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Tanzania has found evidence to suggest that bone tools were used for hunting, and even as poison arrow tips.

A team of archaeologists studying bone artifacts discovered in a cave on the island of Unguja in the Zanzibar archipelago of Tanzania has found evidence to suggest that bone tools were used for hunting, and even as poison arrow tips. Bone technology was essential to a Stone Age man’s lifestyle and has been shown to ...

When it comes to knowing your true self, believe in free will

Diminishing a person's belief in free will leads to them feeling less like their true selves, according to recent research. In a pair of studies, researchers manipulated people's beliefs in free will to see how this would affect the subjects' sense of authenticity, their sense of self.

https://www.sciencedaily.com/releases/2016/06/160617113502.htm

Ten simple rules to use statistics effectively

Under growing pressure to report accurate findings as they interpret increasingly larger amounts of data, researchers are finding it more important than ever to follow sound statistical practices.

https://www.sciencedaily.com/releases/2016/06/160620191409.htm

Brain markers of numeric, verbal and spatial reasoning abilities

A new study begins to clarify how brain structure and chemistry give rise to specific aspects of 'fluid intelligence,' the ability to adapt to new situations and solve problems one has never encountered before.

https://www.sciencedaily.com/releases/2016/06/160620140946.htm

Making computers reason and learn by analogy

Using the power of analogy, a new structure-mapping engine gives computers the ability to reason like humans and even solve moral dilemmas.

https://www.sciencedaily.com/releases/2016/06/160621155000.htm

The sound of music: How the songbird learns its melody

In zebra finches, only males learn and sing songs, as this is the way they attract a mate. Therefore, learning a complex song to attract the lady zebra finches is crucial for reproduction. The juvenile zebra finches do this by listening to the father's song and memorizing it. The neurons associated with the memory of the father bird's song have now been pinpointed.

https://www.sciencedaily.com/releases/2016/06/160621115441.htm

New origins for farmed rice discovered

Chew on this: rice farming is a far older practice than we knew. In fact, the oldest evidence of domesticated rice has just been found in China, and it's about 9,000 years old.

https://www.sciencedaily.com/releases/2016/06/160622164324.htm

Scientists reveal sub-Saharan Africa's legacy of past migrations over last 4,000 years

Researchers have revealed that the genetic ancestries of many of sub-Saharan Africa's populations are the result of historical DNA mixing events, known as admixture, within the last 4,000 years.

https://www.sciencedaily.com/releases/2016/06/160622144926.htm

To tool or not to tool? Clever cockatoos make economic decisions about tool use

Cognitive biologists studied tool-related decision-making in an Indonesian cockatoo. They found that the animals seemed to carefully ponder about their choices: while doing so the animals scrutinized details such as differences in quality between the two food rewards, but also the functionality of the available tool as means to obtain the out-of-reach food in the situation at hand.

https://www.sciencedaily.com/releases/2016/06/160623100912.htm

Exploring the prehistory of Palawan Island through human remains

Researchers are excavating human remains from caves in Palawan Island in the Philippines to learn more about the diversity of burial and other cultural practices over the past 10,000 years.

https://www.sciencedaily.com/releases/2016/06/160624140609.htm

OTHER NEWS – CONFERENCE: SALC6

Sixth International Conference of the Scandinavian Association for Language and Cognition (SALC 6)

Centre for Languages and Literature, Lund University

April 20-22, 2017

http://konferens.ht.lu.se/salc6/

The main goal of SALC is to promote the study of the relationship between language and cognition both in the Nordic countries and more generally. This involves any type of research in which language is not treated in isolation, but as based on structures and processes of general cognition and social cognition, and as affecting such structures and processes. The
conference is intended to be a forum for cooperation and exchange of ideas between disciplines, fields of study and theoretical frameworks for the study of language and cognition.

Topics
We invite abstracts for theme sessions, oral presentations and posters (see below) related to topics in the area of Language and Cognition.

