

Literatur

Aktuell

BARRETT 2011

Bruce Barrett et al., *Placebo Effects and the Common Cold: A Randomized Controlled Trial*. [Annals of Family Medicine](#) **9** (2011), 312–322.

Bruce Barrett, Roger Brown, Dave Rakel, David Rabago, Lucille Marchand, Jo Scheder, Marlon Mundt, Gay Thomas & Shari Barlow

PURPOSE We wanted to determine whether the severity and duration of illness caused by the common cold are influenced by randomized assignment to open-label pills, compared with conventional double-blind allocation to active and placebo pills, compared with no pills at all.

METHODS We undertook a randomized controlled trial among a population with new-onset common cold. Study participants were allocated to 4 parallel groups: (1) those receiving no pills, (2) those blinded to placebo, (3) those blinded to echinacea, and (4) those given open-label echinacea. Primary outcomes were illness duration and area-under-the-curve global severity. Secondary outcomes included neutrophil count and interleukin 8 levels from nasal wash at intake and 2 days later.

RESULTS Of 719 randomized study participants, 2 were lost and 4 exited early. Participants were 64% female, 88% white, and aged 12 to 80 years. Mean illness duration for each group was 7.03 days for those in the no-pill group, 6.87 days for those blinded to placebo, 6.34 days for those blinded to echinacea, and 6.76 days for those in the open-label echinacea group. Mean global severity scores for the 4 groups were no pills, 286; blinded to placebo, 264; blinded to echinacea, 236; and open-label echinacea, 258. Between-group differences were not statistically significant. Comparing the no-pill with blinded to placebo groups, differences (95% confidence interval [CI]) were -0.16 days (95% CI, -0.90 to 0.58 days) for illness duration and -22 severity points (95% CI, -70 to 26 points) for global severity. Comparing the group blinded to echinacea with the open-label echinacea group, differences were 0.42 days (95% CI, -0.28 to 1.12 days) and 22 severity points (95% CI, -19 to 63 points). Median change in interleukin 8 concentration and neutrophil cell count, respectively by group, were 30 pg/mL and 1 cell for the no-pill group, 39 pg/mL and 1 cell for the group blinded to placebo, 58 pg/mL and 2 cells for the group blinded to echinacea, and 70 pg/mL and 1 cell for the group with open-label echinacea, also not statistically significant. Among the 120 participants who at intake rated echinacea's effectiveness as greater than 50 on a 100-point scale for which 100 is extremely effective, illness duration was 2.58 days shorter (95% CI, -4.47 to -0.68 days) in those blinded to placebo rather than no pill, and mean global severity score was 26% lower but not significantly different (-97.0, 95% CI, -249.8 to 55.8 points). In this subgroup, neither duration nor severity differed significantly between the group blinded to echinacea and the open-label echinacea group.

CONCLUSIONS Participants randomized to the no-pill group tended to have longer and more severe illnesses than those who received pills. For the subgroup who believed in echinacea and received pills, illnesses were substantively shorter and less severe, regardless of whether the pills contained echinacea. These findings support the general idea that beliefs and feelings about treatments may be important and perhaps should be taken into consideration when making medical decisions.

CASPERS 2012

Svenja Caspers, Stefan Heim, Marc G. Lucas, Egon Stephan, Lorenz Fi-

scher, Katrin Amunts & Karl Zilles, *Dissociated Neural Processing for Decisions in Managers and Non-Managers*. [PLoS ONE 7 \(2012\), e43537](#). DOI:10.1371/journal.pone.0043537.

Functional neuroimaging studies of decision-making so far mainly focused on decisions under uncertainty or negotiation with other persons. Dual process theory assumes that, in such situations, decision making relies on either a rapid intuitive, automated or a slower rational processing system. However, it still remains elusive how personality factors or professional requirements might modulate the decision process and the underlying neural mechanisms. Since decision making is a key task of managers, we hypothesized that managers, facing higher pressure for frequent and rapid decisions than nonmanagers, prefer the heuristic, automated decision strategy in contrast to non-managers. Such different strategies may, in turn, rely on different neural systems. We tested managers and non-managers in a functional magnetic resonance imaging study using a forced-choice paradigm on word-pairs. Managers showed subcortical activation in the head of the caudate nucleus, and reduced hemodynamic response within the cortex. In contrast, non-managers revealed the opposite pattern. With the head of the caudate nucleus being an initiating component for process automation, these results supported the initial hypothesis, hinting at automation during decisions in managers. More generally, the findings reveal how different professional requirements might modulate cognitive decision processing.

