

HUMAN BEHAVIOR & EVOLUTION SOCIETY



Summer-Fall 2009 Newsletter

In This Issue

View From The
President's Window

Interview

The Student Voice

HBES Conference

2009 Competition

Winners

HBES 2010

Letters From The
Editors

Announcements

Redesigned HBES.COM

Academic Positions

Meetings

Collaborations/Studies

New Books

Resources



Remembering Margo Wilson

[Read more...](#)

View

From the President's Window
Peter J. Richerson

Our HBES president is Pete Richerson, Distinguished Professor in the Department of Environmental Science and Policy at UC Davis. Prof. Richerson discusses the Environment of Evolutionary Adaptedness (EEA) and what we now know about climate variation.

[Read more...](#)



Interview

Randy Thornhill

The featured interview in this edition is with Professor Randy Thornhill, Distinguished Professor of Biology at the University of New Mexico and HBES president-elect. Thanks to Josh Tybur for conducting this interview. Hope you enjoy.

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MisMannered

Coming Soon

Stay tuned for the next edition of MisMannered.

Students

Carolyn Hodges | Kate Hanson Sobraske

The HBES student representatives are Carolyn Hodges and Kate Handson Sobraske. Learn more about the award for outstanding paper in EHB. [Read more...](#)



Remembering Margo Wilson



HBES' great friend Margo Wilson passed away after a long and courageous battle with lymphoma. Margo's intellectual contribution to our field through her work with Martin Daly on homicide is an enduring classic. Her service to the society as President and as founding editor of EHB with Martin was instrumental in growing the Society and Journal from small beginnings to enduring institutions. We will never forget Margo's big smile and her special kind of energy. It accompanied her casual conversations, her most acute scientific observations, her direct service, her dedication, and her ambitions for the society. We will miss her terribly.

For those wishing to make a memorial donation, two suitable recipients are the [Canadian Royal Botanical Gardens](#) and the [Juravinski Cancer Centre Foundation](#). The editors of EHB are planning a formal tribute in an upcoming volume.

View From the President's Window | Peter J. Richerson



What Was The Environment of Evolutionary Adaptedness Like?

One of the bedrock principles of evolutionary science is that what we are today is the product of evolutionary forces acting upon our ancestors in the past. In the case of human cultural evolution, people might select cultural variants based on some guesses about the future. But our individual and collective ability to predict the future is quite limited. We are today largely what evolution in the past made of our lineage. Hence, the concept of an Environment of Evolutionary Adaptedness has great appeal. The assumption usually seems to be that the human EEA is roughly approximated by ethnographically known foragers or other contemporary small-scale societies, like the !Kung and the Yanomamo. Human evolutionists often point out that we spent more than 99% of our evolutionary history as hunter-gatherers, suggesting that human evolution was shaped by a relatively constant environment something like that of contemporary foragers for most of the Pleistocene.

The trouble with this picture is that it does not do justice to a much richer, more interesting and more problem-ridden human evolutionary history. In the last two decades paleoanthropologists, paleoclimatologists, and human geneticists have begun to paint a more detailed picture of the past and it looks nothing like the received view. The paleoenvironmental record is being read with increasingly accuracy and precision as well-funded paleoclimatologists avidly seek data about past environments in order to help answer questions about future climate. The changes have been stunning. Over the last 65 million years, the world's climate has become cooler and drier, culminating in the Plio-Pleistocene ice ages, starting about 2.6 million years ago. At that time, the climate shifted from being dominated by a relatively low amplitude 23,000 year cycle to being dominated by a higher amplitude 41,000 year cycle. Then, about 1 million years ago, the amplitude of climate fluctuation increased again. A 100,000 year cycle became the dominant component of the variation and the amplitude of this cycle increased further about half a million years ago.

Paleoanthropologists have noted that the first members of our genus *Homo* appeared not long after the shift to the 41,000 year cycle. Larger brained hominins, the fore-runners of Neanderthals and our own species evolved after the shift to the 100,000 year cycle, particularly after 500,000 years ago.

