

Liste erstellt am 2011-12-01

Literatur

Afrika

ASSOKO NDONG 2001

Alain Assoko Ndong, *Archéologie du peuplement Holocène de la Réserve de Faune de la Lopé, Gabon*. Dissertation ([Bruxelles 2001](#)).

PHILLIPSON 1997

David Phillipson, *Les migrations de populations bantues*. [Pour la Science – Dossier 1997](#), x, 92–97.

PHILLIPSON 2000

David Phillipson, *Die Wanderungen der Bantu-Völker*. [Spektrum der Wissenschaft – Dossier 2000](#), i, 88–93.

Im südlichen Afrika sprechen etwa 140 Millionen Menschen Bantu. Sprachwissenschaftliche und archäologische Indizien sprechen dafür, daß die ersten Sprecher des Bantu sich vor etwa 2300 Jahren aus einer Region im Norden auf den Weg machten.

Aktuell

BRASSARD 2011

Gilles Brassard, *The conundrum of secure positioning*. [nature 479 \(2011\)](#), 307–308.

Quantum information has been suggested as a means to prove beyond doubt a person's exact spatial position. But it turns out that all attempts to solve this problem using such an approach are doomed to failure.

GERARDIN 2011

Ylaine Gerardin, Tami Lieberman & Pieter van Dokkum, *Women: sexist fiction is alienating, Women: latent bias harms careers*. [nature 479 \(2011\)](#), 299.

In our view, it is distasteful to publish fiction that promulgates such sexist notions. The story places women and men in fundamentally different categories. Such bias can subvert the career path of women – something our community must get to grips with.

MICHAEL 2011

Andrew J. Michael, *Random variability explains apparent global clustering of large earthquakes*. [Geophysical Research Letters 38 \(2011\)](#), L21301.

[DOI:10.1029/2011GL049443](#).

[GeoResLet38-L21301-Supplement.pdf](#)

[1] The occurrence of 5 $M_w \geq 8.5$ earthquakes since 2004 has created a debate over whether or not we are in a global cluster of large earthquakes, temporarily raising risks above long-term levels. I use three classes of statistical tests to determine if the record of $M \geq 7$ earthquakes since 1900 can reject a null hypothesis of independent random events with a constant rate plus localized aftershock sequences. The data cannot reject this null

hypothesis. Thus, the temporal distribution of large global earthquakes is well-described by a random process, plus localized aftershocks, and apparent clustering is due to random variability. Therefore the risk of future events has not increased, except within ongoing aftershock sequences, and should be estimated from the longest possible record of events.

SMITH 2011

Roff Smith, *Lost World*. [nature 479 \(2011\), 287–289](#).

Did a giant impact 200 million years ago trigger a mass extinction and pave the way for the dinosaurs?

The CAMP events produced 2 million cubic kilometres of basalt or more, in a series of pulses that alternated between cooling the climate with sulphurous haze and warming it with massive emissions of carbon dioxide and methane. The oceans grew acidic and parts became starved of oxygen, while on land a surge in lightning sparked extensive fires¹. Many of Earth's life forms simply couldn't recover from that succession of body blows, says McHone.

It's a plausible theory, as Olsen and Kent both readily concede – even, perhaps, the most likely one. All the same, the CAMP theory leaves a lot of unanswered questions, not least of which is the suddenness of the extinctions. The late-Triassic eruptions span hundreds of thousands of years, but the dieoffs seem swift in the fossil record.

More troublingly, the Rochechouart impact doesn't seem to have been anywhere near big enough to have accounted for the mass extinctions around the globe – at least, not on its own. The 25-kilometre-wide buried crater may have been 40 to 50 kilometres across originally, but it is just a pockmark in comparison with the 180-kilometre-wide scar at Chicxulub. “Based on our estimates, Rochechouart is quite small in terms of global environmental consequences,” says Collins.

Anthropologie

BENAZZI 2011

Stefano Benazzi et al., *Early dispersal of modern humans in Europe and implications for Neanderthal behaviour*. [nature 479 \(2011\), 525–528](#).

