

References

Afrika

CRUZ 2011

M. Dores Cruz, “Pots are pots, not people”, *Material culture and ethnic identity in the Banda Area (Ghana), nineteenth and twentieth centuries*. *Azania* **46** (2011), 336–357.

Colonial literature often assumed that Africans belonged to tribes and could be organised in orderly fashion. Concepts of ethnicity and identity have replaced the colonial paradigm and propositions of ‘pots as people’ are considered fallacies. Nevertheless, analogies continue to be employed, thereby overlooking the diversity of historical experiences, the fluidity and the strategic character of ethnicity, rather than stressing similarities across time and space. This case study cautions against the validity of simple analogies used to address identity formation and its direct relationship with material culture. It focuses on ceramics produced in the Banda area of west-central Ghana during the nineteenth and twentieth centuries that are characterised by their seeming lack of meaning as emblems of identity, while intangible cultural aspects play a central role. When analysed at the micro-level identical vessels used by different ethnic groups in their daily life show variability in manufacture among villages. This paper examines how contexts and choices in production can be entangled with cultural identity, taking us beyond formal aspects of ceramics as markers of identity.

Keywords: Ceramic production and consumption | historical archaeology | Ghana | critique of Africanisms

MUTUNDU 2010

Kennedy K. Mutundu, *An ethnoarchaeological framework for the identification and distinction of Late Holocene archaeological sites in East Africa*. *Azania* **45** (2010), 6–23.

One of the interpretive problems in the study of the advent of pastoralism in East Africa has been the difficulty of distinguishing archaeological sequences of local hunter-gatherers with access to domestic stock or in the early stages of the adoption of herding, from those of in-migrating pastoralists with a subsistence strategy that may have included wild animals. Lack of knowledge of how these two interacting socioeconomic groups might be distinguished archaeologically impedes our better understanding of prehistoric hunter-gatherer interactions with pastoralists and the secondary adoption of food production. In this article, I use ethnoarchaeological observations among the historic Mukogodo huntergatherers and the pastoral Maasai of Kenya to propose a scheme of interpretive guidelines that may be used to distinguish archaeological sequences associated with different socioeconomic adaptations during the ‘Pastoral Neolithic’ in East Africa. My analysis shows that site features and subtle patterns in faunal assemblages can be useful in the identification and distinction of relevant sites, and in addressing some of the interpretive difficulties that archaeologists have encountered in the study of late Holocene archaeological sites in the region.

Keywords: Ethnoarchaeology | identification | hunter-gatherers | ‘Pastoral Neolithic’ | East Africa

SADR 2003

Karim Sadr, *The Neolithic of Southern Africa*. [Journal of African History](#) **44** (2003), 195–209.

As the exception on the continent, southern Africa has no Neolithic period. In the 1920s, when the term came to mean Stone Age with food production, Neolithic was dropped in South Africa for lack of evidence for farming or herding in Stone Age sites. But since the late 1960s many sheep bones have surfaced in just such sites. Now, the continued absence of the Neolithic may say more about the politics of South African archaeology than about its prehistory. This paper describes food production in the southern African late Stone Age and argues in favor of (re-)introducing the term Neolithic to the subcontinent.

Keywords: Archaeology | southern Africa | pre-colonial | environment.

Aktuell

ILIEV 2016

Rumen Iliev, Joe Hoover, Morteza Dehghani & Robert Axelrod, *Linguistic positivity in historical texts reflects dynamic environmental and psychological factors*. [PNAS](#) **113** (2016), E7871–E7879.