Exactly what these low frequency climate fluctuations imply about hominin evolution is not clear. For sure, they would have brought dramatic shifts in the ranges of hominins, and that of their competitors, their predators and their prey. But there is no reason to believe that this would have created a niche which favored hominins who had large metabolically taxing brains—the time scales of change are much too long. A clue about what might have favored big brains and the things that big brains can do came to light in the mid 1990s when exquisitely detailed cores covering about the last 80,000 year were raised from the Greenland Ice Cap. They revealed a stunning pattern of high frequency high amplitude variation. During the last Ice Age, dramatic climatic changes occurred on times scales ranging from the millennium to the decade. Compared to these fluctuations, the “The Little Ice Age,” which caused so much social and economic disruption between 1250 and 1850, is hardly perceptible. More recently, a number of other high resolution ice, lake, and ocean cores have confirmed the pattern observed in the Greenland core; high amplitude millennial and sub-millennial scale variation characterized the last glacial period. Cores having records covering the last four to five glacial cycles have shown that all the glacial periods were highly variable, and the interglacial periods, like the present, were relatively calm. Some recent cores suggest that the drumbeat of sub/millennial scale variation has increased over the last few glacial cycles.

Sub/millennial scale variation has obvious implications for the evolution of human brain size. In addition to temporal variation, rapid change probably created a chaotic out-of-equilibrium spatial

variation in ecosystems, compared to the more orderly communities and biomes that have existed for the last 11,500 years. Whether big brains are mainly about deploying content rich cognitive modules, rapid individual acquisition of new information, fast cultural evolution to run up new adaptations, or some combination of all three, one can imagine how the rather high costs of big brains could be repaid in such variable environments. Humans are not unique in this response to Pleistocene environments. Harry Jerison's classic study suggests that many mammalian lineages had large increases in brain size at the same time as hominins.

Interestingly, hominins do not seem to have very common any time in the Pleistocene, with the partial exception of West Eurasia during the last glacial period. Human genetic diversity is low compared to chimpanzees. Neanderthals appear to have had even lower diversity than Anatomically Modern Humans. Humans either went through recent population bottlenecks, or were chronically rare. The genetic data do not yet speak with one voice about the details of our paleodemography, but the archaeological evidence seems quite consistent with chronic rarity. Site densities per unit time are low, and both Anatomically Modern Humans and Neanderthals made Mousterian/MSA tools of intermediate complexity until the middle of the last ice age. That is, both very big-brained species made comparatively simple stone tools for one whole interglacial glacial cycle with little sign of cultural progress. This is a vexing puzzle. Big brains are very costly, and it makes sense that fancy behavioral capacities could support such a brain. But the brains seem to have reached very large size in people who still made comparatively simple tools. Both big-brained hominins after the middle of the last glacial did begin making much fancier tools. Richard Klein has suggested that some favorable genetic mutation about 50,000 years ago provided the final cognitive modernization that made modern capacities for cultural elaboration possible. Perhaps. But there is as yet no direct evidence. In this scenario, the advanced Neandertal toolkits were acquired by trade or copying from Anatomical Moderns. Another possibility is that environmental changes were responsible for the changes around 50,000 years ago, either by directly unleashing culture or by favoring genes that supported cultural elaboration.

The evidence from Tasmania and other situations where Holocene populations were isolated and small suggests that cultural complexity increases with effective population size. Tasmanians had a reasonably complex toolkit in the early Holocene that became much simplified after the flooding of the Bass Strait isolated a few thousand Tasmanians from the hundreds of thousands of Australians on the mainland. It may be that Anatomical Moderns and Neanderthals made relatively simple tools because their populations were too small and disconnected to develop and maintain more complex technology, not because they were cognitively or socially inferior.

