

Literatur

Aktuell

DRDLA-SCHUTTING 2012

Ruth Drdla-Schutting, Justus Benrath, Gabriele Wunderbaldinger & Jürgen Sandkühler, *Erasure of a Spinal Memory Trace of Pain by a Brief, High-Dose Opioid Administration*. [science](#) **335** (2012), 235–235.

s335-0235-Supplement.pdf

Painful stimuli activate nociceptive C fibers and induce synaptic long-term potentiation (LTP) at their spinal terminals. LTP at C-fiber synapses represents a cellular model for pain amplification (hyperalgesia) and for a memory trace of pain. m-Opioid receptor agonists exert a powerful but reversible depression at C-fiber synapses that renders the continuous application of low opioid doses the gold standard in pain therapy. We discovered that brief application of a high opioid dose reversed various forms of activity-dependent LTP at C-fiber synapses. Depotentiation involved Ca²⁺-dependent signaling and normalization of the phosphorylation state of α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors. This also reversed hyperalgesia in behaving animals. Opioids thus not only temporarily dampen pain but may also erase a spinal memory trace of pain.

HALPERN 2012

Diane F. Halpern et al., *Single-Sex Education: Comments and Reply*. [science](#) **335** (2012), 165–168.

Single-Sex Education: Results One-Sided; Olen Anthony Kalkus

Single-Sex Education: Positive Effects; Hyunjoon Park, Jere R. Behrman, Jaesung Choi

Single-Sex Education: Unequal to Segregation; Burch Ford

Single-Sex Education: Parameters Too Narrow; Thomas G. Palaima

Response; Diane F. Halpern, Lise Eliot, Rebecca S. Bigler, Richard A. Fabes, Laura D. Hanish, Janet Hyde, Lynn S. Liben, Carol Lynn Martin

SLIMAK 2012

Ludovic Slimak et al., *Response to “Comment on Late Mousterian Persistence near the Arctic Circle”*. [science](#) **335** (2012), 167.

Ludovic Slimak, John Inge Svendsen, Jan Mangerud, Hugues Plisson, Herbjørn Presthus Heggen, Alexis Brugère & Pavel Yurievich Pavlov

Contrary to what Zwyns et al. claim on a bibliographical basis, the lithic industry of Byzovaya cannot belong to the Streletskayan complex or be considered as Upper Palaeolithic (UP). Direct analysis of northern assemblages and of Streletskayan technologies reveals incompatible features between these industries. Byzovaya is structured on specific Mousterian technologies and does not show any unique features of the UP.

ZWYNS 2012

Nicolas Zwyns, Wil Roebroeks, Shannon P. McPherron, Adam Jagich & Jean-Jacques Hublin, *Comment on “Late Mousterian Persistence near the Arctic Circle”*. [science](#) **335** (2012), 167.

Slimak et al. (Reports, 13 May 2011, p. 841) reanalyzed the lithic assemblage from the northern site of Byzovaya (Russia) and concluded that it was Mousterian and produced

by Neandertals. The previous interpretation of this assemblage as falling within Early Upper Paleolithic variability remains the most parsimonious explanation; pending additional fossil discoveries, there is no evidence supporting the occurrence of Neandertals at these high latitudes.

Amerika

BALTER 2012

Michael Balter, *The Peopling Of the Aleutians*. [science 335 \(2012\), 158–161](#). Few Aleuts still live in their ancestral homeland, but their genetics and archaeology offer a rare glimpse into one of humanity’s last great migrations-and into the mysterious peopling of the Americas

To some, the Aleuts’ maritime adaptations strengthen the idea that the first Americans were sea travelers (Science, 4 March 2011, p. 1122). “The Aleutians show that a coastal route is entirely reasonable,” says archaeologist Lucy Johnson of Vassar College in Poughkeepsie, New York. Others counter that the Aleutians were settled too late to have a bearing on the land-versus-sea debate. “I have great difficulty with this notion,” says archaeologist Don Dumond of the University of Oregon, Eugene.

Anthropologie

SPETH 1983

John D. Speth & Katherine A. Spielmann, *Energy Source, Protein Metabolism, and Hunter-Gatherer Subsistence Strategies*. [Journal of Anthropological Archaeology 2 \(1983\), 1–31](#).

During late winter and spring, hunter-gatherers in temperate, subarctic, and arctic environments often relied on diets that provided marginal or inadequate caloric intakes. During such periods, particularly when stored food supplies dwindled or were used up entirely, lean meat became the principal source of energy. Nutritional problems associated with high-protein, low-energy diets are discussed. These problems include elevated metabolic rates, with correspondingly higher caloric requirements, and deficiencies in essential fatty acids. The relative benefits of adding fat or carbohydrate to a diet of lean meat are evaluated in light of the protein-sparing capacities of these two nutrients. Experimental data indicate that although both enhance high-protein, low-energy diets, carbohydrate is a more effective supplement than fat. Given the nutritional inadequacies of a lean-meat diet, the paper concludes with a discussion of alternative subsistence strategies that increase the availability of carbohydrate or fat at the critical time of year.

Grundlagen

MULVILLE 2005

J. MULVILLE AND A. K. OUTRAM (Hrsg.), *The Zooarchaeology of Fats, Oils, Milk and Dairying, Proceedings of the 9th Conference of the International Council of Archaeozoology, Durham, August 2002*. ([Oxford 2005](#)).

