

Literatur

Aktuell

BECHTEL 2013

Michael M. Bechtel & Kenneth F. Scheve, *Mass support for global climate agreements depends on institutional design*. [PNAS 110 \(2013\), 13763–13768](#).

Effective climate mitigation requires international cooperation, and these global efforts need broad public support to be sustainable over the long run. We provide estimates of public support for different types of climate agreements in France, Germany, the United Kingdom, and the United States. Using data from a large-scale experimental survey, we explore how three key dimensions of global climate cooperation—costs and distribution, participation, and enforcement—affect individuals' willingness to support these international efforts. We find that design features have significant effects on public support. Specifically, our results indicate that support is higher for global climate agreements that involve lower costs, distribute costs according to prominent fairness principles, encompass more countries, and include a small sanction if a country fails to meet its emissions reduction targets. In contrast to well-documented baseline differences in public support for climate mitigation efforts, opinion responds similarly to changes in climate policy design in all four countries. We also find that the effects of institutional design features can bring about decisive changes in the level of public support for a global climate agreement. Moreover, the results appear consistent with the view that the sensitivity of public support to design features reflects underlying norms of reciprocity and individuals' beliefs about the potential effectiveness of specific agreements.

international institutions | environmental cooperation | global warming | international relations | public opinion

CANN 2013

Rebecca L. Cann, *Y Weigh In Again on Modern Humans*. [science 340 \(2013\), 465–467](#).

Sampling of the human Y chromosome eliminates the curious disparity in ages of our last common male and female ancestors.

GAVISH 2010

Yossi Gavish, Aviv Shoham & Ayalla Ruvio, *A qualitative study of mother-adolescent daughter-vicarious role model consumption interactions*. [Journal of Consumer Marketing 27 \(2010\), 43–56](#).

Purpose – The purposes of this research are to examine the extent to which daughters view their mothers as consumption role models, the extent to which daughters serve as consumption role models for their mothers, and the extent to which external role models are shared by mothers and their adolescent daughters.

Design/methodology/approach – Two qualitative studies focused on mothers-adolescent daughters-vicarious role models interactions as drivers of consumption behaviors in Western cultures. Study 1 included 20 in-depth interviews with mothers and their adolescent daughters (conducted separately). Study 2 included five of the original dyads interviewed jointly and observed in fashion stores.

Findings – Regarding adolescent daughters’ use as role models and fashion markers for their mothers, most mothers confirmed that their adolescent daughters’ fashion opinion was very important. Second, based on consumer socialization arguments, mothers served as role models for their adolescent daughters. Most dyads shop for fashion items together and in the same stores. Regarding the issue of cognitive versus chronological ages, the studies suggest that there is a gap between mothers’ cognitive and chronological ages in support of cognitive age theory and the youthfulness ideal of Western cultures. Notably, such a gap mostly failed to materialize for adolescent daughters. Hence, consumption similarity appears to be driven more by the gap for mothers than the gap for daughters. Finally, external role models such as celebrities did not have a great influence on mothers or their adolescent daughters.

Originality/value – The research used in-depth interviews with and in-store observation of mothers and adolescent daughters. Future research might use similar interviews with younger daughters. Another extension of the work reported here that can provide triangulation for the findings is to change from a qualitative to a quantitative methodology.

Keywords: Consumer behaviour, Socialization, Qualitative research

GONZÁLEZ-JIMÉNEZ 2013

Emilio González-Jiménez, Pedro A. García, María José Aguilar, Carlos A. Padilla & Judit IJlvarez, *Breastfeeding and the prevention of breast cancer, A retrospective review of clinical histories*. *Journal of Clinical Nursing* (2013), preprint, 1–7. DOI:10.1111/jocn.12368.

Aims and objectives. To evaluate at what age parous and nonparous women were diagnosed with breast cancer. Factors taken into account for parous women were whether they had breastfed their children, and if so, the length of the lactation period. Other factors considered for both groups were obesity, family histories of cancer, smoking habits and alcohol consumption.

