

## Literatur

### Aktuell

BUTZER 2012

Karl W. Butzer, *Reply to Pearson and Pearson: Reflections on historical vs. contemporary information*. [PNAS 109 \(2012\), E2032](#).

EDITORIAL 2012

*Error prone, Biologists must realize the pitfalls of work on massive amounts of data*. [nature 487 \(2012\), 406](#).

Much of this sloppy science comes from the pressure to generate ‘surprising’ results and to publish them quickly, even though they are more likely to be driven by errors than are findings that more or less follow from previous work. A researcher who reveals something exciting is more likely to get a high-profile paper (and a permanent position) than is someone who spends years providing solid evidence for something that everyone in the field expected to be true. This pressure extends throughout the careers of scientists, and is compounded by the preference of journals (including Nature) to publish significant findings – and of the media to report them.

GÖTTING 2011

Eva Götting, *Exportschlager Dämon? Zur Verbreitung altorientalischer Lamaštu-Amulette*. In: JANINA GÖBEL & TANJA ZECH (Hrsg.), *Exportschlager-Kultureller Austausch, wirtschaftliche Beziehungen und transnationale Entwicklungen in der antiken Welt, Humboldts Studentische Konferenz der Altertumswissenschaften 2009*. (Berlin 2011), 437–456.

Ziel des Artikels ist es, die geographisch-chronologische Verbreitung der Lamaštu-Darstellungen unter Berücksichtigung ihrer ikonographischen Entwicklung zu besprechen. Anhand dieser Untersuchung soll eine Aussage darüber getroffen werden, ob sich die Verbreitung der Gestalt Lamaštu in erster Linie durch den Export der Amulette vollzog oder aber Lamaštu durch einen bloßen Ideentransfer Eingang in die religiöse Vorstellungswelt anderer Kulturen fand.

GUÉGUEN 2012

Nicolas Guéguen & Céline Jacob, *Clothing Color and Tipping, Gentlemen patrons give more tips to waitresses with red clothes*. [Journal of Hospitality & Tourism Research \(2012\) preprint, 1–6](#). DOI:10.1177/1096348012442546.

Recent research conducted with humans demonstrated that red, relative to other achromatic or chromatic colors, led men to view women presented on a photograph as more attractive. The effect of color on behavior was tested in a tipping context. Eleven waitresses in five restaurants were instructed to wear the same tee shirt with different colors (black, white, red, blue, green, or yellow). The effect of color on tipping according to patron’s gender was measured. It was found that waitresses wearing red received more tips but only with male patrons. Waitresses color had no effect on female patrons’ tipping behavior. The relation between red and sexual attractiveness are used to explain the results. Managerial interests related with clothing appearance were discussed. KEYWORDS: restaurant; tipping; employees; physical appearance; color clothing

## LAWLER 2012

Andrew Lawler, *European Association for South Asian Archaeology and Art* / 2–6 July 2012 / Paris, France. *science* **337** (2012), 288–289.

### The Ingredients for a 4000-Year-Old Proto-Curry

Recent studies presented at the meeting found a surprisingly diverse Indus diet that incorporated spices such as ginger and turmeric, beans such as lentils and mung, grains such as rice and millet, and even bananas. With Egypt and Mesopotamia, the Indus was among the first urban civilizations, centered on today's Pakistan and India. The Indus people built a half-dozen massive cities around 2500 B.C.E. that mostly fell into ruin after 1800 B.C.E.

### Diving Into the Indian Ocean's Past

Researchers began the first systematic dives to examine what appears to be the oldest known shipwreck in the Indian Ocean, radiocarbon dated to between the 2nd and 1st centuries B.C.E. Because almost nothing was known about seafaring in this time and place, the wreck promises to remake our understanding of the region and era.

### Persians Made the Afghan Desert Bloom

Using a tiny, instrument-filled drone called a hexacopter, the team spotted a 2-meter-wide linear feature that led to a 60-by-80-meter basin near Altin Dilyar Tepe. The mud-brick canal stretches for nearly 10 kilometers, pierced periodically with at least two other large basins that coincide with settlements. Besenval says this apparent aqueduct likely carried water for farming from the Balkh River, which flows out of the mountains, across the harsh desert. Achaemenid pottery found nearby dates the structure as early as the 5th century B.C.E. By the 4th century B.C.E., a drying climate may have made this always-marginal land too difficult to farm even with irrigation, Besenval adds.