[n479-0525-Supplement.pdf](#)

Stefano Benazzi, Katerina Douka, Cinzia Fornai, Catherine C. Bauer, Ottmar Kullmer, Jiří Svoboda, Ildikó Pap, Francesco Mallegni, Priscilla Bayle, Michael Coquerelle, Silvana Condemi, Annamaria Ronchitelli, Katerina Harvati & Gerhard W. Weber

The appearance of anatomically modern humans in Europe and the nature of the transition from the Middle to Upper Palaeolithic are matters of intense debate. Most researchers accept that before the arrival of anatomically modern humans, Neanderthals had adopted several ‘transitional’ technocomplexes. Two of these, the Uluzzian of southern Europe and the Chaëtelperronian of western Europe, are key to current interpretations regarding the timing of arrival of anatomically modern humans in the region and their potential interaction with Neanderthal populations. They are also central to current debates regarding the cognitive abilities of Neanderthals and the reasons behind their extinction¹⁻⁶. However, the actual fossil evidence associated with these assemblages is scant and fragmentary⁷⁻¹⁰, and recent work has questioned the attribution of the Chaëtelperronian to Neanderthals on the basis of taphonomic mixing and lithic analysis^{11,12}. Here we reanalyse the deciduous molars from the Grotta del Cavallo (southern Italy), associated with the Uluzzian and originally classified as Neanderthal^{13,14}. Using two independent morphometric methods based on microtomographic data, we show that the Cavallo specimens can be attributed to anatomically modern humans. The secure context of the teeth provides crucial evidence that the makers of the Uluzzian technocomplex were therefore not Neanderthals. In addition, new chronometric data for the Uluzzian layers of Grotta del Cavallo

obtained from associated shell beads and included within a Bayesian age model show that the teeth must date to 45,000-43,000 calendar years before present. The Cavallo human remains are therefore the oldest known European anatomically modern humans, confirming a rapid dispersal of modern humans across the continent before the Aurignacian and the disappearance of Neanderthals.

HIGHAM 2011

Tom Higham et al., *The earliest evidence for anatomically modern humans in northwestern Europe*. [nature 479 \(2011\), 521–524](#).

[n479-0521-Supplement.pdf](#)

Tom Higham, Tim Compton, Chris Stringer, Roger Jacobi, Beth Shapiro, Erik Trinkaus, Barry Chandler, Flora Gröning, Chris Collins, Simon Hillson, Paul O’Higgins, Charles FitzGerald & Michael Fagan

The earliest anatomically modern humans in Europe are thought to have appeared around 43,000-42,000 calendar years before present (43-42 kyr cal BP), by association with Aurignacian sites and lithic assemblages assumed to have been made by modern humans rather than by Neanderthals. However, the actual physical evidence for modern humans is extremely rare, and direct dates reach no farther back than about 41-39 kyr cal BP, leaving a gap. Here we show, using stratigraphic, chronological and archaeological data, that a fragment of human maxilla from the Kent’s Cavern site, UK, dates to the earlier period. The maxilla (KC4), which was excavated in 1927, was initially diagnosed as Upper Palaeolithic modern human¹. In 1989, it was directly radiocarbon dated by accelerator mass spectrometry to 36.4-34.7 kyr cal BP². Using a Bayesian analysis of new ultrafiltered bone collagen dates in an ordered stratigraphic sequence at the site, we show that this date is a considerable underestimate. Instead, KC4 dates to 44.2- 41.5 kyr cal BP. This makes it older than any other equivalently dated modern human specimen and directly contemporary with the latest European Neanderthals, thus making its taxonomic attribution crucial. We also show that in 13 dental traits KC4 possesses modern human rather than Neanderthal characteristics; three other traits show Neanderthal affinities and a further seven are ambiguous. KC4 therefore represents the oldest known anatomically modern human fossil in northwestern Europe, fills a key gap between the earliest dated Aurignacian remains and the earliest human skeletal remains, and demonstrates the wide and rapid dispersal of early modern humans across Europe more than 40 kyr ago.

LUCAS 2011

Peter W. Lucas, *Cooking clue to human dietary diversity*. [PNAS 108 \(2011\), 19101–19102](#).