People use more positive words than negative words. Referred to as “linguistic positivity bias” (LPB), this effect has been found across cultures and languages, prompting the conclusion that it is a panhuman tendency. However, although multiple competing explanations of LPB have been proposed, there is still no consensus on what mechanism(s) generate LPB or even on whether it is driven primarily by universal cognitive features or by environmental factors. In this work we propose that LPB has remained unresolved because previous research has neglected an essential dimension of language: time. In four studies conducted with two independent, time-stamped text corpora (Google books Ngrams and the New York Times), we found that LPB in American English has decreased during the last two centuries. We also observed dynamic fluctuations in LPB that were predicted by changes in objective environment, i.e., war and economic hardships, and by changes in national subjective happiness. In addition to providing evidence that LPB is a dynamic phenomenon, these results suggest that cognitive mechanisms alone cannot account for the observed dynamic fluctuations in LPB. At the least, LPB likely arises from multiple interacting mechanisms involving subjective, objective, and societal factors. In addition to having theoretical significance, our results demonstrate the value of newly available data sources in addressing long-standing scientific questions.

Keywords: Pollyanna hypothesis | positivity in language | automated text analysis | subjective happiness

Significance: For nearly 50 y social scientists have observed that across cultures and languages people use more positive words than negative words, a phenomenon referred to as “linguistic positivity bias” (LPB). Although scientists have proposed multiple explanations for this phenomenon—explanations that hinge on mechanisms ranging from cognitive biases to environmental factors—no consensus on the origins of LPB has been reached. In this research, we derive and test, via natural language processing and data aggregation, divergent predictions from dominant explanations of LPB by examining it across time. We find that LPB varies across time and therefore cannot be explained simply as the product of cognitive biases and, further, that these variations correspond to fluctuations in objective circumstances and subjective mood.

ZARINGHALAM 2016

Maryam Zaringhalam, *The problem with ‘alternative’*. [science](#) **354** (2016), 798.

For years after I dissected a fetal pig in ninth grade, I identified as an aspiring scientist. I was enraptured by the way that anatomical parts, unimpressive on their own, came together to form a living creature. I wanted to devote my life to studying such marvels by becoming a professor at the helm of my own research laboratory. Every step I made was toward that goal—until my second year of graduate school. I still loved doing science. But, through launching a blog and salon series called ArtLab, I found that I loved thinking and talking about science—unfundable dream projects, happy lab accidents that became historical breakthroughs, the latest sci-fi fantasy and its implications—even more. I realized that a traditional professorship was not right for me. But I feared that pursuing my newfound interest would mean that I was settling for an “alternative” to my ninth grade dreams. I was stuck.

Amerika

VALLEBUENO-ESTRADA 2016

Miguel Vallebuena-Estrada et al., *The earliest maize from San Marcos Tehuacán is a partial domesticate with genomic evidence of inbreeding*. [PNAS](#) **113** (2016), 14151–14156.

Miguel Vallebuena-Estrada, Isaac Rodríguez-Arévalo, Alejandra Rougon-Cardoso, Javier Martínez González, Angel García Cook, Rafael Montiel & Jean-Philippe Vielle-Calzada

Pioneering archaeological expeditions led by Richard MacNeish in the 1960s identified the valley of Tehuacán as an important center of early Mesoamerican agriculture, providing by far the widest collection of ancient crop remains, including maize. In 2012, a new exploration of San Marcos cave (Tehuacán, Mexico) yielded nonmanipulated maize specimens dating at a similar age of 5,300–4,970 calibrated y B.P. On the basis of shotgun sequencing and genomic comparisons to Balsas teosinte and modern maize, we show herein that the earliest maize from San Marcos cave was a partial domesticate diverging from the landraces and containing ancestral allelic variants that are absent from extant maize populations. Whereas some domestication loci, such as teosinte branched1 (tb1) and brittle endosperm2 (bt2), had already lost most of the nucleotide variability present in Balsas teosinte, others, such as teosinte glume architecture1 (tga1) and sugary1 (su1), conserved partial levels of nucleotide variability that are absent from extant maize. Genetic comparisons among three temporally convergent samples revealed that they were homozygous and identical by descent across their genome. Our results indicate that the earliest maize from San Marcos was already inbred, opening the possibility for Tehuacán maize cultivation evolving from reduced founder populations of isolated and perhaps self-pollinated individuals.