Like humans, cheetah and African wild dogs have low genetic diversity. These species are interesting because, like Pleistocene humans, they prey mainly on medium sized herbivores. This is a crowded ecological niche in Africa today and would have been crowded in Pleistocene Eurasia. Ecologists have come to suspect that wild dogs and cheetah are confined to marginal habitat by interference competition from lions, hyenas, and leopards. Hominin fossils often show signs of being victims of predation. One possible explanation for the apparent rarity of hominins, even late, large-brained, comparatively sophisticated hominins, is that we were only a marginally successful member of the predator guilds of Africa and Eurasia.

Why might humans have begun to be substantially more common and more sophisticated about 50,000 thousand years ago? One possibility is that the frequency and perhaps the amplitude of climatic variation increased substantially just before this critical time, broadening our access to the carnivore niche. Perhaps our ultra big brains enabled us to hunt more successfully than the slower responding competition when the climate became more variable.

Even so, the making of ultra fancy tools seems to have been confined to the Upper Paleolithic of west Eurasia and southwestern Siberia until nearly the end of the Pleistocene. This is also a vexing pattern. Have archaeologists just missed Upper Paleolithic analogs, say in West Africa and Southeast Asia? Perhaps; tropical forests are hard for archaeologists to prospect, although what has come to light so far is not encouraging. West Eurasia is environmentally unique in being the relatively mild maritime end of the Mammoth Steppe Biome that once stretched from Spain and France across Siberia over the dry Bering

Strait to Alaska and northwestern most Canada. At least the eastern most part of this biome (Beringia) was free of humans until about 14,000 years ago. Much of northeastern Siberia may have been exploited lightly and humans might have been confined to far western refugia during the cold episodes of the sub/millennial scale variation. The lack of fuel-wood may have been a factor in surviving winters. The big game themselves were better adapted to cold winters and seem to have been numerous in the regions that people could not exploit. One problem with being a really sophisticated hunter, with a full kit of clever gear for capturing prey, is that such populations might have tended to become superpredators, expanding, over-exploiting their prey, and causing in turn a collapse of human populations. In Africa, several industries with an Upper Paleolithic cast, such as the Howison's Poort and Still Bay of Southern Africa, seem to have arisen and disappeared in less than a thousand years. Perhaps they represent population booms that began to make fancy tools and then suffered a superpredator's collapse. The west Eurasians may have avoided a similar fate only because they had an inadvertent protected reserve on the eastern Mammoth Steppe that provided a westerly flow of game populations, or some other environmental advantage that allowed them to maintain large populations and, hence, complex culture.

In the Holocene, but not in the previous interglacial, human populations exploded by shifting their caloric demand to plants. Cultural innovations have led to a veritable adaptive radiation of Anatomically Modern Humans into a huge variety of hunting-and-gathering, horticultural, agrarian, herding, fishing, trading, and manufacturing niches. Humans likely always consumed some plant resources, at least at lower latitudes, but even the plant rich hunter-gather lifestyle of the San, Ache, Australians, and Western North Americans is outside the range Pleistocene peoples, much less agricultural adaptations. Recent genetic studies indicate that humans underwent a burst of evolution as they adapted to new diets and to the new diseases brought about by denser populations and contact with domestic animals. Whether any genes related to behavior also came under selection in the Holocene is currently unknown, but some paleogeneticists expect to find such loci. At minimum, the EEA extended into the first half of the Holocene. After this bust of evolution, we became

better adapted to the Holocene than we ever were to the Pleistocene, to judge by the vast increase in our biomass and cultural diversity. Our Holocene adaptations seem to have generally exhibited boom and bust dynamics, perhaps an extension of a pattern of recurrent excessive exploitation of resources that goes back to Pleistocene episodes of superpedation.

