertility social norms. Distinguishing between models, however, requires more comprehensive, better controlled studies than have been published to date. We use

detailed demographic data from recent fieldwork to determine which models produce the most robust explanation of the rapid, recent demographic transition in rural Bangladesh. To rigorously compare models, we use an evidence-based statistical approach using model selection techniques derived from likelihood theory. This approach allows us to quantify the relative evidence the data give to alternative models, even when model predictions are not mutually exclusive. Results indicate that fertility, measured as either total fertility or surviving children, is best explained by models emphasizing economic factors and related motivations for parental investment. Our results also suggest important synergies between models, implicating multiple causal pathways in the rapidity and degree of recent demographic transitions.

Anthropologie

FERRARO 2013

Joseph V. Ferraro et al., *Earliest Archaeological Evidence of Persistent Hominin Carnivory*. [PLoS ONE 8 \(2013\), e62174](#).
[DOI:10.1371/journal.pone.0062174](#).

Joseph V. Ferraro, Thomas W. Plummer, Briana L. Pobiner, James S. Oliver, Laura C. Bishop, David R. Braun, Peter W. Ditchfield, John W. Seaman III, Katie M. Binetti, John W. Seaman Jr., Fritz Hertel & Richard Potts

The emergence of lithic technology by ≈ 2.6 million years ago (Ma) is often interpreted as a correlate of increasingly recurrent hominin acquisition and consumption of animal remains. Associated faunal evidence, however, is poorly preserved prior to ≈ 1.8 Ma, limiting our understanding of early archaeological (Oldowan) hominin carnivory. Here, we detail three large well-preserved zooarchaeological assemblages from Kanjera South, Kenya. The assemblages date to ≈ 2.0 Ma, pre-dating all previously published archaeofaunas of appreciable size. At Kanjera, there is clear evidence that Oldowan hominins acquired and processed numerous, relatively complete, small ungulate carcasses. Moreover, they had at least occasional access to the fleshed remains of larger, wildebeest-sized animals. The overall record of hominin activities is consistent through the stratified sequence – spanning hundreds to thousands of years – and provides the earliest archaeological evidence of sustained hominin involvement with fleshed animal remains (i.e., persistent carnivory), a foraging adaptation central to many models of hominin evolution.

Bibel

HUMPHREYS 2011

Colin J. Humphreys, *The mystery of the last supper, Reconstructing the final days of Jesus*. (Cambridge 2011).

Apparent inconsistencies in the gospel accounts of Jesus' final week have puzzled Bible scholars for centuries. Matthew, Mark and Luke clearly state that the last supper was a Passover meal, whereas John asserts that it occurred before the festival. The gospel narratives also do not seem to allow enough time for all the events recorded between the last supper and the crucifixion, whilst indicating that Wednesday was a 'missing day' on which Jesus did nothing. Colin Humphreys presents a compelling, fresh account of how these inconsistencies can be explained, drawing on evidence from the Dead Sea Scrolls and Egyptian texts and using astronomy to reconstruct ancient calendars. In doing so, Humphreys proposes a new theory that the last supper took place on a Wednesday, rather than Thursday

as traditionally believed and successfully unifies the supposedly contradictory gospel stories.

WARKER 2012

MARGARET WARKER (Hrsg.), *Ancient Israel in Egypt and the Exodus*. (Washington 2012).

In “Out of Egypt,” James K. Hoffmeier questions how likely is it that the Israelites were enslaved in Egypt. And if they were there, which way did they go when they left? Hoffmeier uses recent archaeological excavation data from Egypt to shed new light on the Israelites’ time as Pharaoh’s slaves, the locations mentioned in Exodus and the route the Israelites took out of Egypt to the Promised Land.

Abraham Malamat’s article “Let my People Go and Go and Go and Go” questions the historicity of the Biblical account. Malamat suggests that once we give up the search for a single, dramatic Exodus, the evidence for a more subtle Exodus—one dispersed over time—will emerge.