Background. Breast cancer is the most common form of cancer in younger women in Western countries. Its growing incidence as well as the increasingly early age of diagnosis led us to carefully analyse its possible causes and the preventive measures to be taken. This is a particularly important goal in epidemiological research.

Design. A retrospective study of the clinical histories of patients diagnosed with breast cancer at the San Cecilio University Hospital in Granada (Spain).

Methods. In this study, we analysed 504 medical records of female patients, 19–91 years of age, who had been diagnosed and treated for breast cancer from 2004–2009 at the San Cecilio University Hospital in Granada (Spain). Relevant data (age of diagnosis, period of lactation, family history of cancer, obesity, alcohol consumption and smoking habits) were collected from the clinical histories of each patient and analysed. A conditional inference tree was used to relate the age of diagnosis to smoking habits and the length of the lactation period.

Results. The conditional inference tree identified significant differences between the age of the patients at breast cancer diagnosis, smoking habits ($p < 0.001$) and lactation period if the subjects had breastfed their children for more than six months ($p = 0.006$), regardless of whether they had a family history of cancer.

Conclusions. Our study concluded that breastfeeding for over six months not only provides children with numerous health benefits, but also protects mothers from breast cancer when the mothers are nonsmokers.

Relevance to clinical practice. Nurses play a crucial role in encouraging new mothers to breastfeed their children, and this helps to prevent breast cancer.

Keywords: breastfeeding duration, breast cancer, prevention

KALLAI 2012

Arava Y. Kallai, Christian D. Schunn & Julie A. Fiez, *Mental arithmetic activates analogic representations of internally generated sums*. [Neuropsychologia 50 \(2012\), 2397–2407](#).

The internal representation of numbers generated during calculation has received little attention. Much of the mathematics learning literature focuses on symbolic retrieval of math facts; in contrast, we critically test the hypothesis that internally generated numbers are represented analogically, using an approximate number system. In an fMRI study, the spontaneous processing of arithmetical expressions was tested. Participants passively viewed a sequence of double-digit addition expressions that summed to the same number. Adaptation was found in number-related regions in a fronto-parietal network. Following adaptation, arrays of dots were introduced, differing in their numerical distance from the sum of the addition expressions. Activation in voxels that showed adaptation to a repeated sum was also sensitive to the distance of the dot quantity from the sum. We conclude that participants exhibited adaptation to an internally generated number, that adapted representations were analogic in nature, and that these analogic representations may undergird arithmetic calculation.

Keywords: Number representation | Analogic representation | Arithmetic | Adaptation fMRI | Intraparietal sulcus

Our findings add to the converging evidence showing that fluency in math cannot be attributed to fast and efficient retrieval of math facts stored in long-term memory in every condition. Correlations between math and arithmetic abilities and the quality of analogic numerical representation have been shown in past studies. We now show a direct link between calculation and analogic representation of quantity.

KAPPELER 2013

Peter M. Kappeler, *Why Male Mammals Are Monogamous*. [science 340 \(2013\), 469–470](#).

Social monogamy evolved many times across mammals as a male mating strategy in species where females are widely spaced for ecological reasons.

NAIR 2013

Prashant Nair, *QnAs with Daniel Kahneman*. [PNAS 110 \(2013\), 13696](#).

On the other hand, science communicators should realize that if the message is intended to lead to action, they are effectively addressing people's system 1, which thrives on stories, individual anecdotes rather than statistics or evidence. And most people's beliefs are shaped not by arguments but by the beliefs of others they trust. Counterintuitive as it may seem to scientists, most people believe in conclusions before they accept arguments. So stories and source credibility are at least as important as the quality of arguments when it comes to the public acceptance of scientific ideas.

ROEB 2013

Martin Roeb & Christian Sattler, *Isothermal Water Splitting*. [science 340 \(2013\), 470–471](#).