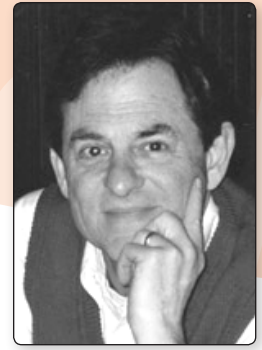
The conventional EEA concept seems to me to create more problems than it solves. Rob Boyd's and my gene-culture coevolution hypothesis would best fit a smooth, intimate relationship between anatomical modernization, especially brain size, and toolkit complexity. Allison Brooks and Sally McBrearty outlined such a scenario a decade ago, but, according to other observers, the record looks more punctuated to many observers. Ephemeral local episodes of tool sophistication, often with regression, are plausibly the rule in the late Pleistocene, rather than a steady march of increasing technological complexity. The most common Evolutionary Psychology hypothesis would be consistent with a long-continued, stable, Pleistocene to which humans successfully adapted, followed by chaos in the Holocene. But even the patterns of variation changed during the Pleistocene. The remarkable success of Holocene humans compared to our ancestors seems to contradict the idea that we are not adapted to the Holocene. Somehow, a marginally successful Pleistocene predator turned out pre-adapted for spectacular successes in the Holocene. The mysteries and complexities of the actual EEA are much more interesting than the caricatures we once held. As JBS Haldane is supposed to have said "The world is not only queerer than we suppose, it is queerer than we can suppose!" Perhaps what we turn out to be able to do in the Holocene says as much about what we might have been up to in the EEA as vice versa.

For a fully referenced version see:

Richerson, Peter J., Robert Boyd, and Robert L. Bettinger. 2009. Cultural Innovations and Demographic Change. *Human Biology* 81: 211-235.



Interview | Randy Thornhill



In this edition, Dr. Josh Tybur interviews the HBES President-Elect, Randy Thornhill, Distinguished Professor of Biology at the University of New Mexico. Prof. Thornhill has co-authored a number of books including *A Natural History of Rape: Biological Bases of Sexual Coercion* with Craig T. Palmer and the recently released *The Evolutionary Biology of Human Female Sexuality* with Steven W. Gangestad.

Your graduate training was in zoology, but your research has focused on humans for the past fifteen years or so. What motivated you to focus on humans later in your career?

I got my Masters from Auburn University in entomology, and my Ph.D. was in zoology, from the University of Michigan. For the most part, my graduate training focused on evolutionary biology and ecology. I did a lot of insect studies and some bird studies early on, and beginning in 1979, I published my first study having to do with humans on the cuckoldry hypothesis of concealed ovulation. So the human stuff goes way back, but you're absolutely right that up until the last 15-20 years, most of it has been insect research. However, most of that research was focused on standard evolutionary theoretical questions, just using insects as systems to study those topics. It used insects as a tool to study topics like female choice and alternative mating strategies. I eventually started applying these topics to humans almost exclusively, but even in the book that Steve (Gangestad) and I just published, about 50% of the references are on non-humans.

The switch to studying humans was driven by the fact that evolutionary theory provides a very useful way to scientifically understand any taxonomic group, and I have a longstanding interest in humans.

So why don't you study insects any more?

I think people like you and me respond to the discovery rate. The higher the discovery rate, the more positive reinforcement we get for continuing our research. The discovery rate for humans is so incredibly high because of the tradition of not using evolutionary approaches for studying humans. That has left open all these important questions about human social life, including sexual life, of course. That can no longer be said about insect studies. I do have a graduate student, Kenneth (Letendre) who, in part, is working on ant social behavior as part of his dissertation. The general approach in my program is using evolutionary theory to identify some issues that are unanswered, and finding a taxonomic group that you can test those questions against, without limitation of taxonomic group.

As a trained evolutionary biologist and distinguished professor of biology at UNM, do you feel that biologists who study non-human animals are open to applying the same research program to humans? If not, why do you think this is?

I think they are all open to the application of modern evolutionary biology to physiological systems in general in humans. But the application of evolutionary biology to human behavior and psychology is not a universal kind of application among biologists. People differ on the degree to which individuals

are willing to take risks, and to be open to new ideas and new ways of doing things. You have to be a very open minded person as opposed to a closed minded person to pursue the application of evolutionary biology to human behavior and psychology.

