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Literatur

Aktuell

Couzin-Frankel 2013

Jennifer Couzin-Frankel, *Shaking Up Science*. science **339** (2013), 386–389.

Two journal editors take a hard look at honesty in science and question the ethos of their profession.

Fang and Casadevall have given much thought to what's behind bad behavior. Both now detect signs of a system they consider flawed. For example, faculty applicants to their respective departments are invited for interviews only if they've been first authors on a publication in a high-profile journal. "We defer to the editors of Science and Nature to tell us what's good," Casadevall laments. These days, "you get a finding and the whole discussion is not about the finding, it's where you're going to publish."

Earp 2013

Brian D. Earp, *It's OK to criticize religious practices*. The Philosophers' Magazine (2013), preprint, 1–4.

In 2012, a German court ruled that religious circumcision of male minors constitutes criminal bodily assault. Muslim and Jewish groups responded with outrage, with some commentators pegging the ruling to Islamophobic and anti-Semitic motivations. In doing so, these commentators failed to engage with any of the legal and ethical arguments actually given by the court in its landmark decision. In this brief commentary, I argue that a firm distinction must be drawn between criticisms of religious practices that stem from irrational prejudice and bigoted attitudes and those that are grounded in sound moral reasoning. Given that ritual circumcision is a pre-Enlightenment custom that elevates the inclinations of the community over the rights of the individual, it is hardly surprising that a growing number of post-Enlightenment philosophers and legal scholars are taking an ethical stand against it. As the "circumcision debate" continues, parties on all sides of the issue must take care to reason through the relevant considerations with care and respect.

KEYWORDS: circumcision, Cologne, religion, Islamophobia, anti-Semitism, ethics

There is absolutely no good reason to think that we must refrain at all times from criticizing an idea or custom just because it is rooted in religion. Indeed, sometimes we have an obligation to do the opposite. We do have to have the debate. Criticizing a religious practice from the perspective of secular ethics is not the same thing as being prejudiced against the religion, nor does it imply any sort of ill-will toward members of a particular faith group. This distinction bears repeating at every turn. We simply have to be able to talk these things through.

Kwok 2013

Roberta Kwok, *Two minutes to impress*. nature **494** (2013), 137–138.

With ruthless revision, researchers can compose a punchy 'elevator speech' to sell their science to a neighbour, potential employer or politician.

Miller 2013

Greg Miller, *The Promise and Perils of Oxytocin*. science **339** (2013), 267–269.

Is oxytocin the next revolution in psychiatric medicine—or an overhyped hormone that could make some patients worse?

Rosner 2013

Hillary Rosner, *Survival of the flexible*. nature **494** (2013), 22–23.

Many tropical species never experience extreme heat or cold. That may doom them in a warming world.

Janzen's pivotal idea came to him in the mid-1960s, when the young ecologist at the University of Kansas in Lawrence was travelling around Costa Rica with 20 US students and a Costa Rican assistant. The trip began in the assistant's home city of San José, which had a 'bland' climate that was, Janzen says, "not too hot, too cold, too wet or too dry". From there, they travelled to a dry tropical forest at sea level, where the weather was hotter. During a lecture, Janzen saw sweat pouring off his assistant. "And I looked at the students and none of them was sweating," says Janzen. Later, when the group moved to a field station at 3,000 metres elevation in the cold, wet cloud forest, Janzen saw his assistant "sitting with piles of blankets on him. Everyone else was sitting there in khakis. I realized this guy has spent his life in San José, which is like sitting in a climate-controlled cabinet." "The thought hit me," says Janzen, "that all these tropical animals and plants around me are living in whatever their temperature regime is. And it stays that way." He reasoned that because tropical species are not exposed to seasonal extremes, they are locked into relatively narrow temperature ranges at specific elevations in the mountains. That prevents most of the creatures from spreading over mountains into adjacent valleys, which limits the flow of genes and increases the overall biodiversity in the tropics, he said.

Energie

Kopetz 2013

Heinz Kopetz, *Build a biomass energy market*. nature **494** (2013), 29–31.

Governments must offer incentives to drive a switch to biofuels and other renewables, argues Heinz Kopetz.

Critics often argue that the development of biofuels for transportation has caused more hunger in the world by eating up land that could be used to produce food, but there is little scientific evidence of that. In fact, the development of bioenergy goes hand in hand with increased investment and higher productivity in agriculture and forestry. And because many of the byproducts are protein-rich, it could actually improve the food supply.

In sum, by 2035, biomass could deliver 120 exajoules (50 % of the world's needs) for heat, 15 exajoules for transport and 18 exajoules (7 %) for electricity. Altogether that is one-quarter of the global energy needs — assuming that the growth in energy consumption slows down with the improved efficiency.

Mathematik

Fowler 2013

James H. Fowler & Nicholas A. Christakis, *A random world is a fair world*. PNAS **110** (2013), 2440–2441.

Rand 2013

David G. Rand, Corina E. Tarnita, Hisashi Ohtsuki & Martin A. Nowak, *Evolution of fairness in the one-shot anonymous Ultimatum Game*. PNAS **110** (2013), 2581–2586.