Process operation at constant temperature may enhance the solar-thermal production of hydrogen from water.

SARLIS 2013

Nicholas V. Sarlis et al., *Minimum of the order parameter fluctuations of seismicity before major earthquakes in Japan*. *PNAS* **110** (2013), [13734–13738](#).

Nicholas V. Sarlis, Efthimios S. Skordas, Panayiotis A. Varotsos, Toshiyasu Nagao, Masashi Kamogawa, Haruo Tanaka & Seiya Uyeda

It has been shown that some dynamic features hidden in the time series of complex systems can be uncovered if we analyze them in a time domain called natural time χ . The order parameter of seismicity introduced in this time domain is the variance of χ weighted for normalized energy of each earthquake. Here, we analyze the Japan seismic catalog in natural time from January 1, 1984 to March 11, 2011, the day of the M9 Tohoku earthquake, by considering a sliding natural time window of fixed length comprised of the number of events that would occur in a few months. We find that the fluctuations of the order parameter of seismicity exhibit distinct minima a few months before all of the shallow earthquakes of magnitude 7.6 or larger that occurred during this 27-y period in the Japanese area. Among the minima, the minimum before the M9 Tohoku earthquake was the deepest. It appears that there are two kinds of minima, namely precursory and nonprecursory, to large earthquakes.

criticality | seismic electric signals

SHEN 2013

Helen Shen, *US brain project puts focus on ethics*. *nature* **500** (2013), [261–262](#).

SUGLIA 2013

Shakira F. Suglia, Sara Solnick & David Hemenway, *Soft Drinks Consumption Is Associated with Behavior Problems in 5-Year-Olds*. *Journal of Pediatrics* (2013), preprint, 1–6. DOI:10.1016/j.jpeds.2013.06.023.

Objective To examine soda consumption and aggressive behaviors, attention problems, and withdrawal behavior among 5-year-old children.

Study design The Fragile Families and Child Wellbeing Study is a prospective birth cohort study that follows a sample of mother-child pairs from 20 large US cities. Mothers reported children's behaviors using the Child Behavior Checklist at age 5 years and were asked to report how many servings of soda the child drinks on a typical day.

Results In the sample of 2929 children, 52 % were boys, 51 % were African-American, 43 % consumed at least one serving of soda per day, and 4 % consumed 4 or more servings per day. In analyses adjusted for sociodemographic factors, consuming one (beta, 0.7; 95 % CI, 0.1-1.4), 2 (beta, 1.8; 95 % CI, 0.8-2.7), 3 (beta, 2.0; 95 % CI, 0.6-3.4), or 4 or more (beta, 4.7; 95 % CI, 3.2-6.2) servings was associated with a higher aggressive behavior score compared with consuming no soda. Furthermore, those who consumed 4 or more (beta, 1.7; 95 % CI, 1.0-2.4) soda servings had higher scores on the attention problems subscale. Higher withdrawn behavior scores were noted among those consuming 2 (beta, 1.0; 95 % CI, 0.3-1.8) or 4 or more (beta, 2.0; 95 % CI, 0.8-3.1) soda servings compared with those who consumed no soda.

Conclusion We note an association between soda consumption and negative behavior among very young children; future studies should explore potential mechanisms that could explain this association.

Anthropologie

COSTANDI 2013

Moheb Costandi, *Corrupted Memory*. [nature 500 \(2013\), 268–270](#).

Elizabeth Loftus has spent decades exposing flaws in eyewitness testimony. Her ideas are gaining fresh traction in the US legal system.

Meanwhile, her research has shifted into new controversial waters. Taking on board the lesson that memories can be manufactured, she has been investigating the possibility of using those memories to modify behaviour^{9,10}. “We’ve shown that you can plant a memory of getting sick eating particular foods as a child,” she says, “and we can get people thinking they got sick drinking vodka, so they don’t want to drink as much of it later on.”