If cooking were to be proven an ancient practice, which these authors have continually contended, this becomes some of the most important scientific research of recent decades because these new experiments now establish how sufficient energy might have been obtained to sustain the metabolic cost of an enlarged brain. Thus, there is no doubt that this exciting research should be continued. However, there are some worries. What if other species should take up cooking? It has already been argued that another species, *Homo neanderthalensis*, did so. These creatures are no longer with us, but whatever direction this research goes in, cooking lessons for other species would seem inadvisable and the circulation of PNAS issues should remain intraspecific.

MELLARS 2011

Paul Mellars, *The earliest modern humans in Europe*. [nature 479 \(2011\), 483–485](#).

The reanalysis of findings from two archaeological sites calls for a reassessment of when modern humans settled in Europe, and of Neanderthal cultural achievements.

Benazzi et al. conclude that the teeth are distinctively modern human, and not Neanderthal. If so, this casts radically new light on the true significance of the much-debated Uluzzian industries of the Italian peninsula. As the authors point out, this evidence³ further weakens previously proposed arguments that European Neanderthals independently invented many distinctively ‘modern’ cultural features without any contacts with or input from intrusive modern human populations.

RAND 2011

David G. Rand, Samuel Arbesman & Nicholas A. Christakis, *Dynamic social networks promote cooperation in experiments with humans*. [PNAS 108 \(2011\), 19193–19198](#).

Human populations are both highly cooperative and highly organized. Human interactions are not random but rather are structured in social networks. Importantly, ties in these networks often are dynamic, changing in response to the behavior of one’s social partners. This dynamic structure permits an important form of conditional action that has been explored theoretically but has received little empirical attention: People can respond to the cooperation and defection of those around them by making or breaking network links. Here, we present experimental evidence of the power of using strategic link formation and dissolution, and the network modification it entails, to stabilize cooperation in sizable groups. Our experiments explore large-scale cooperation, where subjects’ cooperative actions are equally beneficial to all those with whom they interact. Consistent with previous research, we find that cooperation decays over time when social networks are shuffled randomly every round or are fixed across all rounds. We also find that, when networks are dynamic but are updated only infrequently, cooperation again fails. However, when subjects can update their network connections frequently, we see a qualitatively different outcome: Cooperation is maintained at a high level through network rewiring. Subjects preferentially break links with defectors and form new links with cooperators, creating an incentive to cooperate and leading to substantial changes in network structure. Our experiments confirm the predictions of a set of evolutionary game theoretic models and demonstrate the important role that dynamic social networks can play in supporting large-scale human cooperation.

collective action | economic games | evolutionary game theory | homophily | reciprocity

Biologie

CARMODY 2011

Rachel N. Carmody, Gil S. Weintraub & Richard W. Wrangham, *Energetic consequences of thermal and nonthermal food processing*. [PNAS 108 \(2011\), 19199–19203](#).

Processing food extensively by thermal and nonthermal techniques is a unique and universal human practice. Food processing increases palatability and edibility and has been argued to increase energy gain. Although energy gain is a well-known effect from cooking starch-rich foods, the idea that cooking meat increases energy gain has never been tested. Moreover, the relative energetic advantages of cooking and nonthermal processing have not been assessed, whether for meat or starch-rich foods. Here, we describe a system for characterizing the energetic effects of cooking and nonthermal food processing. Using mice as a model, we show that cooking substantially increases the energy gained from meat, leading to elevations in body mass that are not attributable to differences in food intake or activity levels. The positive energetic effects of cooking were found to be superior to the effects of pounding in both meat and starch-rich tubers, a conclusion further supported by food preferences in fasted animals. Our results indicate significant contributions

from cooking to both modern and ancestral human energy budgets. They also illuminate a weakness in current food labeling practices, which systematically overestimate the caloric potential of poorly processed foods.

caloric value | nutrition label | weight | energy balance | human evolution

FREIDIN 2011

Esteban Freidin & Alex Kacelnik, *Rational Choice, Context Dependence, and the Value of Information in European Starlings (*Sturnus vulgaris*)*. [science 334 \(2011\), 1000–1002](#).

s334-1000-Supplement.pdf

Both human and nonhuman decision-makers can deviate from optimal choice by making context-dependent choices. Because ignoring context information can be beneficial, this is called a “less-is-more effect.” The fact that organisms are so sensitive to the context is thus paradoxical and calls for the inclusion of an ecological perspective. In an experiment with starlings, adding cues that identified the context impaired performance in simultaneous prey choices but improved it in sequential prey encounters, in which subjects could reject opportunities in order to search instead in the background. Because sequential prey encounters are likely to be more frequent in nature, storing and using contextual information appears to be ecologically rational on balance by conditioning acceptance of each opportunity to the relative richness of the background, even if this causes context-dependent suboptimal preferences in (less-frequent) simultaneous choices. In ecologically relevant scenarios, more information seems to be more.