Keywords: maize | paleogenomics | teosinte | domestication | Tehuacán

Significance: The valley of Tehuacán in Mexico is an important center of early Mesoamerican agriculture. To characterize the genetic constitution of the earliest phase of maize cultivation, we reexamined San Marcos cave in Tehuacán and sequenced DNA from three newly discovered maize samples dating at a similar age of 5,000 y B.P. The genomes of these samples reveal unforeseen levels of genetic diversity as compared with modern maize, indicating that the effects of domestication were not yet complete. We find that their genetic constitution was similar

and influenced by inbreeding, suggesting that the corresponding plants come from a reduced population of isolated and perhaps self-pollinated individuals.

Anthropologie

FIELD 2016

Yair Field et al., *Detection of human adaptation during the past 2000 years*. [science](#) **354** (2016), 760–760.

s354-0760-Supplement1.pdf, s354-0760-Supplement2.xlsx

Yair Field, Evan A. Boyle, Natalie Telis, Ziyue Gao, Kyle J. Gaulton, David Golan, Loic Yengo, Ghislain Rocheleau, Philippe Froguel, Mark I. McCarthy & Jonathan K. Pritchard

Detection of recent natural selection is a challenging problem in population genetics. Here we introduce the singleton density score (SDS), a method to infer very recent changes in allele frequencies from contemporary genome sequences. Applied to data from the UK10K Project, SDS reflects allele frequency changes in the ancestors of modern Britons during the past ≈ 2000 to 3000 years. We see strong signals of selection at lactase and the major histocompatibility complex, and in favor of blond hair and blue eyes. For polygenic adaptation, we find that recent selection for increased height has driven allele frequency shifts acrossmost of the genome. Moreover, we identify shifts associated with other complex traits, suggesting that polygenic adaptation has played a pervasive role in shaping genotypic and phenotypic variation in modern humans.

GOWLETT 2013

John A. J. Gowlett & Richard W. Wrangham, *Earliest fire in Africa, Towards the convergence of archaeological evidence and the cooking hypothesis*. [Azania](#) **48** (2013), 5–30.

Issues of early fire use have become topical in human evolution, after a long period in which fire scarcely featured in general texts. Interest has been stimulated by new archaeological finds in Europe, the Middle East and Africa, and also by major inputs from other disciplines, including primatology and evolutionary psychology. Evidence for fire is, however, often disputed, especially with regard to the early cases in Africa. Interpretations often struggle to take into account the implications of a huge bias in archaeological preservation, which means that our surviving evidence does not accurately map the past. Additionally, there is often a ‘yes-no’ presence/absence approach to fire, which does not recognise that earliest hominin fire use may have occurred in interaction with natural fire, and may not even have included deliberate hearth use in its first stages. Here we examine the need to integrate different approaches to the issues of early fire-use, considering especially the earliest archaeological evidence and the ‘cooking hypothesis’, while also tackling the issues of apparent differences in early African and European fire records.

Keywords: Fire use | human evolution | Pleistocene | Africa | Palaeolithic | diet

KRAMER 2001

Andrew Kramer, Tracey L. Crummett & Milford H. Wolpoff, *Out of Africa and into the Levant, Replacement or admixture in Western Asia?* [Quaternary International](#) **75** (2001), 51–63.

Late Pleistocene Israel is the region in which issues of population mixture or competition at the time of the emergence of modern humans are most likely to