Finally, in “When Did Ancient Israel Begin?” Hershel Shanks takes a new look at the late-13th-century B.C.E. Merneptah Stele, which has long been considered the earliest reference to Israel outside of the Bible. But now three German scholars say they may have found another hieroglyphic inscription almost 200 years older naming “Israel.” The Bible may be more accurate than some thought.

Datierung

JAMES 1991

Peter James, I. J. Thorpe, Nikos Kokkinos, Robert Morkot & John Frankish, *Centuries of Darkness, Review Feature*. [Cambridge Archaeological Journal](#) **1** (1991), 227–253.

Comments by: K.A. Kitchen, Barry Kemp, Nicholas Postgate, Anthony Snodgrass & Andrew & Susan Sherratt

Some years ago, Mortimer Wheeler bemoaned archaeologists’ obsession with chronology, saying ‘we have been preparing time-tables; let us now have some trains’ (Wheeler 1954, 245). Today, almost forty years later, many basic problems of chronology are still to be resolved, and despite Wheeler’s justifiable frustration it is clear that without a reliable chronology it is difficult to develop confident models to explain past processes and events.

True, significant advances have been made, particularly in methodology

.Scientific techniques now provide ever more reliable and accurate timescales, and the development and extension of dendrochronology allows precise dating for most of the historic and prehistoric periods as far back as the neolithic. For the early history of the western Old World, however, considerable reliance must still be placed on the historical chronologies of Egypt and Mesopotamia. These are the result of over 150 years’ work by philologists and archaeologists. Though the basic framework which they provide is constantly being refined in the light of new discoveries and reassessments, the outline established some 50 years ago has come to be broadly accepted, both by Near Eastern historians, and by prehistorians working in areas such as Greece and Asia Minor who have taken their chronological fixes from direct ties with the better-documented regions. Early this year, a dramatic challenge to this framework appeared in *Centuries of Darkness*, a book written by a group of younger scholars who claim that the accepted chronology of the Late Bronze Age is as much as 250 years too high. They would move the end of the Egyptian New Kingdom from 1070 BC to around 825 BC, and make Ramesses II, the creator of the great rock-cut temple at Abu Simbel, a pharaoh

of the eleventh-tenth centuries rather than the thirteenth, as is generally thought. The authors of this new proposal maintain that down-dating the end of the Late Bronze Age by this amount would solve many of the problems associated with the so-called Dark Age of Greece and parts of the Near East which followed the collapse of the Hittite empire and the Mycenaean palace civilization, conventionally placed at around 1200 BC. Is such a dramatic revision possible in such a relatively well-documented part of the ancient world? To assess the implications of this theory, we have here invited a number of regional experts to comment on the proposed chronological revolution. First, however, the authors of *Centuries of Darkness* summarize their radical proposal.

JAMES 1992

Peter James, I. J. Thrope, Nikos Kokkinos, Robert Morkot & John Frankish, *Centuries of Darkness, A Reply to Critics*. [Cambridge Archaeological Journal 2 \(1992\), 127–130](#).

When writing *Centuries of Darkness*, with its proposal for a lowering of Late Bronze Age chronology in the Near East and Mediterranean by some 250 years, we expected few specialists in the numerous fields touched upon to accept readily such a radical proposal. Yet the overall response to our summary paper in the *Cambridge Archaeological Journal* (James et al. 1991b) was disappointing. Our critics have either misinterpreted our theory or have misrepresented the nature of the evidence. Our response here is necessarily restricted to a few key issues.

Grundlagen

LIGHTFOOT 2013

Kent G. Lightfoot, Rob Q. Cuthrell, Chuck J. Striplen & Mark G. Hylkema, *Rethinking the study of landscape management practices among hunter-gatherers in North America*. [American Antiquity 78 \(2013\), 285–301](#).