CHO 2012

Ilseung Cho et al., *Antibiotics in early life alter the murine colonic microbiome and adiposity*. [nature 488 \(2012\), 621–626](#).

[n488-0621-Supplement1.pdf](#)

Ilseung Cho, Shingo Yamanishi, Laura Cox, Barbara A. Methe', Jiri Zavadil, Kelvin Li, Zhan Gao, Douglas Mahana, Kartik Raju, Isabel Teitler, Huilin Li, Alexander V. Alekseyenko and Martin J. Blaser

Antibiotics administered in low doses have been widely used as growth promoters in the agricultural industry since the 1950s, yet the mechanisms for this effect are unclear. Because antimicrobial agents of different classes and varying activity are effective across several vertebrate species, we proposed that such subtherapeutic administration alters the population structure of the gut microbiome as well as its metabolic capabilities. We generated a model of adiposity by giving subtherapeutic antibiotic therapy to young mice and evaluated changes in the composition and capabilities of the gut microbiome. Administration of subtherapeutic antibiotic therapy increased adiposity in young mice and increased hormone levels related to metabolism. We observed substantial taxonomic changes in the microbiome, changes in copies of key genes involved in the metabolism of carbohydrates to short-chain fatty acids, increases in colonic short-chain fatty acid levels, and alterations in the regulation of hepatic metabolism of lipids and cholesterol. In this model, we demonstrate the alteration of early-life murine metabolic homeostasis through antibiotic manipulation.

FLINT 2012

Harry J. Flint, *Antibiotics and adiposity*. [nature 488 \(2012\), 601–602](#).

Mice receiving low doses of certain antibiotics gain weight and accumulate fat. This could be because some gut bacteria survive the treatment better than others, shifting digestion towards greater energy provision.

GUÉRIN 2012

Guillaume Guérin et al., *Multi-method (TL and OSL), multi-material (quartz and flint) dating of the Mousterian site of Roc de Marsal (Dordogne, Fran-*

ce): correlating Neanderthal occupations with the climatic variability of MIS 5–3. *Journal of Archaeological Science* **39** (2012), 3071–3084.

Guillaume Guérin, Emmanuel Discamps, Christelle Lahaye, Norbert Mercier, Pierre Guibert, Alain Turq, Harold L. Dibble, Shannon P. McPherron, Dennis Sandgathe, Paul Goldberg, Mayank Jain, Kristina Thomsen, Marylène Patou-Mathis, Jean-Christophe Castel, Marie-Cécile Soulier

Roc de Marsal has yielded numerous remains of Mousterian occupations, including lithics, fauna and combustion features. It was made famous by the discovery of the skeleton of a Neanderthal child. Given the need to date the sequence, TL and OSL were applied on heated flints and quartz, and OSL on unheated quartz. Chronological results combined with palaeoenvironmental data – faunal remains and micromorphological features in the sediments from the cave, pollen proxies and faunal remains from the region – allowed us to place climate variations in southwest France on a numerical time scale. Denticulate Mousterian occupations were dated to the middle of MIS 4 (65–70 ka) and Quina layers either to the very end of MIS 4 or to MIS 3. Interestingly, a faunal pattern showing a mix of red deer, roe deer and reindeer was found to have occurred during MIS 4, which was shown to be consistent with data from other similar sites in southwest France.