be solved. For those who believe that modern humans “rst arose in Africa and subsequently spread throughout the world replacing archaic populations, the Levant would be the “rst region where such archaic populations were encountered. For those who regard the Levantine Neandertal populations as late – H migreH s from a glaciated and inhospitable Europe, the Levant is the place where it is most likely that Neandertals encountered other human populations. If ever there was a time and place where we can examine the question of whether European and African populations exchanged ideas and mates, or competed with each other without genetic exchanges, this is it! In this paper we test the null hypothesis of a single human species occupying the Levant at the onset of the Late Pleistocene. An inability to delineate two distinct groups among the Levantine hominids would support the null hypothesis, while a demonstration of the presence of two morphs would lead to its refutation. We use non-metric traits to examine the eight most complete adult Levantine human crania to try to refute the contention “rst proposed by McCown and Keith (1939. *The Stone Age of Mount Carmel: the Fossil Human Remains from the Levalloiso-Mousterian*, Vol. II. Clarendon Press, Oxford), that the Levant ‘Neandertals (Amud, Tabun) were the same species as the ‘early modern humans (Qafzeh III, VI, IX; Skhul IV, V, IX). To test this hypothesis we use individual specimens as ‘operational taxonomic units, and assess it using phylogenetic analysis as a heuristic clustering procedure. While our analyses produce many different trees, none of the most parsimonious ones reveal a separate Neandertal clade. Furthermore, we conducted a pairwise difference analysis of these data, which also failed to reveal a unique relationship between the Neandertal crania that would be expected if these hominids were a different species from that represented by Qafzeh and Skhul. We acknowledge that the bases for refutation are necessary but not indispensably sufficient conditions, and yet nevertheless, our “ndings fail to refute the null hypothesis. Instead our results suggest that the traditional ‘Neandertal versus ‘modern human groupings in the Levant may not be as distinct as often thought. This would imply that as populations left Africa, they interbred with the Late Pleistocene inhabitants of the Levant, and suggest that as different populations moved or expanded their range, subsequent human evolution be viewed as a consequence of the continued mixing of ideas and genes.

SPIKINS 2016

Penny Spikins, Barry Wright & Derek Hodgson, *Are there alternative adaptive strategies to human pro-sociality? The role of collaborative morality in the emergence of personality variation and autistic traits. Time and Mind* **9** (2016), 289–313.

Selection pressures to better understand others’ thoughts and feelings are seen as a primary driving force in human cognitive evolution. Yet might the evolution of social cognition be more complex than we assume, with more than one strategy towards social understanding and developing a positive pro-social reputation? Here we argue that social buffering of vulnerabilities through the emergence of collaborative morality will have opened new niches for adaptive cognitive strategies and widened personality variation. Such strategies include those that do not depend on astute social perception or abilities to think recursively about others’ thoughts and feelings. We particularly consider how a perceptual style based on logic and detail, bringing certain enhanced technical and social abilities which compensate for deficits in complex social understanding could be advantageous at low levels in certain ecological and cultural contexts. ‘Traits of autism’ may have promoted innovation in archaeological material culture during the late Palaeolithic in the context of the mutual interdependence of different social strategies, which in turn contributed to the rise of innovation and large scale social networks.

Keywords: Cognitive evolution | collaborative morality | Palaeolithic archaeology
| personality variation | autistic traits

WOLPOFF 1983

Milford H. Wolpoff, *Lucy's Little Legs*. [Journal of Human Evolution 12 \(1983\), 443–453](#).

Just when it seemed as though a human pattern of bipedal locomotion was firmly established and generally accepted for the Pliocene australopithecines, the interpretation of a substantially different and energetically inefficient gait pattern for these early hominids has appeared again. This recent claim involves the contention that the femur of the Hadar australopithecine female Lucy was too short to allow functional equivalence and kinematic equality with living humans. In this paper it is argued that the data do not support this interpretation of Lucy's relative femur length. Her legs are shown to be about the length one would expect in a modern human of her diminutive weight, and within the human range relative to a measure of the length of her trunk (as is also the femur of the Sterkfontein australopithecine female, STS 14). That the femora of these australopithecines also happen to be the length of a chimpanzee's with similar body weight is irrelevant with regard to their locomotion. Based on the implications of Lucy's small size and relative limb proportions, a model of hominoid divergences and subsequent evolutionary patterns is suggested that accounts for the parallelisms created by the claim that the orangutan was the first of the hominoids to diverge.

Keywords: Australopithecine locomotion | relative femur length | human origins.

Bibel

CLINES 2007

David J. A. Clines, *What Do We Really Want to Know about the Pentateuch? Response to the Session, Sources of the Pentateuch: SBL International Meeting, Vienna, 24 July 2007*. [unknown \(2007\), preprint, 1–7](#).