There is no evidence that any of this will successfully transfer from the lab to the real world. Even if it does, it would violate therapists’ code of conduct, and could have unforeseen consequences.

“Lying to children is a slippery slope that makes me uncomfortable,” says Judy Illes, a neuro ethicist at the University of British Columbia in Vancouver, Canada.

“Can’t we alter their behaviour in a positive way, instead of using subterfuge?”

But Loftus dismisses the concerns, suggesting that even if therapists cannot do it, parents might want to. “Parents lie to their kids all the time, about Santa Claus and the tooth fairy. Would you rather have an unhealthy kid, or one with a few false memories?”

GIBBONS 2013

Ann Gibbons & Elizabeth Pennisi, *How a Fickle Climate Made Us Human, Out of the Kenyan Mud, an Ancient Climate Record*. [science 340 \(2013\), 474–479](#).

[The] long-term drying trend, which began at about the time when the human and chimp lineages diverged, tempted some researchers in the 1990s to propose a revised savanna hypothesis: Drier, cooler climates thinned the forests of Africa, perhaps driving hominins out of the woods to scurry upright across open grasslands between patches of trees in search of food. Then, new fossil discoveries challenged that idea. [...] With hominins walking in the woods, the savanna hypothesis bit the dust. [...] This suggests that hominins were born when grasses were on the rise. In fact, Cerling and his colleagues think that the first hominins had more grass in their environment than initially proposed—40% to 60% of the vegetation at nine *Ar. ramidus* fossil sites was C4 plants, Cerling suggests. [...] Species that arose more than 4 million years ago, including *Ar. ramidus* and the oldest australopithecine, *Australopithecus anamensis*, subsisted on an apelike diet of at least 90% leaves and fruits from C3 plants. By 3.5 million years ago, a descendant of *Au. anamensis*—*Au. afarensis*, whose most famous member is the skeleton named Lucy—apparently adapted to the widespread grasslands by also munching on many C4 plants. [...] “[T]he savanna hypothesis is alive and well,” Cerling says. [...] Potts proposed 16 years ago that the key adaptation of the human lineage, manifested in everything from big brains to culture, is adaptability: Individuals who could survive in wet woods as well as dry grasslands fared better than those specialized for one or the other. He argues that the dramatic fluctuations of the ancient African climate shaped human nature, allowing our species to eventually thrive in all sorts of environments worldwide. Deep-sea cores suggest that “the first appearance of every major genus in our evolutionary history, the origin of every major stone technology, happens to fall in long periods of high climate variability,” Potts says.

Biologie

LUKAS 2013

D. Lukas & T. H. Clutton-Brock, *The Evolution of Social Monogamy in Mammals*. [science 340 \(2013\), 526–530](#).

s341-0526-Supplement.pdf

The evolution of social monogamy has intrigued biologists for over a century. Here, we show that the ancestral condition for all mammalian groups is of solitary individuals and that social monogamy is derived almost exclusively from this social system. The evolution of social monogamy does not appear to have been associated with a high risk of male infanticide, and paternal care is a consequence rather than a cause of social monogamy. Social monogamy has evolved in nonhuman mammals where breeding females are intolerant of each other and female density is low, suggesting that it represents a mating strategy that has developed where males are unable to defend access to multiple females.

Our results suggest that social monogamy evolved in mammals where feeding competition between females was intense, breeding females were intolerant of each other, and population density was low [...] Because all the African apes are polygynous and group living, it is likely that the common ancestor of hominids was also polygynous, and this is supported by evidence of substantial sexual size dimorphism in early hominids (30), as well as by sex differences in rates of aging in modern humans (31). It has been suggested that the evolution of human monogamy could have been a consequence of the need for extended paternal investment (3). Alternatively, the rarity of transitions to social monogamy from group living, polygynous species in nonhuman mammals could suggest that the shift to monogamy in humans may be instead the result of a change in dietary patterns that reduced female density and limited the potential for males to guard more than one female (32).