There has been little movement to systematically incorporate the study of indigenous landscape management practices into the method and theory of hunter-gatherer research in North American archaeology, despite a growing interest in this topic. The purposes of this article are twofold. One is to address why, until quite recently, archaeologists have been reluctant to engage in the current debate about the scale and ecological impact of these practices, particularly anthropogenic burning. We argue that this stems from a long tradition of viewing hunter-gatherers as passive, immediate-return foragers, as well as from the daunting methodological challenges of identifying landscape management activities using archaeological data. Our second purpose is to explore how archaeologists can make significant contributions to our understanding of past resource management practices through the creation of new kinds of collaborative, interdisciplinary eco-archaeological programs. Based on the current work of scholars in archaeological and environmental disciplines, as well as on our own implementation of such an approach in central California, we discuss the importance of maintaining mutual relationships with local tribes, the challenges of coordinating multiple data sets, and the process of rethinking our analytical methods and temporal scales for undertaking hunter-gatherer studies.

SIEGMUND 2012

Frank Siegmund, *Schnelle Zeiten – langsame Zeiten, Archäologische Chronologiesysteme als Geschichtsquelle*. [Archäologische Informationen 35 \(2012\), 259–270](#).

This article investigates the absolute duration of the individual phases of archaeological chronology systems based on material finds. The duration of these phases varies. In Roman times, the Migration Period, under the Merovingians and in the modern era the phases last on average 30 years; in the Iron Age, the Roman Iron Age in Germania Magna and the Middle Ages, the average duration is about 60 years; in the Neolithic period and the Bronze Age an average of 100 years (Figs. 1-2). Four different classes become apparent (Figs. 3-4): short phases of up to 45 years, medium phases of 45 to 80 years, long phases of 80 to 175 years and very long phases of more than 175 years. The duration of these phases follows no general trend in the sense of “the older the longer, the younger the shorter”. Instead, short phases can also be observed in every era, especially in the Early Neolithic period. The duration of the phases does not primarily depend on the source circumstances and taphonomy. In early historical situations, which thanks to written sources can be cross-referenced to a certain extent, the duration of the phases corresponds well with historical events and developments. Archaeological chronologies can therefore be used as a comparative diachronic and intercultural tool to assess cultural changes as well as to assess the force of traditions and innovations. A major cause of the variation in the duration is seen in the way culture is transmitted to young people: short phases are mainly linked to cultural transfers between peers; medium-length phases result principally from the transfer of culture from parents to children; long phases from the transfer from grandparents to grandchildren. The introduction of major technological innovation – agriculture (farming) and animal husbandry, the “secondary products evolution”, the beginning of the Bronze Age, or the beginning of the Iron Age – is accompanied by relatively long phases, i.e. periods with fewer changes in the material culture.

Keywords: acculturation; innovation; technological impact assessment; resilience; evolutionary archaeology – diachrone Studie; Akkulturation; Innovation; Technikfolgenabschätzung; Resilienz; Evolutionäre Archäologie

Materialbasierte archäologische Chronologien weisen Phasen unterschiedlicher absoluter Dauer auf. Diese Phasendauern sind nicht vorwiegend von der Quellenlage abhängig. An frühgeschichtlichen Situationen, die dank der schriftlichen Überlieferung eine Kontrolle ermöglichen, zeigt sich, dass ereignisreiche Abschnitte mit kurzen Phasendauern einhergehen und historisch ruhigere Zeiten mit relativ längeren Phasen, auch da, wo eine reiche archäologische Überlieferung das Potential zu einer detaillierteren Phasengliederung böte. Daher eignen sich archäologische Chronologien als ein diachron und interkulturell vergleichbarer Schätzer kultureller Veränderungen, der Intensität von Tradition und Innovation. Als wesentlicher Verursacher der unterschiedlichen Dauern werden die Hauptakteure beim Kulturtransfer gesehen: Kurze Phasen hängen mit einem Kulturtransfer vorwiegend unter Gleichaltrigen zusammen, mittellange Phasen resultieren aus einem Kulturtransfer vorwiegend von der Elterngeneration an die Kinder, lange Phasen aus einem Kulturtransfer der Großeltern an ihre Enkel.