Among the Pentateuch's characters I especially want to hear someone clever and not too religious talk about is the character Yahweh, who has to be, whatever you think of his morals, one of the most interesting gods known to humans. I don't want to have him psychoanalysed so much as explored as a character. It is a topic worthy of the most critical and intelligent endeavours our best scholars are capable of; but they seem to be tied up at the moment on debating minutiae.

DONNER 1984

Herbert Donner, *Geschichte des Volkes Israel und seiner Nachbarn in Grundzügen, Band 1: Von den Anfängen bis zur Staatenbildungszeit*. Grundrisse zum Alten Testament 4/1 (Göttingen 1995).

Dieser Grundriß der Geschichte Israels setzt als erster konsequent bei der Kritik der neuen alttestamentlichen Forschung an den beherrschenden großen Hypothesen der Vorgängergeneration an. So entsteht in sorgfältiger Analyse und aus reicher Kenntnis auch der außerbiblischen Quellen ein Bild der Erzväterzeit, der Zeit Moses und des Auszugs aus Ägypten, der sogenannten Landnahme, der Richterzeit und der Zeit der Könige bis Salomo, in dem zwar Fragen offen bleiben müssen, aber auch überraschende neue Erkenntnisse erscheinen, z.B. über altorientalische Siedlungsvorgänge, das Zusammenleben verschiedener Völker, die Anfänge des Jahwe-Glaubens und frühe politische und religiöse Auseinandersetzungen.

DONNER 1986

Herbert Donner, *Geschichte des Volkes Israel und seiner Nachbarn in Grundzügen, Band 2: Von der Königszeit bis zu Alexander dem Großen mit Ausblick auf die Geschichte des Judentums bis Bar Kochba*. Grundrisse zum Alten Testament 4/2 (Göttingen 21995).

Klima

NOTZ 2016

Dirk Notz & Julienne Stroeve, *Observed Arctic sea-ice loss directly follows anthropogenic CO₂ emission*. *science* **354** (2016), 747–750. [s354-0747-Supplement.pdf](#)

Arctic sea ice is retreating rapidly, raising prospects of a future ice-free Arctic Ocean during summer. Because climate-model simulations of the sea-ice loss differ substantially, we used a robust linear relationship between monthly-mean September sea-ice area and cumulative carbon dioxide (CO₂) emissions to infer the future evolution of Arctic summer sea ice directly from the observational record. The observed linear relationship implies a sustained loss of 3 ± 0.3 square meters of September sea-ice area per metric ton of CO₂ emission. On the basis of this sensitivity, Arctic sea ice will be lost throughout September for an additional 1000 gigatons of CO₂ emissions. Most models show a lower sensitivity, which is possibly linked to an underestimation of the modeled increase in incoming longwave radiation and of the modeled transient climate response.

Kultur

KINTISCH 2016

Eli Kintisch, *The Lost Norse*. *science* **354** (2016), 696–701.

Archaeologists have a new answer to the mystery of Greenland’s Norse, who thrived for centuries and then vanished.

Despite the signs of crisis at a few Western Settlement sites, those in the Eastern Settlement show no sign of a violent end. Instead, after farmhouses collapsed, remaining settlers scavenged the wood from them, suggesting a slow dwindling of population. The challenge for the average Greenlander to survive drove “a constant emigration” back to Iceland and Europe, Fitzhugh hypothesizes, “which could bring the Eastern [Settlement] to a close peacefully, without starvation or death by Inuit.”

Metallzeiten

BÖSEL 2008

Mechthild Bösel, *Wandel durch Bronze? Vergleichende Untersuchung sozialer Strukturen auf früh- und mittelbronzezeitlichen Gräberfeldern im Theißgebiet*. *Prähistorische Zeitschrift* **83** (2008), 45–108.