Keywords: TL | OSL | Middle Palaeolithic | Climate variability | Palaeoenvironments

MATTISON 2012

Julie A. Mattison et al., *Impact of caloric restriction on health and survival in rhesus monkeys from the NIA study*. *nature* (2012) preprint, 1–5. DOI:doi:10.1038/nature11432.

n2012-preprint-Supplement.pdf

Julie A. Mattison, George S. Roth, T. Mark Beasley, Edward M. Tilmont, April M. Handy, Richard L. Herbert, Dan L. Longo, David B. Allison, Jennifer E. Young, Mark Bryant, Dennis Barnard, Walter F. Ward, Wenbo Qi, Donald K. Ingram & Rafael de Cabo

Calorie restriction (CR), a reduction of 10–40% in intake of a nutritious diet, is often reported as the most robust non-genetic mechanism to extend lifespan and healthspan. CR is frequently used as a tool to understand mechanisms behind ageing and age-associated diseases. In addition to and independently of increasing lifespan, CR has been reported to delay or prevent the occurrence of many chronic diseases in a variety of animals. Beneficial effects of CR on outcomes such as immune function^{1,2}, motor coordination³ and resistance to sarcopenia⁴ in rhesus monkeys have recently been reported. We report here that a CR regimen implemented in young and older age rhesus monkeys at the National Institute on Aging (NIA) has not improved survival outcomes. Our findings contrast with an ongoing study at the Wisconsin National Primate Research Center (WNPRC), which reported improved survival associated with 30% CR initiated in adult rhesus monkeys (7–14 years)⁵ and a preliminary report with a small number of CR monkeys⁶. Over the years, both NIA and WNPRC have extensively documented beneficial health effects of CR in these two apparently parallel studies. The implications of the WNPRC findings were important as they extended CR findings beyond the laboratory rodent and to a long-lived primate. Our study suggests a separation between health effects, morbidity and mortality, and similar to what has been shown in rodents^{7–9}, study design, husbandry and diet composition may strongly affect the life-prolonging effect of CR in a long-lived nonhuman primate.

MAXMEN 2012

Amy Maxmen, *Calorie restriction falters in the long run, Genetics and healthy diets matter more for longevity*. *nature* **488** (2012), 569.

To those who enjoy the pleasures of the dining table, the news may come as a relief: drastically cutting back on calories does not seem to lengthen lifespan in primates. The

verdict, from a 25-year study in rhesus monkeys fed 30 % less than control animals, represents another setback for the notion that a simple, diet-triggered switch can slow ageing. Instead, the findings, published this week in *Nature*, suggest that genetics and dietary composition matter more for longevity than a simple calorie count.

MILLER 2012

Christopher E. Miller & Christine Sievers, *An experimental micromorphological investigation of bedding construction in the Middle Stone Age of Sibudu, South Africa*. *Journal of Archaeological Science* **39** (2012), 3039–3051.

We conducted experiments to compare the micromorphological signatures of modern burnt sedge and grass bedding to laminated layers of carbonized material and phytoliths in Middle Stone Age deposits at the shelter, Sibudu. The experiments were designed to clarify the formation processes associated with the laminated layers and to investigate whether these previously identified layers of bedding were deliberately burned or not. The results indicate that the laminated layers were most likely produced by human activity related to the construction, maintenance and burning of bedding. Furthermore, our experiments demonstrate that large volumes of vegetal material could have produced the relatively thin, archaeological deposits of burnt bedding.

Keywords: Sibudu | Middle Stone Age | Bedding | Experiments | Micromorphology

TRIMMER 2012

Pete C. Trimmer, James A. R. Marshall, Lutz Fromhage, John M. McNamara & Alasdair I. Houston, *Understanding the placebo effect from an evolutionary perspective*. *Evolution and Human Behavior* (2012) preprint, 1–10. DOI:10.1016/j.evolhumbehav.2012.07.004.

A placebo is a treatment which is not effective through its direct action on the body, but works because of its effect on the patient's beliefs. From an evolutionary perspective, it is initially puzzling why, if people are capable of recovering, they need a placebo to do so. Based on an argument put forward by Humphrey [Great expectations: the evolutionary psychology of faith-healing and the placebo effect. In: Humphrey, N (2002). *The mind made flesh*. Oxford University Press, Oxford. 255-285], we present simple mathematical models of the placebo effect that involve a trade-off between the costs and benefits of allocating resources to a current problem. These models show why the effect occurs and how its magnitude and timing can depend on different factors. We identify a particular aspect of belief which may govern the effect and conclude that a deeper understanding of why the placebo effect exists may allow it to be invoked more easily in the future.