Energie

MUHICH 2013

Christopher L. Muhich et al., *Efficient Generation of H_2 by Splitting Water with an Isothermal Redox Cycle*. [science 340 \(2013\), 540–542](#).

s341-0540-Supplement.pdf

Christopher L. Muhich, Brian W. Evanko, Kayla C. Weston, Paul Lichty, Xinhua Liang, Janna Martinek, Charles B. Musgrave & Alan W. Weimer

Solar thermal water-splitting (STWS) cycles have long been recognized as a desirable means of generating hydrogen gas (H_2) from water and sunlight. Two-step, metal oxide-based STWS cycles generate H_2 by sequential high-temperature reduction and water reoxidation of a metal oxide. The temperature swings between reduction and oxidation steps long thought necessary for STWS have stifled STWS's overall efficiency because of thermal and time losses that occur during the frequent heating and cooling of the metal oxide. We show that these temperature swings are unnecessary and that isothermal water splitting (ITWS) at 1350°C using the "hercynite cycle" exhibits H_2 production capacity >3 and >12 times that of hercynite and ceria, respectively, per mass of active material when reduced at 1350°C and reoxidized at 1000°C .

Judentum

FAUST 2008

Avraham Faust & Shlomo Bunimovitz, *The Judahite Rock-Cut Tomb, Family Response at a Time of Change*. [Israel Exploration Journal 58 \(2008\), 150–170](#).

Despite the attention devoted to the form, chronology, and distribution of the Judahite rock-cut tomb and to its social and religious significance, few, if any, studies have attempted to explain the reasons behind the appearance of the rockcut tomb in the ninth century and its emergence to prominence during the eighth–seventh centuries BCE, after some four centuries in which simple inhumations were the norm.

The period under discussion was a troubled one. Accelerated urbanisation, growing population density and social inequalities, evolving trade and mass production, and increased hired labour, along with external political and military pressures, all led to the disintegration of lineages and extended families in the urban sector and to growing insecurity.

The Judahite tomb, which stresses the permanent nature of the family and generational continuity, was the response of the extended family — the biblical *bet 'ab* — to these threats. As more and more families were harmed by the social changes, it became increasingly necessary for the remaining families to transmit, both to themselves and to their peers, the message that they survive and flourish.

Changes in burial practice also attest to the development and complexity of Judahite ideology and ethos. Although some elements remained constant (e.g., the ethos of simplicity and egalitarianism), their role and importance changed diachronically (from the early to the late Iron Age) and synchronically (during the late Iron Age) between rich and poor, and between urban and rural families.

Because the four-room house was already the symbol of the family, it was the best vehicle to transmit the message that the family persisted. In sum, the adoption of the house plan for the Judahite tomb was an attempt to immortalise the *bet 'ab* in stone.

Klima

BONDEVIK 2005

Stein Bondevik, Finn Løvholt, Carl Harbitz, Jan Mangerud, Alastair Dawson & John Inge Svendsen, *The Storegga Slide tsunami, Comparing field observations with numerical simulations*. [Marine and Petroleum Geology 22 \(2005\), 195–208](#).

Deposits from the Storegga tsunami have been found in coastal areas around the Norwegian Sea and North Sea, from the northeast coast of England to beyond the Arctic Circle in northern Norway. The tsunami deposits reach onshore elevations of 10–12 m above sea level of their time in western Norway, 3–6 m in northeast Scotland and above 20 m on the Shetland Islands. These elevations are compared with surface (wave) elevations derived from a numerical simulation of the Storegga slide. A good agreement is obtained for a retrogressive slide that descends at 25–30 m/s, and that has short time lags of 15–20 s between each individual slide-block.