GIRALDEAU 2011

Luc-Alain Giraldeau, *When More Is More*. [science 334 \(2011\), 910–911](#).

Whether contextual information is helpful in making decisions depends on the situation.

By showing that the less-is-more effect disappears in sequential choice, Freidin and Kacelnik argue that the effect may simply be a by-product of an unnatural simultaneous choice situation. They may be correct, but their birds’ decision-making was still far from perfect, even if they did better using contextual information in the sequential choice trials.

This type of qualitative support, but quantitative failure, has been the hallmark of almost every test of optimal foraging models in behavioral ecology. Thus, using Freidin and Kacelnik’s own logic, some important natural component of a starling’s decision process may have been overlooked in the study. Many social animals, including starlings, use information gained by observing the successes and misfortunes of their companions when choosing among options. Perhaps the behavior of others provides readily accessible contextual information that would further improve the starlings’ performance in sequential decisions. Future research on decision-making should no longer ignore the social information component.

Grundlagen

MALINOWSKI 1939

Bronislaw Malinowski, *The Group and the Individual in Functional Analysis*. [American Journal of Sociology 44 \(1939\), 938–938](#).

The leitmotiv of sociological theory and research is “individual, group, and their mutual dependence.” Since functional sociology includes not merely the emotional and the biological aspects of mental processes but also man’s biological reality, the bodily needs, the environmental influences, and the cultural reactions to them must be studied side by side. Not only does the individual depend upon the group in whatever he achieves, but the group in all its individual members depends upon the development of a material outfit

which, in its essence, is an addition to the human anatomy and which entails corresponding modifications of human physiology. The relation is not of the individual to society or the group but to a plurality of groups. Analysis of a society into aspects and into institutions must be carried out simultaneously if a complete understanding of that society is desired. The analysis of such aspects as economics, education or social control, and political organization defines the type and level of the characteristic activities in a culture, discloses the totality of motives, interests, and values of the individual, and gives insight into the whole process by which the individual is conditioned or culturally formed, and of the group mechanism of this process. The analysis into institutions gives the concrete picture of the social organization within the culture. The twofold approach through the study of the individual with his innate tendencies and their cultural transformation and the study of the group as the relation and coordination of individuals with reference to space, environment, and material equipment is necessary. Symbolism, which is in essence that modification of the human organism which allows it to transform the physiological drive into a cultural value, must make its appearance with the earliest appearance of human culture. Symbols are necessary for communication, for the incorporation of an effective element into a culture, for its transmission, and for the recognition of its value.

Klima

CLEGG 2011

Benjamin F. Clegg, Ryan Kelly, Gina H. Clarke, Ian R. Walker & Feng Sheng Hu, *Nonlinear response of summer temperature to Holocene insolation forcing in Alaska*. [PNAS](#) **108** (2011), 19299–19304.

[pnas108-19299-Supplement1.xls](#), [pnas108-19299-Supplement2.xls](#), [pnas108-19299-Supplement3.xls](#)

Regional climate responses to large-scale forcings, such as precessional changes in solar irradiation and increases in anthropogenic greenhouse gases, may be nonlinear as a result of complex interactions among earth system components. Such nonlinear behaviors constitute a major source of climate “surprises” with important socioeconomic and ecological implications. Paleorecords are key for elucidating patterns and mechanisms of nonlinear responses to radiative forcing, but their utility has been greatly limited by the paucity of quantitative temperature reconstructions. Here we present Holocene July temperature reconstructions on the basis of midge analysis of sediment cores from three Alaskan lakes. Results show that summer temperatures during 10,000–5,500 calibrated years (cal) B.P. were generally lower than modern and that peak summer temperatures around 5,000 were followed by a decreasing trend toward the present. These patterns stand in stark contrast with the trend of precessional insolation, which decreased by $\approx 10\%$ from 10,000 y ago to the present. Cool summers before 5,500 cal B.P. coincided with extensive summer ice cover in the western Arctic Ocean, persistence of a positive phase of the Arctic Oscillation, predominantly La Nina-like conditions, and variation in the position of the Alaskan treeline. These results illustrate nonlinear responses of summer temperatures to Holocene insolation radiative forcing in the Alaskan sub-Arctic, possibly because of state changes in the Arctic Oscillation and El Niño-Southern Oscillation and associated land-atmosphere-ocean feedbacks.