Keywords: Natural selection; Placebo; Nocebo; Expectation; Belief; Evolution

TURNER 2012

Bethany L. Turner et al., *Diet and death in times of war: Isotopic and osteological analysis of mummified human remains from southern Mongolia*. *Journal of Archaeological Science* **39** (2012), 3125–3140.

JArchSci39-3125-Supplement.docx

Bethany L. Turner, Molly K. Zuckerman, Evan M. Garofalo, Andrew Wilson, George D. Kamenov, David R. Hunt, Tsend Amgalantugs, Bruno Frohlich

This study presents the results of an isotopic analysis of nine naturally mummified individuals—three adults, two adolescents, one juvenile, and three infants—recovered from the Hets Mountain Cave site in southern Mongolia, where they had been secondarily deposited. All of the individuals show evidence of violent perimortem trauma, but no skeletal indicators of nutritional or disease-related stress. Multiisotopic data ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{18}\text{O}$, $^{87}\text{Sr}/^{86}\text{Sr}$, and $^{20}\text{nPb}/^{204}\text{Pb}$) were characterized in multiple tissues from each individual when possible, in order to reconstruct diet composition and residential origin

at different points in life. Specifically, $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ in bone carbonate and collagen ($N = 8$) and hair keratin ($N = 4$) were coupled with enamel carbonate $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ ($N = 3$) and enamel $^{87}\text{Sr}/^{86}\text{Sr}$, and $^{20}\text{Pb}/^{204}\text{Pb}$ ($N = 3$) to assess diet and residential mobility in relation to skeletal indicators of health and trauma. Results are consistent with a persistence of mixed C3/C4 pastoral subsistence and general stability of diet composition over the life course, in contrast to contemporary accounts of widespread famine and a dependence on grains imported from China throughout the region. However, results also suggest that at least some individuals may have migrated to this region of southern Mongolia from elsewhere during life, meaning that their dietary isotopic profiles may not represent local subsistence patterns near the Hets Mountain Cave site. Overall, these results speak to the utility of life course oriented multi-isotopic analysis in complementing more top-down historical analyses in understanding variation in subsistence, nutrition, and migration in regions undergoing significant political and economic turmoil.

Keywords: Isotopes | Diet | Mobility | Trauma | Mongolia | Bioarchaeology

Anthropologie

DÍAZ 2012

Begoña Díaz, Florian Hintz, Stefan J. Kiebel & Katharina von Kriegstein, *Dysfunction of the auditory thalamus in developmental dyslexia*. [PNAS 109 \(2012\), 13841–13846](#).

Developmental dyslexia, a severe and persistent reading and spelling impairment, is characterized by difficulties in processing speech sounds (i.e., phonemes). Here, we test the hypothesis that these phonological difficulties are associated with a dysfunction of the auditory sensory thalamus, the medial geniculate body (MGB). By using functional MRI, we found that, in dyslexic adults, the MGB responded abnormally when the task required attending to phonemes compared with other speech features. No other structure in the auditory pathway showed distinct functional neural patterns between the two tasks for dyslexic and control participants. Furthermore, MGB activity correlated with dyslexia diagnostic scores, indicating that the task modulation of the MGB is critical for performance in dyslexics. These results suggest that deficits in dyslexia are associated with a failure of the neural mechanism that dynamically tunes MGB according to predictions from cortical areas to optimize speech processing. This view on task-related MGB dysfunction in dyslexics has the potential to reconcile influential theories of dyslexia within a predictive coding framework of brain function.

functional MRI | speech recognition | auditory processing | magnocellular

GROVE 2012

Matt Grove, *Amplitudes of orbitally induced climatic cycles and patterns of hominin speciation*. [Journal of Archaeological Science 39 \(2012\), 3085–3094](#).