Keywords: Tsunami deposits; Storegga Slide; Tsunami modelling

ZEEBE 2013

Richard E. Zeebe, *Time-dependent climate sensitivity and the legacy of anthropogenic greenhouse gas emissions*. *PNAS* **110** (2013), 13739–13744.

Climate sensitivity measures the response of Earth's surface temperature to changes in forcing. The response depends on various climate processes that feed back on the initial forcing on different timescales. Understanding climate sensitivity is fundamental to reconstructing Earth's climatic history as well as predicting future climate change. On timescales shorter than centuries, only fast climate feedbacks including water vapor, lapse rate, clouds, and snow/sea ice albedo are usually considered. However, on timescales longer than millennia, the generally higher Earth system sensitivity becomes relevant, including changes in ice sheets, vegetation, ocean circulation, biogeochemical cycling, etc. Here, I introduce the time-dependent climate sensitivity, which unifies fast-feedback and Earth system sensitivity. I show that warming projections, which include a time-dependent climate sensitivity, exhibit an enhanced feedback between surface warming and ocean CO₂ solubility, which in turn leads to higher atmospheric CO₂ levels and further warming. Compared with earlier studies, my results predict a much longer lifetime of human-induced future warming (23,000–165,000 y), which increases the likelihood of large ice sheet melting and major sea level rise. The main point regarding the legacy of anthropogenic greenhouse gas emissions is that, even if the fast-feedback sensitivity is no more than 3 K per CO₂ doubling, there will likely be additional long-term warming from slow climate feedbacks. Time-dependent climate sensitivity also helps explaining intense and prolonged warming in response to massive carbon release as documented for past events such as the Paleocene–Eocene Thermal Maximum.

Kultur

RAHMSTORF 2003

Lorenz Rahmstorf, *The identification of Early Helladic weights and their wider implications*. In: KAREN POLINGER FOSTER & ROBERT LAFFINEUR (Hrsg.), *METRON: Measuring the Aegean Bronze Age, Proceedings of the 9th International Aegean Conference New Haven, Yale University, 18–21 April 2002*. *Aegaeum* 24 (Liège 2003), 293–299.

SAUL 2013

Hayley Saul, Marco Madella, Anders Fischer, Aikaterini Glykou, Sönke Hartz & Oliver E. Craig, *Phytoliths in Pottery Reveal the Use of Spice in European Prehistoric Cuisine*. *PLoS ONE* **8** (2013), e70583. DOI:10.1371/journal.pone.0070583.

pone08-e70583-Supplement1.png

Here we present evidence of phytoliths preserved in carbonised food deposits on prehistoric pottery from the western Baltic dating from 6,100 cal BP to 5750 cal BP. Based on comparisons to over 120 European and Asian species, our observations are consistent with phytolith morphologies observed in modern garlic mustard seed (*Alliaria petiolata* (M. Bieb) Cavara & Grande). As this seed has a strong flavour, little nutritional value, and the phytoliths are found in pots along with terrestrial and marine animal residues, these findings are the first direct evidence

for the spicing of food in European prehistoric cuisine. Our evidence suggests a much greater antiquity to the spicing of foods than is evident from the macrofossil record, and challenges the view that plants were exploited by hunter-gatherers and early agriculturalists solely for energy requirements, rather than taste.

Metallzeiten

GÜNKEL-MASCHEK 2012

Ute Günkel-Maschek, *Unterwegs im Labyrinth, Zur Gestaltung des ‚Prozessionskorridors‘ im spätminoischen ‚Palast‘ von Knossos*. In: CLAUS REINHOLDT & WOLFGANG WOHLMAYR (Hrsg.), *Akten des 13. Österreichischen Archäologentages, Klassische und Frühgäische Archäologie Paris-Lodron-Universität Salzburg vom 25. bis 27. Februar 2010*. (Wien 2012), 39–46.