The objective of the following study was to gain more insight into Bronze Age social structures based on the grave good assemblages and the funerary practices in four selected Early and Middle Bronze Age cemeteries of the Tisza region (Battonya, Mokrin, Hernádkak, Tápé). The essential data for the evaluation of the finds were delivered by a statistical tool for determining the value of grave goods:

the so-called Z standardisation. The graves with highly valuable grave goods as determined with this procedure – the graves of possible elites – are also regarded qualitatively. Then contingency and correlation analyses are performed on the calculated grave good index using the variables gender, age and grave pit depth.

As a result of the analysis, it can be shown that in all four cemeteries, a weak but significant correlation exists between the value of the grave goods and the grave depth. When the highest ranking group is considered separately, Battonya and Hernádkak correlate very strongly. The grave good assemblages of child and adult graves are not significantly different in all necropolises, as one might expect. There is evidence that the value of the grave goods differs in relation to gender and age – in Mokrin there is an overrepresentation of female infants – which might reflect local peculiarities in societal structure.

The introduction of bronze metallurgy in Europe influenced society, so that a gradual and regionally variable emergence of new social structures may be expected. The cemeteries discussed here, which reveal both similarities and differences in developmental trends, are of course only a small stone in the large mosaic of research into Bronze Age social structures.

Keywords: Tisza region | Bronze Age | cemeteries | Z standardisation | grave goods index | social structures.

Ziel der folgenden Untersuchung war es, anhand der Beigabenzusammensetzungen und der Grabsitten auf vier ausgewählten früh- und mittelbronzezeitlichen Gräberfeldern des Theißgebiets (Battonya, Mokrin, Hernádkak, Tápé) nähere Hinweise auf die bronzezeitlichen Sozialstrukturen zu bekommen. Wesentliche Daten für die Auswertung der Funde lieferte dabei ein statistisches Verfahren zur Erfassung der Beigabenwertigkeit: die so genannte Z-Normierung. Die durch dieses Verfahren ermittelten Gräber mit hohen Beigabenwerten – Gräber möglicher Eliten – werden auch qualitativ betrachtet. Anschließend werden Kontingenz- und Korrelationsanalysen des jeweils errechneten Beigabenindex mit den Variablen Geschlecht, Alter und Grabgrubentiefe durchgeführt.

Als Ergebnis der Untersuchung kann gezeigt werden, dass bei allen vier Gräberfeldern ein zwar schwacher, aber signifikanter Zusammenhang zwischen Beigaben"reichtum" und Grabtiefe besteht. Bei getrennter Betrachtung allein der Spitzengruppe korrelieren Battonya und Hernádkak sogar sehr stark. Die Beigabenausstattung von Kinder- und Erwachsenengräbern ist nicht in allen Nekropolen, wie man erwarten könnte, signifikant unterschiedlich. Es lassen sich auch Unterschiede in Bezug auf den Beigabenreichtum im Zusammenhang mit dem Geschlecht und dem Alter nachweisen – in Mokrin Überrepräsentation von weiblichen Kleinkindern –, die lokale Besonderheiten der Gesellschaftsstruktur widerspiegeln könnten.

Die Einführung der Bronzemetallurgie in Europa beeinflusste die Gesellschaft, so dass mit einer allmählichen und regional unterschiedlichen Herausbildung neuer sozialer Strukturen zu rechnen ist. Die besprochenen Gräberfelder mit ihren Gemeinsamkeiten, aber eben auch Anzeichen für unterschiedliche Entwicklungstrends sind natürlich nur ein kleiner Mosaikstein bei der Erforschung der bronzezeitlichen Sozialstrukturen.

Keywords: Theißgebiet | Bronzezeit | Gräberfelder | Z-Normierung | Beigabenindex | Sozialstrukturen.

EVIAN 2016

Shirly Ben-Dor Evian, *The Battles between Ramesses III and the "Sea-Peoples", When, Where and Who? An Iconic Analysis of the Egyptian Reliefs*. *Zeitschrift für Ägyptische Sprache und Altertumskunde* **143** (2016), 151–168.