Submission formats
1. Theme sessions
Deadline: 31 August 2016; notification: 30 September 2016
• Submissions should include: session title, name and affiliation of symposium convener, an introduction of up to 400 words explaining the theme, all abstracts for the theme session in a suitable order.
• Sessions may consist of 3 or 6 papers (90 or 180 mins.), including time for introduction and general discussion. Papers in each theme session should be thematically linked.
• Theme session proposers should indicate whether they wish the individual abstracts to be considered as individual presentations (oral or poster), in case the session is not accepted as a whole.

2. General session
Deadline: 15 October 2016; notification: 15 December 2016
• Submissions should include: title, name, affiliation, 400-word abstract, excluding references. The time allocation is 20 mins oral presentation followed by 5 mins discussion.

3. Poster session
• Submissions should include: title, name, affiliation, 400-word abstract, excluding references. Authors are invited to give a 1 minute oral presentation in the main lecture hall preceding the poster session.

Please submit your abstract or theme session proposal using the link below:
https://easychair.org/conferences/?conf=salc6

Please indicate the type of submission you are making both in the abstract/theme session proposal text and in the submission form by ticking the appropriate category in the "Topics" field.

Important dates
• Theme session submission: 31 August 2016
• Theme session notification: 30 September 2016
• Submission of abstracts for oral presentations and posters: 15 October 2016
• Notification of acceptance for oral presentations and posters: 15 December 2016
• Deadline for early registration: 15 January 2017
• Deadline for registration: 30 March 2017

OTHER NEWS – ART PROJECT: Nightschool on Anarres
I’m currently involved in an art installation at King’s College London, “Paths to Utopia” (http://www.kcl.ac.uk/Cultural/newsandviews/newsrecords/160519-Paths-to-Utopia.aspx). Our project within the installation is “Nightschool on Anarres” (http://www.kcl.ac.uk/cultural/Cultural-Institute/Utopia2016/Commissions/Nightschool.aspx). If you are in London over the Summer I can recommend visiting the installation.

My role in the project has been to create the language, Pravic, to be as faithful as possible to Ursula Le Guin’s description in “The Dispossessed”. What I came up with is given here: http://martinedwardes.webplus.net/pravic/. I will be giving a series of talks during July and August, ostensibly to teach Pravic, but mainly to discuss the question of whether language can affect thought. If you are interested, do please come along.

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Nature Scientific Reports – 21 June 2016
PAPERS

FERNANDO RAMIREZ ROZZI – Diversity in tooth eruption and life history in humans: Illustration from a Pygmy population
Life history variables (LHV) in primates are closely correlated with the ages of tooth eruption, which are a useful proxy to predict growth and development in extant and extinct species. However, it is not known how tooth eruption ages interact with LHV in polymorphic species such as modern humans. African pygmies are at the one extreme in the range of human size variation. LHV in the Baka pygmies are similar to those in standard populations. We would therefore expect tooth eruption ages to be similar also. This mixed (longitudinal and cross-sectional) study of tooth eruption in Baka individuals of known age reveals that eruption in all tooth classes occurs earlier than in any other human population. Earlier tooth eruption can be related to the particular somatic growth in the Baka but cannot be correlated with LHV. The link between LHV and tooth eruption seems disrupted in H. sapiens, allowing adaptive variations in tooth eruption in response to different environmental constraints while maintaining the unique human life cycle.
http://www.nature.com/articles/srep27405?WT.ec_id=SREP-20160621&spMailingID=51656115&spUserID=ODY4NjU1NzU3NQS2&spJobID=943053053&spReportId=OTQzMDUzMDUzS0

TOSHIO YAMAGISHI et al – Moral Bargain Hunters Purchase Moral Righteousness When it is Cheap: Within-Individual Effect of Stake Size In Economic Games
Despite the repeatedly raised criticism that findings in economic games are specific to situations involving trivial incentives, most studies that have examined the stake-size effect have failed to find a strong effect. Using three prisoner’s dilemma experiments, involving 479 non-student residents of suburban Tokyo and 162 students, we show here that stake size strongly affects a player’s cooperation choices in prisoner’s dilemma games when stake size is manipulated within each individual such that each player faces different stake sizes. Participants cooperated at a higher rate when stakes were lower than when they were higher, regardless of the absolute stake size. These findings suggest that participants were ‘moral bargain hunters’ who purchased moral righteousness at a low price when they were provided with a ‘price list’ of prosocial behaviours. In addition, the moral bargain hunters who cooperated at a lower stake but not at a higher stake did not cooperate in a single-stake one-shot game.
http://www.nature.com/articles/srep27824?WT.ec_id=SREP-20160621&spMailingID=51656115&spUserID=ODY4NjU1NzU3NQS2&spJobID=943053053&spReportId=OTQzMDUzMDUzS0