Zusammenfassend kann demnach festhalten werden, dass im ‚Prozessionskorridor‘ des späten Palastes von Knossos vermutlich nicht die Verehrung einer großen Göttin, Königin oder Hauptpriesterin dargestellt war. Die Bilder an den Wänden waren vielmehr eine Vergegenwärtigung des Prozessionsgeschehens, welches sich von der Stadt über den Westhof kommend durch den Südwest-Eingang und den Korridor zum Zentralhof bewegte. In diesem Rahmen nahmen in Fell-Röcke gekleidete Palastfunktionäre herbeigebrachte Gaben wie etwa Textilien entgegen, die dann vielleicht zur weiteren Verwendung im Ritualgeschehen durch den Palast getragen (vgl. Abb. 5a) oder überhaupt einbehalten wurden. In jedem Fall hielt dieser Abschnitt des ‚Prozessionsfreskos‘ dauerhaft die Menschenströme fest, die in den Palast drängten; er hielt fest, welche kostbaren Gaben der Palast von ihnen empfing; und nicht zuletzt vergegenwärtigte und verstetigte er durch die qualitätvollen Gewänder, die wertvollen Gefäße sowie weitere Gaben sowohl den Reichtum des Palastes als auch den exklusiven Status derjenigen, die ihn betreten durften.

Mittelpaläolithikum

RUEBENS 2013

Karen Ruebens, *Regional behaviour among late Neanderthal groups in Western Europe, A comparative assessment of late Middle Palaeolithic bifacial tool variability*. *Journal of Human Evolution* (2013), preprint, 1–22. DOI:10.1016/j.jhevol.2013.06.009.

Population dynamics between and within Pleistocene groups are vital to understanding wider behavioural processes like social transmission and cultural variation. The late Middle Palaeolithic (MIS 5d-3, ca. 115,000–35,000 BP [years before present]) permits a novel, data-driven assessment of these concepts through a unique record: bifacial tools made by classic Neanderthals. Previously, studies of late Middle Palaeolithic bifacial tools were hampered by a convoluted plethora of competing terms, types and regional entities. This paper presents a large-scale intercomparison of this tool type, and bridges typotechnological and spatio-temporal data from across Western Europe (Britain, Belgium, the Netherlands, France and Germany).

Results indicate a high level of variation among individual bifacial tools and assemblages. Each bifacial tool concept is correlated with various methods of production, resulting in large degrees of morphological variation. Despite such variation, a distinct three-fold, macro-regional pattern was identified: the Mousterian of

Acheulean Tradition (MTA) in the southwest dominated by handaxes, the Keilmessergruppen (KMG) in the northeast typified by backed and leaf-shaped bifacial tools, and, finally a new unit, the Mousterian with Bifacial Tools (MBT), geographically situated between these two major entities, and characterised by a wider variety of bifacial tools.

Differing local conditions, such as raw material or function, are not sufficient to explain this observed macro-regional tripartite. Instead, the MTA and KMG can be viewed as two distinct cultural traditions, where the production of a specific bifacial tool concept was passed on over generations. Conversely, the MBT is interpreted as a border zone where highly mobile groups of Neanderthals from both the east (KMG) and west (MTA) interacted.

Principally, this study presents an archaeological contribution to behavioural concepts such as regionality, culture, social transmission and population dynamics. It illustrates the interpretive potential of large-scale lithic studies, and more specifically the presence of regionalised cultural behaviour amongst late Neanderthal groups in Western Europe.

Keywords: Mousterian | Keilmessergruppen | Neanderthal behaviour | Population dynamics | Regionality

Politik

BOHANNON 2013

John Bohannon, *Study Links Climate Change And Violence, Battle Ensues*. [science](#) **340** (2013), 444–445.

The selected papers may have also confused “single sharp” weather events such as heat waves with longer term climate shifts, Solow says. He points out that in sub-Saharan Africa, there is no doubt that climate change has been unfolding over the past several decades. But over the same period, “the overall rate of civil conflict has declined.”