The question is really one of the value differences among individuals, pertaining to the appreciation of the application of science to everything, not just birds and bees and human guts, but also human behavior and psychology. Those who are not interested in the application of evolutionary biology to human behavior and psychology are simply more conservative, I have hypothesized.

Your earlier studies of sexual coercion among insects was relatively non-controversial, but such research applied to humans created a lot of controversy. Why do you think that is?

I would qualify it just a little bit by saying that the stuff on insects did receive some controversy within biology because some people would read into it that I was saying that rape, wherever it occurs taxonomically, is right, because I was studying rape adaptation in insects. There were even papers in scientific journals saying, "Thornhill's on the wrong track here. He's endorsing rape." And these were coming from biologists.

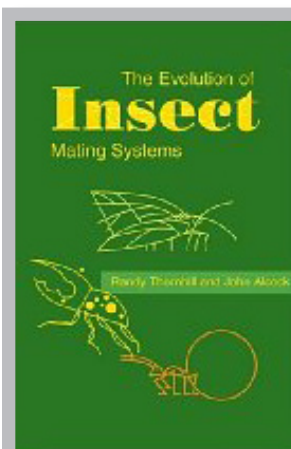
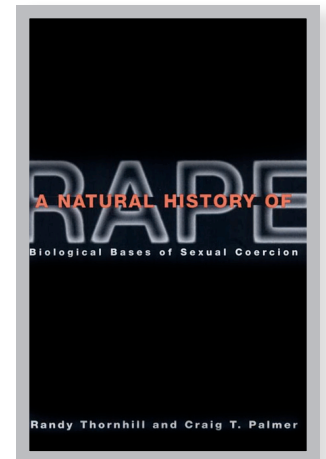
But you're right in the sense that there was relatively little of that compared to the application of sexual selection theory to human sexual coercion. And again, we're dealing with the same phenomenon I just discussed. We're dealing with a limitation in the application of science

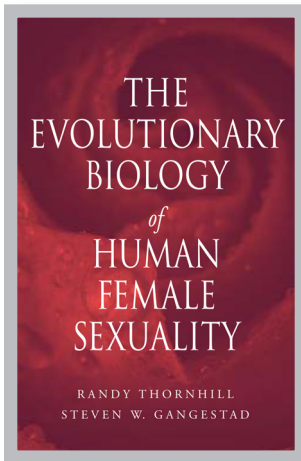
to the world. It applies to everything except human behavior, and an extreme lack of application to human sexual behavior. All sex researchers have met the wrath of social criticism. Kinsey, Masters and Johnson, etc., took tremendous criticism from society. That's simply because many people are conservative minded, and sex is really the heart of the conservative way of thinking. You just don't talk about it – you don't do anything that might endorse promiscuity.

I think the answer is simple: if you get people who want to limit the application of science to anything, be it the opposition to the early ideas in physics applied to how the universe works, or the opposition to the application of any area of science to any area of our universe, it's coming out of conservative values. That applies with equal force to the limitation of the application of evolutionary biology to human behavior and psychology, and even stronger against the application of evolution to rape, because rape is about sex, and that is the heart of the conservative value system.

What advice can you give to scientists who study controversial topics? What is the best way to handle media attention and social criticism?

The people who study controversial topics – and that's everyone in HBES, compared to other scientific societies – are coming from an ideological system of valuing the application of scientific ideas to everything, including controversial ideas. So they're already mentally prepared and willing to deal with the controversy.





I would say just be prepared for the wrath. It can be very costly. It can be ostracism from the local group all the way to physical threats to that scientist and the scientist's family, like what (Craig) Palmer and I got.

Where is the limit of the application of scientific ideas to human behavior?

There is no limit to the application of science to the universe. That is a point of view that I share generally with people at HBES. I do not share that view with most of the rest of the people of the world, in and out of science. But on a personal level, a person has to decide how much cost they are willing to accept, because the ramifications of studying very controversial topics can be very serious. Most people will adaptively not go the limit, because it's easier to get promotions, get accolades, and get your papers in the highest journals.