Palaeoanthropologists and archaeologists have long invoked climate change to explain aspects of human evolution. Collection of new climatic and environmental data combined with new fossil discoveries and methodological improvements continue to make exploration of this link a vital endeavour in studying human evolution. The current study employs a global climatic dataset and a rigorously compiled catalogue of hominin first and last appearance dates to test the effects of changes in temperature on hominin speciation and extinction. Through the use of wavelet analysis and bandpass filters the eccentricity, obliquity, and precession components of the studied climatic record are extracted and tested independently for associations with patterns of speciation and extinction. Results suggest that all three components may play a role in speciation events, but that only the obliquity cycle shows a statistically significant relationship with extinction events. It is

suggested that, whilst climatic factors could contribute to the appearance of new hominin species, subsequent competition between these species may lead to their extinction.

Keywords: Speciation | Extinction | Adaptive radiation | Eccentricity | Obliquity | Precession

Judentum

CAMPBELL 2012

Christopher L. Campbell et al., *North African Jewish and non-Jewish populations form distinctive, orthogonal clusters*. [PNAS 109 \(2012\), 13865–13870](#).

Christopher L. Campbell, Pier F. Palamara, Maya Dubrovsky, Laura R. Botigué, Marc Fellous, Gil Atzmon, Carole Oddoux, Alexander Pearlman, Li Hao, Brenna M. Henn, Edward Burns, Carlos D. Bustamante, David Comas, Eitan Friedman, Itsik Pe'er and Harry Ostrer

North African Jews constitute the second largest Jewish Diaspora group. However, their relatedness to each other; to European, Middle Eastern, and other Jewish Diaspora groups; and to their former North African non-Jewish neighbors has not been well defined. Here, genome-wide analysis of five North African Jewish groups (Moroccan, Algerian, Tunisian, Djerban, and Libyan) and comparison with other Jewish and non-Jewish groups demonstrated distinctive North African Jewish population clusters with proximity to other Jewish populations and variable degrees of Middle Eastern, European, and North African admixture. Two major subgroups were identified by principal component, neighbor joining tree, and identity-by-descent analysis-Moroccan/ Algerian and Djerban/Libyan-that varied in their degree of European admixture. These populations showed a high degree of endogamy and were part of a larger Ashkenazi and Sephardic Jewish group. By principal component analysis, these North African groups were orthogonal to contemporary populations from North and South Morocco, Western Sahara, Tunisia, Libya, and Egypt. Thus, this study is compatible with the history of North African Jews-founding during Classical Antiquity with proselytism of local populations, followed by genetic isolation with the rise of Christianity and then Islam, and admixture following the emigration of Sephardic Jews during the Inquisition.

Jewish genetics | population genetics | North African genetics | identical by descent sharing | deep ancestry

Kultur

BOUCKAERT 2012

Remco Bouckaert, *Mapping the Origins and Expansion of the Indo-European Language Family*. [science 337 \(2012\), 957–960](#).

s337-0957-Supplement1.pdf, s337-0957-Supplement2.zip, s337-0957-Supplement3.zip, s337-0957-Supplement4.mov

Remco Bouckaert, Philippe Lemey, Michael Dunn, Simon J. Greenhill, Alexander V. Alekseyenko, Alexei J. Drummond, Russell D. Gray, Marc A. Suchard & Quentin D. Atkinson

There are two competing hypotheses for the origin of the Indo-European language family. The conventional view places the homeland in the Pontic steppes about 6000 years ago. An alternative hypothesis claims that the languages spread from Anatolia with the expansion of farming 8000 to 9500 years ago. We used Bayesian phylogeographic approaches, together with basic vocabulary data from 103 ancient and contemporary Indo-European languages, to explicitly model the expansion of the family and test these hypotheses. We

found decisive support for an Anatolian origin over a steppe origin. Both the inferred timing and root location of the Indo-European language trees fit with an agricultural expansion from Anatolia beginning 8000 to 9500 years ago. These results highlight the critical role that phylogeographic inference can play in resolving debates about human prehistory.

PRINGLE 2012

Heather Pringle, *New Method Puts Elusive Indo-European Homeland in Anatolia*, *Kultur. science* **337** (2012), 902.