While building on previous works by such scholars as Heinz and Spalinger, the article presents a new methodology specifically devised for the analysis of Egyptian war reliefs. The article contends that many historical reconstructions regarding the “Sea-Peoples” have ignored the basic principles of ancient Egyptian iconic art and preferred intuitive interpretations of the reliefs. This has led to historical misconceptions about the battles and aggressors. The new analysis provides a holistic reading of the reliefs within their context and is thereby able to present new insights as to the location of the battles and the nature of the “Sea-Peoples”.

Keywords: Iconography | Philistines | Ramesses III | Sea-Peoples –War reliefs

KNAPP 1999

Ilona Knapp, *Fürst oder Häuptling? Eine Analyse der herausragenden Bestattungen der frühen Bronzezeit*. [Archäologische Informationen 22 \(1999\), 261–268](#).

Die in neolithischer Tradition errichteten Gräber der Aunjetitzer Kultur zeigen in direkter Weise die Vermittlung traditioneller Werte durch ein bestimmtes Individuum, sie zeigen auch deutlich dessen Berufung auf Deszendenzlinien im Gegensatz zur ‘Restbevölkerung’, die in nichtneolithischer Weise bestattet wurde; ihr scheinen die Abstammungsrechte abgesprochen oder zumindest nur für eine kurze Deszendenzlinie zugesprochen worden zu sein. Dieser Umstand rechtfertigt die Belegung der Gräber mit dem Begriff Häuptlingsgräber, da sie den legitimen, politischen Machtanspruch durch Vermittlung und Sukzession traditioneller Werte und traditionellem Wissen veranschaulichen und das in ihnen bestattete Individuum dadurch als Häuptling auszeichnen. Insofern können die ‘Häuptlingsgräber’, aber auch die neolithische Steinaxtbeigabe, als Materialisation der ‘neolithischen’ Ideologie der aunjetitzer Gesellschaft angesehen werden, die zusätzlich, belegt durch die Metallbeigaben, neue Elemente, z.B. die Idee der Metallurgie, in sich aufnimmt. Daß bestimmte Bereiche, vor allem der Güteraustausch, durch den Häuptling und dessen Positionsgefüge kontrolliert wurden, dokumentiert die Errichtung der Grabanlagen in direktem Bezug zu Handelswegen.

SHENNAN 1975

Susan Shennan, *The social organization at Branč*. [Antiquity 49 \(1975\), 279–288](#).

Nevertheless, it is important to emphasize that the degree of stratification should not be exaggerated as the distinctions between ‘rich’ individuals and others are by no means absolute. Even the difference between ‘richest’ and ‘poorest’ seems very small if compared for instance with the Mediterranean civilizations.

This analysis of the Branč cemetery has shown that it is unsatisfactory to use simple general categories, such as ‘warrior aristocracy’, to characterize the social organization of Early Bronze Age Central Europe. Indeed, the contrast which the situation at Branč makes with such better known areas as Central Germany shows that it is not possible to generalize about Early Bronze Age society on the basis of a single site or region. I believe that the main value of this type of systematic study is the detailed knowledge it can give of the organization of a single community, which, in the case of Branč, will be fitted into its local context when the neighbouring contemporary cemeteries have been analysed. In this way we can gradually build up a coherent picture of the organization of Early Bronze Age society over larger areas, which will be the first stage in a move away from the simplistic models of social evolution that have been applied to the Early Bronze Age in the past.

Methoden

OBA 2001

G. Oba & D.G. Kotile, *Assessments of Landscape Level Degradation in Southern Ethiopia, Pastoralists Versus Ecologists*. [Land Degradation & Development 12 \(2001\), 461–475](#).