What do you see as the field's major advancements, and what areas could use some more attention?

Serious advancements have been made in understanding sexual selection and the related mating system of human beings. It has turned around entirely. All the empirical and theoretical implications associated with the discovery of human estrus have recast entirely the human sexual selection and mating system. Sexuality is a major feature of human social life, and it's been advanced considerably in the last 15 years.

Also, there has been great progress with understanding human altruism. The study of altruism came out of evolutionary biology

with Hamilton and Trivers. That has moved very progressively forward, and would have to be listed as a major accomplishment of our field.

It's a little premature, but I think the evolution of moral systems is getting a lot of very serious and important attention. Same goes for understanding cultural variation, across both traditional and contemporary societies around the world.

I would say another very important area that is now getting attention, but has been neglected almost entirely, is the role of infectious disease. It's interesting to think about why something so important got knocked out of the way as something fundamental to consider in human social life. It looks like some very influential researchers have said that the important selective forces in human evolutionary history came out of interactions with human conspecifics – things like cooperation and conflict. Explicitly, those same researchers said that somewhere in evolutionary history we got away from the importance of parasitic diseases. I think an error was made there. Sure, interactions with conspecifics are very important, but those interactions are very much tied to dealing with infectious disease. I see parasitology becoming a major part of the thought process when researchers think of human social life.

What direction would you like to see HBES move?

The ideas that people associated with HBES have are big and potentially very synthetic ideas, because they're couched in the general theory of life, evolution. They apply to all areas of scholarship associated with the study of humans – economics, political science, sociology, education, you name it. As more and more research is done, those disciplines that traditionally were separate from the study of humans from

an evolutionary perspective will see the need to think about Darwinian ideas when they're studying social phenomena. I think we need to just keep doing what we're doing.

What advice would you give to current and future students of the human evolutionary sciences?

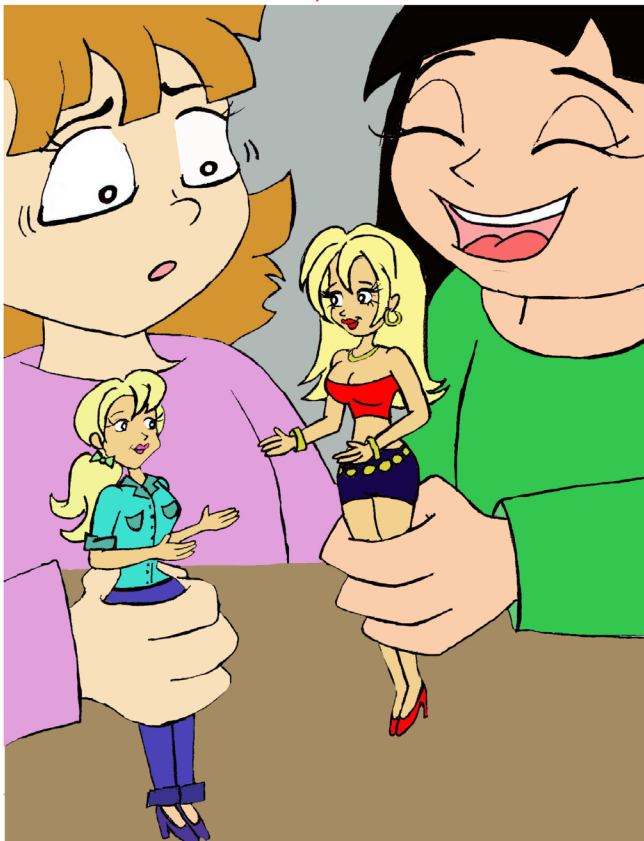
Don't do the sidestepping. Don't just learn a little bit about evolutionary theory and start doing your stuff. You've got to constantly study evolutionary theory, throughout a whole career, really. As many have said, evolutionary theory is the most complicated theory in all of science. You see a lot of people who have sidestepped taking the effort to learn the theory doing the relatively trivial science in our area. I would encourage everybody to really invest the time and energy necessary to learn the

theory, which includes its empirical support cross species.