Now an international research team has borrowed a computational approach from biology to shed new light on the problem. Using models originally created to trace the origins of viral pathogens, such as avian influenza, during outbreaks, evolutionary psychologist Quentin Atkinson of the University of Auckland in New Zealand and his colleagues report on page 957 of this issue that they have found decisive support for the Anatolian hypothesis. “I think we’ve put forward the best case yet for where the Indo-European languages came from,” Atkinson says. “And we’ve also shown that languages can be used to retrace human history in both time and space.”

Mittelpaläolithikum

HUBLIN 2012

Jean-Jacques Hublin, *The earliest modern human colonization of Europe*. *PNAS* **109** (2012), 13471–13472.

This large-scale study demonstrates that lithic assemblages of the Upper Paleolithic associated with the spread of modern humans predate the CI eruption in several European sites. This applies in particular to some forms of the Aurignacian, a lithic industry with sophisticated art objects and musical instruments and associated with modern human remains. This observation falsifies the hypothesis proposing that the CI eruption itself, and/or the short but intense cooling episode known as Heinrich event 4, which started 40,000 y ago, could have triggered the cultural changes or population replacements witnessed around this time. Rather, it suggests that the main threat to indigenous populations were the modern human invaders themselves and not environmental hazards.

LOWE 2012

John Lowe et al., *Volcanic ash layers illuminate the resilience of Neanderthals and early modern humans to natural hazards*. *PNAS* **109** (2012), 13532–13537.

John Lowe, Nick Barton, Simon Blockley, Christopher Bronk Ramsey, Victoria L. Cullen, William Davies, Clive Gamble, Katharine Grant, Mark Hardiman, Rupert Housley, Christine S. Lane, Sharen Lee, Mark Lewis, Alison MacLeod, Martin Menzies, Wolfgang Müller, Mark Pollard, Catherine Price, Andrew P. Roberts, Eelco J. Rohling, Chris Sattow, Victoria C. Smith, Chris B. Stringer, Emma L. Tomlinson, Dustin White, Paul Albert, Ilenia Arienzo, Graeme Barker, Dušan Borić, Antonio Carandente, Lucia Civetta, Catherine Ferrier, Jean-Luc Guadelli, Panagiotis Karkanas, Margarita Koumouzelis, Ulrich C. Müller, Giovanni Orsini, Jörg Pross, Mauro Rosi, Ljiljana Shalamanov-Korobar, Nikolay Sirakov and Polychronis C. Tzedakis

Marked changes in human dispersal and development during the Middle to Upper Paleolithic transition have been attributed to massive volcanic eruption and/or severe climatic deterioration. We test this concept using records of volcanic ash layers of the Campanian Ignimbrite eruption dated to ca. 40,000 y ago (40 ka B.P.). The distribution of the Campanian Ignimbrite has been enhanced by the discovery of cryptotephra deposits (volcanic ash layers that are not visible to the naked eye) in archaeological cave sequences. They

enable us to synchronize archaeological and paleoclimatic records through the period of transition from Neanderthal to the earliest anatomically modern human populations in Europe. Our results confirm that the combined effects of a major volcanic eruption and severe climatic cooling failed to have lasting impacts on Neanderthals or early modern humans in Europe. We infer that modern humans proved a greater competitive threat to indigenous populations than natural disasters.

Neolithikum

DIETRICH 2012

Oliver Dietrich, Manfred Heun, Jens Notroff, Klaus Schmidt & Martin Zarnk, *The role of cult and feasting in the emergence of Neolithic communities, New evidence from Göbekli Tepe, south-eastern Turkey*. *Antiquity* **86** (2012), 674–695.

Göbekli Tepe is one of the most important archaeological discoveries of modern times, pushing back the origins of monumentality beyond the emergence of agriculture. We are pleased to present a summary of work in progress by the excavators of this remarkable site and their latest thoughts about its role and meaning. At the dawn of the Neolithic, hunter-gatherers congregating at Göbekli Tepe created social and ideological cohesion through the carving of decorated pillars, dancing, feasting-and, almost certainly, the drinking of beer made from fermented wild crops.