PAPERS

ILJA CROUJMANS & ASIFA MAJID – Not All Flavor Expertise Is Equal: The Language of Wine and Coffee Experts
People in Western cultures are poor at naming smells and flavors. However, for wine and coffee experts, describing smells and flavors is part of their daily routine. So are experts better than lay people at conveying smells and flavors in language? If smells and flavors are more easily linguistically expressed by experts, or more “codable”, then experts should be better than novices at describing smells and flavors. If experts are indeed better, we can also ask how general this advantage is: do experts show higher codability only for smells and flavors they are expert in (i.e., wine experts for wine and coffee experts for coffee) or is their linguistic dexterity more general? To address these questions, wine experts, coffee experts, and novices were asked to describe the smell and flavor of wines, coffees, everyday odors, and basic tastes. The resulting descriptions were compared on a number of measures. We found expertise endows a modest advantage in smell and flavor naming. Wine experts showed more consistency in how they described wine smells and flavors than coffee experts, and novices; but coffee experts were not more consistent for coffee descriptions. Neither expert group was any more accurate at identifying
Rapid development of information and communications technologies (ICT) has triggered profound changes in how people manage their social contacts in both informal and professional contexts. ICT mediated communication may seem limited in possibilities compared to face-to-face encounters, but research shows that puzzingly often it can be just as effective and satisfactory. We posit that ICT users employ specific communication strategies adapted to particular communication channels, which results in a comparable effectiveness of communication. In order to maintain a satisfactory level of conversational intelligibility they calibrate the content of their messages to a given medium’s richness and adjust the whole conversation trajectory so that every stage of the communication process runs fluently. In the current study, we compared complex task solving trajectories in chat, mobile phone and face-to-face dyadic conversations. Media conditions did not influence the quality of decision outcomes or users’ perceptions of the interaction, but they had impact on the amount of time devoted to each of the identified phases of decision development. In face-to-face contacts the evaluation stage of the discussion dominated the conversation; in the texting condition the orientation-evaluation-control phases were evenly distributed; and the phone condition provided a midpoint between these two extremes. The results show that contemporary ICT users adjust their communication behavior to the limitations and opportunities of various media through the regulation of attention directed to each stage of the discussion so that as a whole the communication process remains effective.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0157827

Among primates, greater adult brain size and behavioral complexity are correlated with heightened offspring dependency, which can be all exaggerated in humans. Scientists have long emphasized the significance of the coevolution of those traits in the story of human intelligence? That possibility is one implication of a recent study in PNAS from Piantadosi and Kidd. According to the story of human intelligence? That possibility is one implication of a recent study in PNAS from Piantadosi and Kidd, among primates, greater adult brain size and behavioral complexity are correlated with heightened offspring dependency, which are all exaggerated in humans. Scientists have long emphasized the significance of the coevolution of those traits in humans, and Piantadosi and Kidd have now provided new insight regarding how that coevolution occurred.

http://www.pnas.org/content/113/25/6816.extract

Adapting to the environment requires using feedback about previous decisions to make better future decisions. Sometimes, however, the past is not informative and taking it into consideration leads to worse decisions. In psychophysical experiments, for instance, humans use past feedback when they should ignore it and thus make worse decisions. Those choice history biases persist even in disadvantageous contexts. To test this persistence, we adjusted trial sequence statistics. Subjects adapted strongly when the statistics confirmed their biases, but much less in the opposite direction; existing biases could not be eradicated. Thus, even in our simplest sensory decisions, we exhibit a form of confirmation bias in which existing choice history strategies are easier to reinforce than to relinquish.