Chironomidae | paleotemperature | climate change | high latitudes | land-ocean-atmosphere interaction

KINNARD 2011

Christophe Kinnard, Christian M. Zdanowicz, David A. Fisher, Elisabeth Isaksson, Anne de Vernal & Lonnie G. Thompson, *Reconstructed changes in Arctic sea ice over the past 1,450 years*. [nature](#) **479** (2011), 509–512.

n479-0509-Supplement.pdf, n479-0509-Supplement.zip

Arctic sea ice extent is now more than two million square kilometres less than it was in the late twentieth century, with important consequences for the climate, the ocean and traditional lifestyles in the Arctic^{1,2}. Although observations show a more or less continuous decline for the past four or five decades^{3,4}, there are few long-term records with which to assess natural sea ice variability. Until now, the question of whether or not current trends are potentially anomalous⁵ has therefore remained unanswerable. Here we use a network of high-resolution terrestrial proxies from the circum-Arctic region to reconstruct past extents of summer sea ice, and show that – although extensive uncertainties remain, especially before the sixteenth century – both the duration and magnitude of the current decline in sea ice seem to be unprecedented for the past 1,450 years. Enhanced advection of warm Atlantic water to the Arctic⁶ seems to be the main factor driving the decline of sea ice extent on multidecadal timescales, and may result from nonlinear feedbacks between sea ice and the Atlantic meridional overturning circulation. These results reinforce the assertion that sea ice is an active component of Arctic climate variability and that the recent decrease in summer Arctic sea ice is consistent with anthropogenically forced warming.

SIROCKO 2009

Frank Sirocko, Bernd Kromer & Heini Wernli, *Ursachen von Klimavariabilität in der Vergangenheit*. In: FRANK SIROCKO (Hrsg.), *Wetter, Klima, Menschheitsentwicklung, Von der Eiszeit bis ins 21. Jahrhundert*. (Darmstadt 2009), 53–59.

Kultur

ARTHUR 2011

Ronan Arthur & Jared Diamond, *Understanding Tribal Fates*. *science* **334** (2011), 911–912.

Geographic and cultural factors help to explain the population explosion of Navajos among Native Americans.

Methoden

KOKKOTIDIS 1991

Klaus Georg Kokkotidis & Jürgen Richter, *Gräberfeld-Sterbetafeln*. *Archäologische Informationen* **14** (1991), 219–253.

Demographische Fragestellungen und Methoden finden mehr und mehr Eingang in die prähistorische Forschung. Für die Demographie prähistorischer Populationen gelten jedoch eine ganze Reihe von Sonderbedingungen, von denen einige vorgestellt und diskutiert werden. Dabei erweist sich, daß noch eine ganze Reihe methodischer Instrumente gefunden und entwickelt werden muß, um zu Verfahren zu gelangen, die vergleichbare Ergebnisse gewährleisten. Die pauschale Kritik („Es war einmal: Paläodemographie“), die kürzlich von Bocquet-Appel (1986) geäußert wurde, verstehen wir als Aufforderung, möglichst viel Fehler-Effekte zu isolieren und nach Lösungswegen zu suchen. Hierzu möchten wir beitragen und anregen.

Neolithikum

BEHRE 2007

Karl-Ernst Behre, *Evidence for Mesolithic agriculture in and around central Europe?* [Vegetation History and Archaeobotany](#) **16** (2007), 203–219.