Kultur

GRAEBER 2011

David Graeber, *Debt, The first 5000 years*. (Brooklyn, New York 2011). Every economics textbook says the same thing: Money was invented to replace onerous and complicated barter systems-to relieve ancient people from having to haul their goods to market. The problem with this version of history? There's not a shred of evidence to support it.

Here anthropologist David Graeber presents a stunning reversal of conventional wisdom. He shows that for more than 5,000 years, since the beginnings of the first agrarian empires, humans have used elaborate credit systems to buy and sell goods-that is, long before the invention of coins or cash. It is in this era, Graeber argues, that we also first encounter a society divided into debtors and creditors.

Graeber shows that arguments about debt and debt forgiveness have been at the center of political debates from Italy to China, as well as sparking innumerable insurrections. He also brilliantly demonstrates that the language of the ancient works of law and religion (words like "guilt,sin,ãnd redemption") derive in large part from ancient debates about debt, and shape even our most basic ideas of right and wrong. We are still fighting these battles today without knowing it.

KAHNEMAN 2003

Daniel Kahneman, *A Psychological Perspective on Economics*. [American Economic Review 93](#) (2003), ii, 162–168.

Whether or not psychologists find them odd and overly simple, the standard assumptions about the economic agent are in economic theory for a reason: they allow for tractable analysis. The constraint of tractability can be satisfied with somewhat more complex models, but the number of parameters that can be added is small. One consequence is that the models of behavioral economics cannot stray too far from the original set of assumptions. Another consequence is that theoretical innovations in behavioral economics may be destined to be noncumulative: when a new model is developed to account for an anomaly of the basic theory, the parameters that were modified in earlier models will often be restored to their original settings.

MCCAFFERY 2012

Edward J. McCaffery, *Cognitive Theory and Tax*. [UCLA Law Review 41](#) (2012), 1861–1947.

The simple thesis of this article is that cognitive theory, in particular, has much to offer the study of taxation, in both its positive and normative dimensions, and vice versa. Cognitive or behavioral decision theory is an outgrowth of cognitive psychology, which is in turn the study of how the mind works-of how human agents process information. Behavioral decision theorists such as Daniel Kahneman and Amos Tversky have been able to show that people think and decide in ways that have systematic biases and distortions. Two examples common to the literature help to illustrate the discipline. Under the “availability” heuristic, people are likely to overweigh the possibility of highly publicized events, such as airplane crashes. The “framing” effect refers to the fact that people react dramatically to the purely formal way in which a question is raised or asked. These two examples show that people’s subjective opinions, perceptions, and decisionmaking often differ systematically from sound objective criteria.

My central argument is that cognitive biases can help to explain major structural features of our existing tax system that are otherwise difficult to understand, and that such biases must be taken into account in developing any general normative theory of tax. This is different from more traditional psychological foci on taxpayer compliance, or general attitudes toward taxes and their relative fairness, or fiscal illusion.’ My idea is that cognitive

tendencies have played an important role in the evolution of our tax system, because the people, through democratic input and popular opposition, create powerful constraints on what practical tax systems can emerge. More specifically, cognitive tendencies can act in two ways. One is passive and evolutionary: Cognitively-favored tax systems are more apt to survive and become stable fixtures of a tax regime than are cognitively-disadvantaged ones. The second is active and conscious: Taxing authorities might seek to exploit cognitive biases in maximizing their revenue intake and minimizing popular opposition. It will often be impossible to say just which case applies, and the two may also apply at the same time. In any case, however, there are certain problems that a detached observer will confront in considering the relationship between cognitive theory and tax. The next section explores these issues.

Metallzeiten

COSACK 2011

Erhard Cosack, *Das Brotopfer aus dem Ipweger Moor, oder warum die vorgeschichtlichen Wagen nicht abgebrannt sind*. [Archäologisches Korrespondenzblatt 41 \(2011\), 507–520](#).

In the Ipweger Moor, northeast of the town Oldenburg, a part of a wooden walkway from around 713/712BC – on the verge to destruction – was examined in 1989. In due course immediately beneath the blanks an object was rescued which was interpreted as bread for its shape and the remains of cereal showing on its surface. Further analyses demonstrated that it was bees wax and prompted the reading of the object as bread imitation intended for sacrifices to the gods. In the presented study this interpretation has been reviewed. Upon the consideration of all findings a completely different reading has been found basing on a very realistic background.

Im nordöstlich der Stadt Oldenburg gelegenen Ipweger Moor musste 1989 der Teilbereich eines von der Zerstörung bedrohten Bohlenweges untersucht werden, der in die Zeit um 713/712 v. Chr. datiert. Dabei konnte direkt unter dessen Bohlen ein Fundobjekt geborgen werden, das wegen seiner Form und der sich in seiner Oberfläche abzeichnenden Getreidereste als Brot interpretiert worden ist. Bei weiteren Untersuchungen hat sich dessen Substanz dann als Bienenwachs erwiesen, worauf in diesem Fundstück ein Brotimitat als Opfer an die Götter gesehen wurde. Diese Interpretation ist in der vorliegenden Arbeit überprüft worden, wobei sich unter Abwägung aller Befunde eine gänzlich andere Deutung ergibt, die letztlich auf einem sehr realistischen Hintergrund beruht.