## MACARTHUR 2012

Daniel MacArthur, *Face up to false positives*. *nature* **487** (2012), 427–428.

Scientists and journals must work together to ensure that eye-catching artefacts are not trumpeted as genomic insights, says Daniel MacArthur.

In fact, it has never been easier to generate high-impact false positives than in the genomic era, in which massive, complex biological data sets are cheap and widely available. Flawed papers cause harm beyond their authors: they trigger futile projects, stalling the careers of graduate students and postdocs, and they degrade the reputation of [not just] genomic research.

How can the frequency with which technical errors are trumpeted as discoveries be minimized? Finding different ways to make data visual (including simply plotting results across the genome) can be more helpful than many researchers appreciate. The human eye, suitably aided, can spot bugs and biases that are difficult or impossible to see in massive data files. Stringent quality control takes time, a scarce resource in the fast-paced world of genomics.

## MAXEINER 2012

Dirk Maxeiner & Michael Miersch, *Wie bequem es ist, Pestizide zu verteufeln*. *Welt Online* (2012), 9. August. <<http://www.welt.de/108553847>> (2012-08-10).

Pestizidhaltige Pflanzenschutzmittel führen zur Parkinson-Erkrankung beim Menschen, heißt es. Diese Annahme basiert zwar auf einem Betrug, doch das ist wohl weniger interessant.

Geben Sie mal die beiden Wörter "Pestizid" und "Parkinson" bei Google ein. Sie erhalten über 64.000 Suchergebnisse, angeführt von Artikeln deutscher Leitmedien aus den Jahren 2006 und 2009. "Pestizide begünstigen Parkinson" oder "Pestizide fördern Parkinson" lauteten damals die Überschriften.

Wenn zwei Studien über ein so brisantes, häufig berichtetes Thema als Fälschungen entlarvt werden, wäre dies eigentlich auch einen Bericht wert. Wir haben jedoch in keinem deutschen Medium etwas darüber gefunden. Nicht bei der morgendlichen Zeitungslektüre und nicht via Google. Falls irgendwer darüber geschrieben hat, dann gut versteckt. Auf der Basis von falschen Annahmen finanzieren Fernsehsender ganze Dokumentarfilme. Die Entlarvung des Betrugs interessiert keinen.

#### NEWMAN 2012

Eryn J. Newman, Maryanne Garry, Daniel M. Bernstein, Justin Kantner & D. Stephen Lindsay, *Nonprobative photographs (or words) inflate truthiness*. *Psychonomic Bulletin & Review* (2012) preprint, 1–6. DOI:10.3758/s13423-012-0292-0.

PsyBullRev2012-preprint-Supplement.pdf

When people evaluate claims, they often rely on what comedian Stephen Colbert calls “truthiness,” or subjective feelings of truth. In four experiments, we examined the impact of nonprobative information on truthiness. In Experiments 1A and 1B, people saw familiar and unfamiliar celebrity names and, for each, quickly responded “true” or “false” to the (betweensubjects) claim “This famous person is alive” or “This famous person is dead.” Within subjects, some of the names appeared with a photo of the celebrity engaged in his or her profession, whereas other names appeared alone. For unfamiliar celebrity names, photos increased the likelihood that the subjects would judge the claim to be true. Moreover, the same photos inflated the subjective truth of both the “alive” and “dead” claims, suggesting that photos did not produce an “alive bias” but rather a “truth bias.” Experiment 2 showed that photos and verbal information similarly inflated truthiness, suggesting that the effect is not peculiar to photographs per se. Experiment 3 demonstrated that nonprobative photos can also enhance the truthiness of general knowledge claims (e.g., Giraffes are the only mammals that cannot jump). These effects add to a growing literature on how nonprobative information can inflate subjective feelings of truth.

Keywords Memory | Relative judgment | Cognitive fluency

#### OLSZEWSKI 2005

Marek Titien Olszewski, *The Historical Background of the Zodiac Mosaic Calendar in the Lower Synagogue at Hammath-Tiberias*. *ASOR Newsletter* **55** (2005), iii, 18.

From now on, the Jewish art of Palestine should be discussed as pre-Hillel II—modest and representing a limited variety of figural motifs—and post-Hillel II, when thanks to the authority of the Patriarch from Tiberias it is characterized by a previously unknown richness of figural scenes.

#### PEARSON 2012

Leonie J. Pearson & Craig J. Pearson, *Societal collapse or transformation, and resilience*. *PNAS* **109** (2012), E2030.