A critical assessment of the data recently put forward in favour of a ‘Mesolithic agriculture’ for Central and Northern Europe is presented. The archaeobotanical record is quite clear: hundreds of excavations of early Neolithic sites, whether from Linearbandkeramik or Trichterbecher (funnel beaker) settlements have produced remains of cultivated plants in large numbers. In contrast to this, all Mesolithic sites excavated so far have not revealed even one macroscopic find of crop plants. The ‘Mesolithic agriculture’ as assumed by several authors, is based solely on single pre-Neolithic pollen grains of the Cerealia-type that occur in pollen diagrams. It is shown that absolute distinction of pollen from wild grasses and cereals is impossible. There is a certain overlapping of both types that must not be neglected. Because of the large pollen sums in modern pollen diagrams, even very scarce grains of Cerealia-type pollen are encountered. Most of these single pre-Neolithic grains must derive from native wild grasses, while others come by long-distance transport etc. Another important feature is the scattered occurrence of Cerealia-type pollen grains from the early Holocene (or even Pleistocene) to the start of the Neolithic. They do not occur in synchronous phases and even in neighbouring sites they do not agree in age. As long as there are no well-dated macro-remains of crop plants of pre-Neolithic age, there is no evidence of Mesolithic agriculture.

Keywords: Pollen analysis | Mesolithic agriculture | Cereals | Neolithic | Europe

BOGAARD 2002

Amy Bogaard, *Questioning the relevance of shifting cultivation to Neolithic farming in the loess belt of Europe: evidence from the Hambach Forest experiment.* [Vegetation History and Archaeobotany](#) **11** (2002), 155–168.

Despite widespread criticism, the shifting cultivation model continues to inform discussion of Neolithic farming in Europe, beginning with early Neolithic (Linearbandkeramik or LBK) communities concentrated in the loess belt of western-central Europe. Hundreds of LBK and later Neolithic sites have been excavated in this region and many of them sampled for charred plant remains. Archaeobotanical data on the weed floras harvested with crops provide the most direct archaeological evidence of crop husbandry practices, including the permanence of crop fields, but have played a limited role in the debate over shifting cultivation. The Hambach Forest experiment, conducted in the 1970s-80s near Cologne, Germany, provides valuable comparative data on the weed floras growing in newly cleared cultivation plots in an area of long-lived mixed oak woodland on loess-based soil. Correspondence analysis of the Hambach weed survey data suggests that weed floras of fields managed under a shifting cultivation regime would be rich in perennial species, including woodland perennials. Comparison of these results with Neolithic weed assemblages from the loess belt of western-central Europe strongly suggests that Neolithic crop fields were not recently cleared of woodland vegetation but were long-established.

Keywords: Shifting cultivation | Hambach Forest | Experimental cultivation | Archaeobotany | Weed ecology

BOGAARD 2005

Amy Bogaard, *‘Garden agriculture’ and the nature of early farming in Europe and the Near East.* [World Archaeology](#) **37** (2005), 177–196.

This paper takes a comparative approach to early farming, arguing that bioarchaeological work on Neolithic Europe can inform understanding of earlier cultivation and herding in the Near East, where the ‘package’ of crops and livestock emerged in the PPNB period. Evidence for intensive cultivation (‘garden agriculture’) integrated with small-scale

herding is outlined for south-east and central Europe before turning to crop and caprine husbandry practices during the PPNB. It is concluded that integration of small-scale cultivation and herding during the PPNB facilitated the spread of agriculture to Europe. Keywords: Neolithic; south-east Europe; central Europe; Near East; crop husbandry; animal husbandry

KREUZ 2005

Angela Kreuz, Elena Marinova, Eva Schäfer & Julian Wiethold, *A comparison of early Neolithic crop and weed assemblages from the Linearbandkeramik and the Bulgarian Neolithic cultures: differences and similarities*. *Vegetation History and Archaeobotany* **14** (2005), 237–258.

The spread of early agriculture from the Mediterranean to central Europe is still poorly understood. The new subsistence reached western central Europe during the second half of the 6th millennium cal b.c. This paper presents a comparison of crop and weed species from 33 Bandkeramik sites from Austria and Germany and six Bulgarian Neolithic sites. The aim is to investigate whether the early cultivation system brought in from the eastern Mediterranean was adapted to European conditions in Bulgaria or further West. Some characteristics of the potential weeds are interpreted with respect to the cultivation systems and the origin of the species.