Judentum

CHANIOTIS 2002

Angelos Chaniotis, *Zwischen Konfrontation und Integration, Christen, Juden und Heiden im spätantiken Aphrodisias*. In: ANDREAS

ACKERMANN & KLAUS E. MÜLLER (Hrsg.), *Patchwork: Dimensionen multikultureller Gesellschaften*. (2002), 83–128.

Die religiöse Komplexität in Aphrodisias war zum Teil das Resultat einer unterschiedlichen Beantwortung derselben Fragen: Gibt es einen Gott? Und greift er in unser Leben ein? Was geschieht nach dem Tod? Welche ist die richtige Lebensführung, und wird sie von Gott belohnt – in dieser Welt oder in einer anderen? Reicht die Reinheit des Körpers aus, oder gibt es auch eine Reinheit des Sinnes und des Herzens? Wie stellt man einen persönlichen Kontakt zu Gott her? Die gemeinsame Fragestellung ermöglichten Begegnung und Austausch auf spiritueller Ebene: So besuchte der Christ Paralios den Isistempel und der heidnische Boxer Alexandres die jüdische Synagoge zusammen mit dem Christen (?) Gregorios. Dabei kam es auch zu einer Annäherung der Begrifflichkeiten und des Vokabulars, das Christentum übernahm in seiner Liturgie Elemente griechischer Rituale; seine Ikonographie ist größtenteils griechisch beeinflusst und heidnische Feste wurden auch im christlichen Konstantinopel gefeiert. Aber auch das spätantike Heidentum veränderte sich unter dem Einfluß von Christen und Juden und befaßte sich stärker mit ethischen Problemen und mit der Unsterblichkeit der Seele.

Wir wissen nicht, wohin dieser Dialog geführt hätte, wenn die administrative und um Homogenität bemühte Staatsgewalt kein Machtwort gesprochen hätte; vielleicht dorthin, wohin die Entwicklung nach dem 6. Jahrhundert n. Chr. sowieso geführt hat: zu einem vom Judentum beeinflussten Christentum, aus dem sowohl die griechische Philosophie und Ikonographie als auch heidnische Kultformen nicht mehr wegzudenken sind.

CHANIOTIS 2002

Angelos Chaniotis, *The Jews of Aphrodisias: New evidence and old problems*. *Scripta Classica Israelica* **21** (2002), 209–242.

The aim of this paper was to show that the known Jewish evidence at Aphrodisias comes from Late Antiquity. The sudden appearance of Jewish evidence is probably a result of Galerius' tolerance decree. Between c. 350 and 500 CE, in a period of religious conflict and suppression, but also of religious quest and ambiguity, the Jewish community of Aphrodisias flourished, possibly profiting from the resistance of the late pagans.

Klima

JAFFÉ 2013

Rudolf Jaffé et al., *Global Charcoal Mobilization from Soils via Dissolution and Riverine Transport to the Oceans*. *science* **340** (2013), 345–347.

s340-0345-Supplement.pdf

Rudolf Jaffé, Yan Ding, Jutta Niggemann, Anssi V. Vähätalo, Aron Stubbins, Robert G.M. Spencer, John Campbell & Thorsten Dittmar

Global biomass burning generates 40 million to 250 million tons of charcoal every year, part of which is preserved for millennia in soils and sediments. We have quantified dissolution products of charcoal in a wide range of rivers worldwide and show that globally, a major portion of the annual charcoal production is lost from soils via dissolution and subsequent transport to the ocean. The global flux of soluble charcoal accounts to 26.5 T 1.8 million tons per year, which is $\approx 10\%$ of the global riverine flux of dissolved organic carbon (DOC). We suggest that the mobilization of charcoal and DOC out of soils is mechanistically coupled. This study closes a

major gap in the global charcoal budget and provides critical information in the context of geoengineering.