http://www.pnas.org/content/113/25/E3548.abstract

One mystery of human evolution is why our cognition differs qualitatively from our closest evolutionary relatives. Here we show how natural selection for large brains may lead to premature newborns, which themselves require more intelligence to raise, and thus may select for even larger brains. As we show, these dynamics can be self-reinforcing and lead to runaway selection for extremely high intelligence and helpless newborns. We test a prediction of this account: the helplessness of a primate’s newborns should strongly predict their intelligence. We show that this is so and relate our account to theories of human uniqueness and the question of why human-level intelligence took so long to evolve in the history of life.
The problem is that, while it works for primates, it doesn’t extend to other animals. You can’t get more helpless than being born as an egg; and, David Icke aside, nobody believes that lizards are all that clever.

BASTIEN BLAIN, GUILLAUME HOLLARD & MATHIAS PESSIGLIONE – Neural mechanisms underlying the impact of daylong cognitive work on economic decisions

In evolved species, resisting the temptation of immediate rewards is a critical ability for the achievement of long-term goals. This self-control ability was found to rely on the lateral prefrontal cortex (LPFC), which also is involved in executive control processes such as working memory or task switching. Here we show that self-control capacity can be altered in healthy humans at the time scale of a workday, by performing difficult executive control tasks. This fatigue effect manifested in choice impulsivity was linked to reduced excitability of the LPFC following its intensive utilization over the day. Our findings might have implications for designing management strategies that would prevent daylong cognitive work from biasing economic decisions.

ZUZANA HOFMANOVÁ et al – Early farmers from across Europe directly descended from Neolithic Aegeans

One of the most enduring and widely debated questions in prehistoric archaeology concerns the origins of Europe’s earliest farmers: Were they the descendants of local hunter-gatherers, or did they migrate from southwestern Asia, where farming began? We recover genome-wide DNA sequences from early farmers on both the European and Asian sides of the Aegean to reveal an unbroken chain of ancestry leading from central and southwestern Europe back to Greece and northwestern Anatolia. Our study provides the coup de grâce to the notion that farming spread into and across Europe via the dissemination of ideas but without, or with only a limited, migration of people.

TIM H. HEUPINK et al with ESKE WILLERSLEV – Ancient mtDNA sequences from the First Australians revisited

This report is the first publication, to our knowledge, to report the complete mitochondrial genome of an ancient Aboriginal Australian. In addition, it also provides important evidence about the reliability of the only previous publication of this kind. The paper attained international significance, although its conclusions have remained controversial. Using second generation DNA sequencing methods, we provide strong evidence that the DNA sequences reported by Adcock et al. were, indeed, contamination. Our manuscript is also important, because the research was planned and conducted and is published with the support of the Barkindji, Ngiyampaa, and Muthi Muthi indigenous groups.

CRAIG T. PALMER, KATHRYN COE & LYLE B. STEADMAN – Reconceptualizing the Human Social Niche: How It Came to Exist and How It Is Changing

In this paper we present a reconceptualization of the social dimension of the human niche and the evolutionary process that brought it into existence. We agree with many other evolutionary approaches that a key aspect of the human niche is a social environment consisting primarily of cooperating and altruistic individuals, not a Hobbesian social environment of “war of all against all.” However, in contrast to the conception of this social environment as consisting of individuals who, in Boyd and Richerson’s words, “cooperate with large groups of unrelated individuals,” we propose that it is more accurately described as consisting of cooperating individuals who currently are often nonkin but who, until relatively recently in human existence, were primarily, and in many cases almost exclusively, kin. In contrast to the conception of this social environment coming into existence by way of a process of selection within and between groups, we propose that it is the result of selection operating on traditions originated by ancestors and transmitted to their descendants. We use our fieldwork in three areas of
the world (New Guinea, Ecuador, and Canada) to illustrate this process and how current social environments can be roughly placed on a continuum from traditional to nontraditional.

http://www.journals.uchicago.edu/doi/abs/10.1086/685703

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EAORC website information is at http://martinedwardes.webplus.net/eaorc.html