Keywords: Turkey, Epipalaeolithic, Pre-Pottery Neolithic A and B, monumentality, congregation, dancing, feasting, drinking, beer, alcohol

GRECO 1997

L. Greco, *From the Neolithic Revolution to Gluten Intolerance: Benefits and Problems Associated with the Cultivation of Wheat*. *Journal of Pediatric Gastroenterology & Nutrition* **24** (1997) Supplement 1, 14–17.

HAYDEN 2003

Brian Hayden, *Were luxury foods the first domesticates? Ethnoarchaeological perspectives from Southeast Asia*. *World Archaeology* **34** (2003), 458–469.

There are important reasons for considering the first domesticated plants and animals as luxury foods primarily used in feasting. Using Southeast Asian tribal society as a case study, it is demonstrated that all the domesticated animals and the most important of the domesticated plants constitute forms of wealth that are primarily or exclusively used in feasting contexts. In addition, numerous studies have demonstrated that feasting generates powerful forces that intensify and increase resource production of luxury foods as well as staples. Such forces ultimately can lead to the domestication of wild species and the transformation of luxury foods into staple foods.

Keywords: Domestication; Southeast Asia; feasting; rice; intensification; ethnoarchaeology.

KATZ 1986

Solomon H. Katz & Mary M. Voigt, *Bread and Beer, The early use of cereals in the human diet*. *Expedition* **28** (1986), ii, 23–34.

Individuals and groups who consumed beer were better nourished than those who consumed wheat and barley as gruel or who ignored these wild resources. Beer would have had sustaining powers well beyond any other food in their diet except animal proteins. In biological terms, beer drinkers would have had a “selective advantage” in the form of improved health for themselves and ultimately for their offspring.

To summarize, it is possible with a careful assessment of the facts about nutrition to propose behavioral sequences that could parsimoniously explain the facts discovered by archaeologists. Careful analysis of nutritional biochemistry can lead to generalizations about the human diet and its relations to biocultural evolutionary processes. This yields the hypothesis that the early intensification in the use of barley and wheat, leading eventually to their domestication, could have stemmed from the desirability of alcohol-containing beers. Under controlled circumstances, alcohol could provide a cultural and social advantage. Unlike other alcohol-yielding brews that were probably available to people at this time, beer would have also had an enormous biological advantage. It enhanced the original nutritional quality of a readily available plant to a level almost comparable with that of meat. Finally, we leave each reader with one last test of any hypothesis, its plausibility. Given a choice of gruel, bread, or brew, which would you rather have with your next meal?

STEVENS 2012

Chris J. Stevens & Dorian Q Fuller, *Did Neolithic farming fail? The case for a Bronze Age agricultural revolution in the British Isles*. *Antiquity* **86** (2012), 707–722.

Story or Book

SCOTT 2012

Beccy Scott, *How to think like a Neanderthal*. *Antiquity* **86** (2012), 932–933. Thomas Wynn & Frederick L. Coolidge. *How to think like a Neanderthal*. xii+210 pages, 13 illustrations. 2012. Oxford: Oxford University Press; 978-0-19-974282-0 hardback £16.99.

My heart lifted when I first opened this book; Wynn and Coolidge, from the outset, have achieved what so many of us fail to do as Palaeolithic archaeologists—trying to reply to the questions about Neanderthals that people really want answered. The authors engage with such fascinating questions as whether Neanderthals told jokes, what their dreams might have been, and what their personalities were like, the types of question that we might ask of any new friend. Not only is the subject matter gripping, but the style is engaging; reading this book feels more like a cosy chat in the pub than an academic text, and it challenges us to consider new lines of enquiry in the same way.

However, the authors could not be accused of letting the facts get in the way of a good story. And so it is that as the authors turn to consider more esoteric aspects of Neanderthal cognition and personality, they move further away from the archaeological record—from family structure (chapter 4), through symbolism and spoken language (chapters 5 and 6), to jokes, dreams and ‘personality’ (chapters 7 to 9). This last aspect I find particularly problematic: we would not consider describing a standard modern human personality. How, then, are we to generalise what the personality of all Neanderthals was like? Whilst this exercise is light-hearted in tone, I worry that, when read by a non-specialist, such observations quickly become translated into ‘fact’, especially when overlain with the scientific veneer of psychology.