Keywords: Early Neolithic | Bulgaria | Germany | Austria | Cultivation systems | Weeds

SCHARL 2004

Silviane Scharl, *Die Neolithisierung Europas, Ausgewählte Modelle und Hypothesen*. Würzburger Arbeiten zur Prähistorischen Archäologie 2 (Rahden 2004).

Religion

VEIT 1988

Ulrich Veit, *Des Fürsten neue Schuhe, Überlegungen zum Befund von Hochdorf*. *Germania* **66** (1988), 162–169.

Story or Book

GAMBLE 2011

Clive Gamble, *Neanderthals in mind*. *nature* **479** (2011), 294–295.

Clive Gamble relishes the inside story on the cognitive abilities of our fossil relatives. *How To Think Like a Neandertal*. Thomas Wynn And Frederick L. Coolidge. Oxford University Press: 2011. 224 pp. £ 16.99, \$ 24.99

They list nine Neanderthal personality traits. On the negative side, they read the archaeological and fossil evidence as indicating that Neanderthals were xenophobic, resistant to change and dogmatic – direct, but also laconic and unimaginative. The lack of imagination is shown, for instance, in their unchanging tool designs; wariness and xenophobia are indicated by their high mortality rate and interpersonal violence; and their laconic approach is suggested by the fact that they rarely travelled out of their home territory. On the plus side, the evidence points to Neanderthals as supremely pragmatic, stoic, risk-tolerant when it came to getting food, and both sympathetic and empathetic, caring for disabled individuals in their communities. Wynn and Coolidge conclude that today, Neanderthals would be commercial fishermen or mechanics, based on their enormous strength and ability to learn the motor procedures needed. Their capacity for empathy might even have made them competent physicians, the authors say.

VEIL 1991

Stephan Veil, *Das Rätsel der Menschwerdung*. [Archäologische Informationen 14 \(1991\), 288–290](#).

Das Rätsel der Menschwerdung. Die Entstehung des Menschen im Wechselspiel mit der Natur. Josef H. Reichholf, Deutsche Verlagsanstalt. Stuttgart 1990

Nach einer ersten Expansion des Frühmenschen *Homo erectus* ab etwa 1 Mill. Jahre von Ostafrika nach Eurasien, fand vor etwa 100.000 Jahren eine letzte Auswanderungswelle statt, die den in Afrika entstandenen anatomisch modernen Menschen nach Europa und in alle Erdteile führte. Interessant ist die Erklärung, die der Verfasser für diesen letzten Exodus anbietet. Eine durch Klimaänderungen verursachte Ausbreitung der Tsetsefliege, die die berüchtigte Schlafkrankheit überträgt, in den Savannengebieten Ostafrikas soll Anlaß für die Auswanderung gewesen sein. Die Tsetsefliege hatte viel früher auch Anpassungen der afrikanischen Pferde, nämlich Zebrastrifen hervorgerufen. Leider gibt es in den letzten Kapiteln zu dieser Thematik einige Unstimmigkeiten mit kulturellen Erscheinungen und ihrer Datierung. Da ist von Landwirtschaft im Zusammenhang mit dem frühen anatomisch modernen Menschen in Afrika die Rede, was zur Zeit archäologisch wohl kaum belegbar ist, da wird das Ende des Neandertalers (vor etwa 30.000 Jahren) mit dem Ende der Eiszeit und ihrer Großtierwelt (10.000 Jahre) in Verbindung gebracht. Schließlich wird der – wengleich publikumswirksame und für Spannung sorgende – Bogen leicht überspannt, wenn der Verfasser die “Genesis” der Bibel unterschwellig im Kern (Vertreibung aus dem ostafrikanischen Paradies, wo Milch [Nomadismus ?] und Honig fließen -) mit dem Auftreten des modernen Menschen in Nahost und Europa verknüpft, das immerhin, wenn die neuesten Datierungen aus Palästina zutreffen 80.000 Jahre (!) vor der schriftlichen Fixierung des Bibeltextes liegt. Trotz der ärgerlichen Unstimmigkeiten im letzten Teil des Buches ist es dem Verfasser insgesamt gelungen, einen Überblick über das Geschehen der Menschwerdung zu vermitteln und die sonst selten so plakativ herausgestellten Zusammenhänge zwischen Klima und Evolution, zwischen Mensch und Umwelt, letztlich den Menschen als Teil der Natur zu beschreiben.