This paper compares land degradation assessment techniques using indigenous ecological knowledge (IEK) of the Booran pastoralists and techniques used by ecologists. The study was conducted at landscape and regional levels in southern Ethiopia, where the Booran pastoral production system comprised the Golbo (lowlands), the Dirre (Plateau) and the Liiban production systems (hereafter also referred to as regions). The study, by involving traditional range scouts in evaluating landscape and regional level environmental changes, challenges the notion that IEK is mythical and could not meet scientific rigour. We show that the use of common soil and vegetation indices allows comparisons of land degradation assessments between the IEK of the pastoralists and ecological techniques. Evaluation by traditional range scouts (TRSCs) and range ecologists (REs) on changes in range conditions and trends showed high correlations. Indigenous ecological knowledge was effectively used to determine landscape suitability and potential grazing capacity of individual landscapes and at regional levels. We show different perceptions in interpreting grazing suitability and potential grazing capacity. Management did not change the latter, which is an inherent property of individual landscapes, while the former could be altered. Both TRSCs and REs made comparable predictions on threats to range conditions and trends, but interpreted landscape stability differently. We suggest that integrating IEK in the ecological methods would help identify important perceptions of the pastoralists on effects of land use on local landscapes. Moreover, the value of IEK should also be considered when monitoring landscape level changes as well as when assessing degradation of the grazing lands. We hope the information in this paper will motivate policy-makers to incorporate the IEK of the pastoralists into decisions on landscape level range rehabilitation.

Keywords: Booran | bush cover | Ethiopia | indigenous ecological knowledge | grazing suitability | landscape patches | landscape change | potential grazing capacity | range conditions | range trends

Neolithikum

ARRANZ-OTAEGUI 2016

Amaia Arranz-Otaegui, Sue Colledge, Lydia Zapata, Luis Cesar Teira-Mayolini & Juan José Ibáñez, *Regional diversity on the timing for the initial appearance of cereal cultivation and domestication in southwest Asia*. [PNAS 113 \(2016\), 14001–14006](#).

Recent studies have broadened our knowledge regarding the origins of agriculture in southwest Asia by highlighting the multiregional and protracted nature of plant domestication. However, there have been few archaeobotanical data to examine whether the early adoption of wild cereal cultivation and the subsequent appearance of domesticated type cereals occurred in parallel across southwest Asia, or if chronological differences existed between regions. The evaluation of the available archaeobotanical evidence indicates that during PrePottery Neolithic A (PPNA) cultivation of wild cereal species was common in regions such as the southern-central Levant and the Upper Euphrates area, but the plant-based subsistence in the eastern Fertile Crescent (southeast Turkey, Iran, and Iraq) focused on the

exploitation of plants such as legumes, goatgrass, fruits, and nuts. Around 10.7–10.2 ka Cal BP (early Pre-Pottery Neolithic B), the predominant exploitation of cereals continued in the southern-central Levant and is correlated with the appearance of significant proportions ($\approx 30\%$) of domesticated-type cereal chaff in the archaeobotanical record. In the eastern Fertile Crescent exploitation of legumes, fruits, nuts, and grasses continued, and in the Euphrates legumes predominated. In these two regions domesticated-type cereal chaff ($>10\%$) is not identified until the middle and late Pre-Pottery Neolithic B (10.2–8.3 ka Cal BP). We propose that the cultivation of wild and domesticated cereals developed at different times across southwest Asia and was conditioned by the regionally diverse plant-based subsistence strategies adopted by Pre-Pottery Neolithic groups.

Keywords: plant domestication | agriculture | southwest Asia | Pre-Pottery Neolithic | archaeobotany

Significance: Recent studies show that cultivation of wild and domesticated plants was a protracted process that developed across southwest Asia. However, there have not been sufficient data to evaluate whether cereal cultivation and domestication developed in parallel in all the regions or at different times. Our findings indicate that cultivation of wild cereal forms during Pre-Pottery Neolithic A was common only in specific regions such as the southern-central Levant. Domesticated-type cereal chaff ($>10\%$) is found in southern Syria around 10.7–10.2 ka Cal BP but appears around 400–1,000 y later in the other regions. Regionally diverse plant-based subsistence during the Pre-Pottery Neolithic could have contributed to (if not caused) chronological dissimilarities in the development of cereal cultivation and domestication in southwest Asia.

Story or Book

FISCHER 2016

Steven Fischer, *The First Fragmented Church of Entropy, Order from chaos*. [nature](#) **540** (2016), 162.