Classical economic models assume that people are fully rational and selfish, while experiments often point to different conclusions. A canonical example is the Ultimatum Game: one player proposes a division of a sum of money between herself and a second player, who either accepts or rejects. Based on rational self-interest, responders should accept any nonzero offer and proposers should offer the smallest possible amount. Traditional, deterministic models of evolutionary game theory agree: in the one-shot anonymous Ultimatum Game, natural selection favors low offers and demands. Experiments instead show a preference for fairness: often responders reject low offers and proposers make higher offers than needed to avoid rejection. Here we show that using stochastic evolutionary game theory, where agents make mistakes when judging the payoffs and strategies of others, natural selection favors fairness. Across a range of parameters, the average strategy matches the observed behavior: proposers offer between 30 % and 50 %, and responders demand between 25 % and 40 %. Rejecting low offers increases relative payoff in pairwise competition between two strategies and is favored when selection is sufficiently weak. Offering more than you demand increases payoff when many strategies are present simultaneously and is favored when mutation is sufficiently high. We also perform a behavioral experiment and find empirical support for these theoretical findings: uncertainty about the success of others is associated with higher demands and offers; and inconsistency in the behavior of others is associated with higher offers but not predictive of demands. In an uncertain world, fairness finishes first.

cooperation | prosociality | stochastic dynamics

Mittelpaläolithikum

Burjachs 2012

Francesc Burjachs et al., *Palaeoecology of Neanderthals during Dansgaarde-Oeschger cycles in northeastern Iberia (Abric Romaní): From regional to global scale*. Quaternary International **247** (2012), 26–37.

Francesc Burjachs, Juan Manuel López-García, Ethel Allué, Hugues-Alexandre Blain, Florent Rivals, Maria Bennàsar & Isabel Expósito

The sequence from Abric Romaní has provided several palaeoecological studies. This paper presents a synthesis of the results yielded by palynology, including the data from the entire non-excavated deposits, and the data obtained through the study of large mammals, micromammals, herpetofauna, and anthracology from the excavated layers. The palaeobotanical studies show that the sequence is mainly related to pine forests, and near or within these dominant forests there were smaller plant formations and/or secondary species with a Mediterranean and/or Atlantic character. Nevertheless, continuous forest did not dominate the entire region. The fauna occupying the territory indicate open spaces in which seasonal grasslands proliferated, dry assemblages in sunny areas and humid ones in mountain shadows. The non-excavated archaeological layers correspond to MIS 4, initially characterized by temperate and humid conditions, and thereafter cool and humid until HS 6 and MIS 3. Afterwards, at the beginning of the MIS 3, the DansgaardeOeschger cycles, ≈1500 yr rapid and abrupt climatic changes, occurred during the deposition of the archaeological levels O, N, M, L, K and J. Later, these events were interrupted by a cold and dry phase, between ca 49 and 47 ka BP,

which affected levels Ja, I and H, culminating with HS 5. Finally, this cold episode was followed by the Hengelo interstadial or DO 12, characterized by a temperate and humid climate identified in levels E and D.

López-García 2012

Juan Manuel López-García et al., *A multidisciplinary approach to reconstructing the chronology and environment of southwestern European Neanderthals: The contribution of Teixoneres cave (Moià, Barcelona, Spain).* Quaternary Science Reviews **43** (2012), 33–44.

Juan Manuel López-García, Hugues-Alexandre Blain, Francesc Burjachs, Anna Ballesteros, Ethel Allué, Gloria Ericka Cuevas-Ruiz, Florent Rivals, Ruth Blasco, Juan Ignacio Morales, Antonio Rodríguez Hidalgo, Eudald Carbonell, David Serrat & Jordi Rosell

According to pollen analysis and the 18O-isotope curve, the first part of the Late Pleistocene (ca 128–30 ka) is mainly characterized by a dynamic that alternates cold phases (Heinrich Events) and temperate phases (interstadials). These rapid fluctuations provide the context for the Neanderthal occupations in the northeastern part of the Iberian Peninsula. In this paper we present the chronological, environmental and climatic data obtained by analyzing the pollen, the charcoal, the small vertebrates (amphibians, squamates and small mammals) and the large-mammal dental wear at the Neanderthal site of Teixoneres cave, Northeastern Iberia. Levels II and III from this cavity have provided Mousterian industries and other evidence of Neanderthal occupations, such as cut-marks in large-mammal bones. A multiproxy study such as this constitutes a new approach to the chronological, environmental and climatic context in which Neanderthal populations lived in southwestern Europe (Iberian Peninsula). The results allow us to establish a relative chronology for these two levels of between ca 30–90 ka and show that they are associated with different environmental and climatic conditions: temperate and humid for Level III and cold and dry for Level II. This demonstrates that the Neanderthals were well adapted to the territory that they occupied, irrespective of the climatic conditions.

Keywords: Pollen | Charcoal | Herpetofauna | Small and large mammals | Biochronology | Paleoenvironment | Paleoclimate | Neanderthals | Southwestern Europe