LANE 2013

Christine S. Lane, Ben T. Chorn & Thomas C. Johnson, *Ash from the Toba supereruption in Lake Malawi shows no volcanic winter in East Africa at 75 ka*. [PNAS 110 \(2013\), 8025–8029](#).

The most explosive volcanic event of the Quaternary was the eruption of Mt. Toba, Sumatra, 75,000 y ago, which produced voluminous ash deposits found across much of the Indian Ocean, Indian Peninsula, and South China Sea. A major climatic downturn observed within the Greenland ice cores has been attributed to the cooling effects of the ash and aerosols ejected during the eruption of the Youngest Toba Tuff (YTT). These events coincided roughly with a hypothesized human genetic bottleneck, when the number of our species in Africa may have been reduced to near extinction. Some have speculated that the demise of early modern humans at that time was due in part to a dramatic climate shift triggered by the supereruption. Others have argued that environmental conditions would not have been so severe to have such an impact on our ancestors, and furthermore, that modern humans may have already expanded beyond Africa by this time. We report an observation of the YTT in Africa, recovered as a cryptotephra layer in Lake Malawi sediments, >7,000 km west of the source volcano. The YTT isochron provides an accurate and precise age estimate for the Lake Malawi paleoclimate record, which revises the chronology of past climatic events in East Africa. The YTT in Lake Malawi is not accompanied by a major change in sediment composition or evidence for substantial temperature change, implying that the eruption did not significantly impact the climate of East Africa and was not the cause of a human genetic bottleneck at that time.

MASIELLO 2013

C. A. Masiello & P. Louchouart, *Fire in the Ocean*. [science 340 \(2013\), 287–288](#).

Exposure to fire alters the properties of dissolved organic carbon in ways that affect how it decomposes in rivers and in the ocean.

Metallzeiten

DARTMOUTH LECTURES

Jeremy B. Rutter, *Aegean Prehistoric Archaeology*. ([Dartmouth College](#)). <<http://www.dartmouth.edu/~prehistory/aegean/>> (2013-04-29).

This site contains information about the prehistoric archaeology of the Aegean. Through a series of lessons and illustrations, it traces the cultural evolution of humanity in the Aegean basin from the era of hunting and gathering (Palaeolithic-Mesolithic) through the early village farming stage (Neolithic) and the formative period of Aegean civilization into the age of the great palatial cultures of Minoan Crete and Mycenaean Greece.

FELDMAN 2008

STEVEN FELDMAN (Hrsg.), *Island Jewels, Understanding Ancient Cyprus and Crete*. ([Washington 2008](#)).

Steven Feldman: Introduction

David Soren: Death at Kourion
Hershel Shanks: Cypriot Land Mines
Marina Solomidou-Ieronymidou: The Guardians of Tamassos
Nancy Serwint: Book Review: Cyprus' Jewel by the Sea
Jeremy McInerney: Did Theseus Slay the Minotaur?
Joan G. Scheuer: Sailing the Wine-dark Seas

HUGHEY 2013

Jeffery R. Hughey et al., *A European population in Minoan Bronze Age Crete*. *Nature Communications* 4 (2013), 1861.

[DOI:10.1038/ncomms2871](https://doi.org/10.1038/ncomms2871).

[NatCom04-1861-Supplement.pdf](#)

Jeffery R. Hughey, Peristera Paschou, Petros Drineas, Donald Mastropaolo, Dimitra M. Lotakis, Patrick A. Navas, Manolis Michalodimitrakis, John A. Stamatoyannopoulos & George Stamatoyannopoulos

The first advanced Bronze Age civilization of Europe was established by the Minoans about 5,000 years before present. Since Sir Arthur Evans exposed the Minoan civic centre of Knossos, archaeologists have speculated on the origin of the founders of the civilization. Evans proposed a North African origin; Cycladic, Balkan, Anatolian and Middle Eastern origins have also been proposed. Here we address the question of the origin of the Minoans by analysing mitochondrial DNA from Minoan osseous remains from a cave ossuary in the Lassithi plateau of Crete dated 4,400–3,700 years before present. Shared haplotypes, principal component and pairwise distance analyses refute the Evans North African hypothesis. Minoans show the strongest relationships with Neolithic and modern European populations and with the modern inhabitants of the Lassithi plateau. Our data are compatible with the hypothesis of an autochthonous development of the Minoan civilization by the descendants of the Neolithic settlers of the island.