## Klima

#### BEVIS 2012

Michael Bevis et al., *Bedrock displacements in Greenland manifest ice mass variations, climate cycles and climate change*. *PNAS* **109** (2012), 11944–11948.

Michael Bevis, John Wahr, Shfaqat A. Khan, Finn Bo Madsen, Abel Brown, Michael Willis, Eric Kendrick, Per Knudsen, Jason E. Box, Tonie van Dam, Dana J. Caccamise II,

Bjorn Johns, Thomas Nylen, Robin Abbott, Seth White, Jeremy Miner, Rene Forsberg, Hao Zhou, Jian Wang, Terry Wilson, David Bromwich and Olivier Francis  
The Greenland GPS Network (GNET) uses the Global Positioning System (GPS) to measure the displacement of bedrock exposed near the margins of the Greenland ice sheet. The entire network is uplifting in response to past and present-day changes in ice mass. Crustal displacement is largely accounted for by an annual oscillation superimposed on a sustained trend. The oscillation is driven by earth's elastic response to seasonal variations in ice mass and air mass (i.e., atmospheric pressure). Observed vertical velocities are higher and often much higher than predicted rates of postglacial rebound (PGR), implying that uplift is usually dominated by the solid earth's instantaneous elastic response to contemporary losses in ice mass rather than PGR. Superimposed on longer-term trends, an anomalous 'pulse' of uplift accumulated at many GNET stations during an approximate six-month period in 2010. This anomalous uplift is spatially correlated with the 2010 melting day anomaly.  
climate change | climate cycles | elasticity | crustal motion geodesy

#### DAS SHARMA 2012

S. Das Sharma, D. S. Ramesh, C. Bapanayya & P. A. Raju, *Sea surface temperatures in cooler climate stages bear more similarity with atmospheric CO<sub>2</sub> forcing*. *Journal of Geophysical Research* **117** (2012), D13110. DOI:10.1029/2012JD017725.

[1] The interglacial Marine Isotope Stage (MIS) 11 received special attention due to its remarkable resemblance with present-day climate. Based on synchronicity of marine, ice sheet and terrestrial proxy responses, warm episodes with intervening cool phase(s) at MIS 11 are qualitatively established. Here we quantitatively evaluate 15 climate proxies during 368-552 kyr intervals adopting a novel long-range cross-correlation approach and information theory based similarity measures. We also estimate the information flow rate and dominant flow direction between these climate variables using transfer entropy and the related directionality index. Our results unequivocally establish that atmospheric CO<sub>2</sub> (pCO<sub>2</sub>) is the driving signal while all other proxies used in this study are the responses. The climate forcing greenhouse gas, the atmospheric CO<sub>2</sub> (pCO<sub>2</sub>) and the response signals like sea surface temperature (SST) and carbon isotope composition of total organic carbon (d13CTOC) proxies are strongly correlated ( $\approx 1$  or  $-1$ ) without significant observable time lag (less than 1 kyr). Various substages of MIS 11 are recognizable in the SST data alone based on normalized similarity measures. Additionally, eight more proxies from lacustrine sediments are identified as primary. During the cooler substages these proxies bear more similarity with ambient atmospheric pCO<sub>2</sub>. Thus, the information theory-based similarity measures suggest that atmospheric CO<sub>2</sub> fluctuations are best captured by at least 9 climate proxies during cooler interglacial events. Based on the results related to interglacial MIS 11 and 13 obtained in this study, an important implication relevant to anthropogenic CO<sub>2</sub> input to the present-day atmosphere can be distilled. It is that sensitive and better-coupled response proxies such as SST and MAT, which already show an increasing trend, are likely to behave in a more dissimilar manner in future. That is, they tend to behave more independently in the near future ( $\approx 0.75$  kyr).