RAHMSTORF 2010

Lorenz Rahmstorf, *Die Nutzung von Booten und Schiffen in der bronzezeitlichen Ägäis und die Fernkontakte der Frühbronzezeit*. In: HARALD MELLER & FRANÇOIS BERTEMES (Hrsg.), *Der Griff nach den Sternen, Internationales Symposium in Halle (Saale) 16.–21. Februar 2005*. Tagungen des Landesmuseums für Vorgeschichte Halle 5/II ([Halle 2010](#)), 675–697.

A basic problem concerning the interpretation of the Nebra Sky Disc is the question as to whether Egyptian and Near Eastern influences must be taken into consideration. This arises particularly with regard to the meaning of boats and ships in attempts to explain the cosmology of early cultures.

In this contribution will be initially examined, which role boats and ships had in the Aegean, whereby it is established that in the Aegean – the link between the early advanced civilizations and Central Europe – no directly comparable ideas of a sun barge reveal themselves. Boats, however, played a prominent role also in religious ideas.

The significance of long-distance contacts in the Early Bronze Age is then examined also with regard to the role of seafaring. It is emphasized which changes had an effect on the Aegean under Near Eastern influence in the Early Bronze Age and integrated this territory as the westernmost fringe of the Near Eastern socio-economic system. The trade of metals, e.g. of tin, serves as a key to the understanding of the farreaching, indirect contacts in the area between the Aegean and Western

India. On the other hand the extent of contacts between the Aegean and Central Europe in pre-Mycenaean times was of considerably smaller scale, and this is primarily due to the different socioeconomic prerequisites.

Ein grundlegendes Problem bei der Deutung der Himmelscheibe von Nebra ist die Frage, ob ägyptische und vorderasiatische Einflüsse für ihre Herstellung in Betracht gezogen werden müssen. Dies ergibt sich besonders in Hinblick auf die Bedeutung von Booten und Schiffen in kosmologischen Erklärungsversuchen früher Kulturen.

In diesem Beitrag wird zunächst untersucht, welche Rolle Boote und Schiffe in die Ägäis besaßen, wobei festgestellt wird, dass sich in der Ägäis – dem Bindeglied zwischen den frühen Hochkulturen und Mitteleuropa – direkt vergleichbare Vorstellungen einer Sonnenbarke nicht erschließen. Jedoch spielten Boote auch in religiösen Vorstellungen eine prominente Rolle.

Anschließend wird die Bedeutung der Fernkontakte in der Frühbronzezeit auch im Hinblick auf die Rolle der Seefahrt betrachtet. Es wird betont, welche Veränderungen unter nahöstlichem Einfluss in der Frühbronzezeit auf die Ägäis wirkten und diesen Raum als westlichsten Ausläufer in das vorderasiatische sozioökonomische System integrierten. Der Handel von Metall, etwa von Zinn, dient als Schlüssel zum Verständnis der weitreichenden, indirekten Kontakte im Großraum zwischen Ägäis und Westindien. Der Umfang der Kontakte zwischen Ägäis und Mitteleuropa war dagegen in vormykenischer Zeit von wesentlich geringerem Umfang. Dies ist vor allem auf die unterschiedlichen sozioökonomischen Grundvoraussetzungen zurückzuführen.

Keywords: Aegean, West Asia, Early Bronze Age, sun barge, tin trade, Ägäis, Westasien, Frühbronzezeit, Sonnenbarke, Zinnhandel