#### MELLES 2012

Martin Melles et al., *2.8 Million Years of Arctic Climate Change from Lake El'gygytgyn, NE Russia*. *science* **337** (2012), 315–320. s337-0315-Supplement.pdf

Martin Melles, Julie Brigham-Grette, Pavel S. Minyuk, Norbert R. Nowaczyk, Volker Wennrich, Robert M. DeConto, Patricia M. Anderson, Andrei A. Andreev, Anthony Coletti, Timothy L. Cook, Eeva Haltia-Hovi, Maaret Kukkonen, Anatoli V. Lozhkin, Peter Rosén, Pavel Tarasov, Hendrik Vogel & Bernd Wagner

The reliability of Arctic climate predictions is currently hampered by insufficient knowledge of natural climate variability in the past. A sediment core from Lake El'gygytgyn in northeastern (NE) Russia provides a continuous, high-resolution record from the Arctic, spanning the past 2.8 million years. This core reveals numerous "super interglacials" during the Quaternary; for marine benthic isotope stages (MIS) 11c and 31, maximum summer temperatures and annual precipitation values are  $\approx 4^\circ$  to  $5^\circ\text{C}$  and  $\approx 300$  millimeters higher than those of MIS 1 and 5e. Climate simulations show that these extreme warm conditions are difficult to explain with greenhouse gas and astronomical forcing alone, implying the importance of amplifying feedbacks and far field influences. The timing of Arctic warming relative to West Antarctic Ice Sheet retreats implies strong interhemispheric climate connectivity.

## Physik

KATZ 1938

H. Katz, *Durchgang langsamer Elektronen (0–200 Volt) durch Metallfolien*. [Annalen der Physik 425 \(1938\), 169–184](#). vormals: 5. Folge, Band 33.

1. Chemisch auf Glas niedergeschlagene und abgelöste Silberfolien haben eine außerordentlich hohe Durchlässigkeit für langsame Elektronen.
2. Die Größe der Durchlässigkeit kann von der Vorbehandlung der Folie abhängen.
3. Als Gesamtdurchlässigkeit wird der von den auftreffenden Elektronen (ohne Berücksichtigung der reflektierten) durchgehende Bruchteil unabhängig von der Austrittsgeschwindigkeit, bezeichnet, als „freie“ Durchlässigkeit der Bruchteil, der ohne Geschwindigkeitsverlust und Richtungsänderung durchgeht.
4. Gegenspannungskurven zeigen, daß die austretenden Elektronen zwei scharf voneinander getrennte Gruppen bilden: eine mit Geschwindigkeiten von wenigen Volt (Sekundärelektronen) und eine andere mit Geschwindigkeitskomponenten in Richtung Käfig, die noch nahe der ursprünglichen Geschwindigkeit sind.
5. Die freie Durchlässigkeit, die aus der Gesamtdurchlässigkeit mit Hilfe der Gegenspannungskurven berechnet wird, durchläuft ein Maximum. Es kann wahrscheinlich gemacht werden, daß dieses Maximum mit Größerwerden der Durchlässigkeit nach kleineren Geschwindigkeiten vorrückt.
6. Der unterschiedliche Verlauf der Gesamtdurchlässigkeit bei verschiedenen Folien läßt sich aus dem verschiedenen Verlauf der freien Durchlässigkeit erklären.
7. Aus dem Vorhandensein eines Minimums der freien Durchlässigkeit bei Geschwindigkeiten von der Größe einiger hundert Volt folgt bereits ein Maximum der Sekundäremissionsausbeutekurven.

KATZ 1938

H. Katz, *Elektronenoptische Versuche zum Durchgang langsamer Elektronen (0–200 Volt) durch Metallfolien*. [Annalen der Physik 425 \(1938\), 160–168](#). vormals: 5. Folge, Band 33.

1. Bei Untersuchungen über Folienabbildung mit Sekundärelektronen wurde die höchst unerwartete Tatsache festgestellt, daß langsame Elektronen durch chemisch hergestellte Silberfolien noch in merklicher Zahl hindurchgehen können.
2. Die Durchlässigkeit ist über die ganze Fläche gleich groß; sie ist bis herab zu Elektronengeschwindigkeiten, die knapp über 0 Volt liegen, verfolgbar.
3. Mit Elektronen kleiner Geschwindigkeit (größenordnungsmäßig bis 10 Volt) kann man durch die Folie hindurch hinter ihr befindliche Gegenstände abbilden und demgemäß zeigen, daß die Elektronen ohne wesentliche Richtungsänderung durch die Folie hindurchgehen; bei größeren Elektronengeschwindigkeiten läßt sich aus den vorhandenen Bildern

folgern, daß die aus der Folie austretenden Elektronen Geschwindigkeiten haben, die in zwei Gruppen zerfallen.

4. Folien anderer Herstellung und anderen Materials zeigen schwächere Durchlässigkeit als chemisch hergestellte und auch erst nach längerer Beschießung mit Elektronen.