But people should just keep doing what's been done for the past 20-30 years. And they will. Every year you get a new crop of bright young people in HBES who are motivated to figure hard things out. It's pretty amazing. If you go to a general psychology conference, and you look at the students studying a more traditional area of psychology, you see that the fire in the minds of those people is less in terms of desire to know how the world works than you would find in the new graduate students in HBES. I think that goes back to the fact that people in HBES are interested in applying science to everything without limitations. They're risk prone, they're willing to accept some costs, and they're willing to go with the best science possible, even if it's controversial. It's really a cool group of people.

OUT of the EEA

Created by Shelli Dobb



What?...She's *Ovulating!*



An update from the Student Representatives \$1,500 for Outstanding EHB Paper

Beginning this year and continuing in following calendar years, the editors-in-chief of Evolution & Human Behavior will select one paper published within the journal to be recognized as being of outstanding caliber. While negotiations are underway to formalize the title of the recognition, it has been determined that it will come with a cash prize of \$1,500 total. Further, this recognition is available to all authors, including students. The official title of the award will be posted in EHB.



FEATURED STUDENT PROFILE

David Frederick (Website: <http://dfred.bol.ucla.edu>)

Department of Psychology, UCLA

Dave Frederick is currently a Ph.D. Candidate at UCLA. Dave's research focuses on the social and evolutionary factors influencing human sexuality and cognition. He has specialized in examining the ways that sexual selection theory can be applied to human mating preferences, and how popular media can influence our perceptions of the attractive body. His work examines the extent to which male exaggerated secondary sexual characteristics are involved in

women's choice of mates and the extent to which this influences men's drive to become muscular (with Martie Haselton). Looking across cultures, he has tested evolutionary perspectives on preferences for male and female body types across 41 sites in 26 countries (with Viren Swami). Harnessing the power of the Internet, he has conducted five large scale studies (Ns = 30,000-70,000) on relationship and sexual satisfaction, infidelity, jealousy, and body satisfaction (with Janet Lever). Dave is pleased to be part of a thriving community of scholars applying evolutionary perspectives to understand human behavior. He is currently seeking faculty and post-doctoral positions for the Fall of 2010 or 2011.

Sample publications:

Frederick, D. A., & Haselton, M. G. (2007). Why is muscularity sexy? Tests of the fitness indicator hypothesis. *Personality and Social Psychology Bulletin*, 33, 1167-1183.

Barrett, C., Frederick, D. A., Haselton, M. G., & Kurzban, R. (2006). Can manipulations of cognitive load be used to test evolutionary hypotheses? *Journal of Personality and Social Psychology*, 91, 513-518.

Haselton, M. G., Bryant, G. A., Wilke, A., Frederick, D. A., Galperin, A., Frankenhuys, W. E., & Moore, T. (in press). Adaptive rationality: An evolutionary perspective on cognitive bias. *Social Cognition*.

HBES Conference 2009 Competition Winners

POSTER COMPETITION WINNER

Cristina Gomes, Max Planck Institute for Evolutionary Anthropology

Congratulations to Cristina Gomes for winning the Poster Competition for a poster entitled “Wild Chimpanzees Exchange Meat for Sex on a Long-Term Basis”, co-authored with Christophe Boesch.

Abstract: Humans and chimpanzees are unusual among primates in that they frequently perform group hunts of mammalian prey and share meat with conspecifics. Especially interesting are cases in which males give meat to unrelated females. The meat-for-sex hypothesis aims at explaining these cases by proposing that males and females exchange meat for sex, which would result in males increasing their mating success and females increasing their caloric intake without suffering the energetic costs and potential risk of injury related to hunting. Although chimpanzees have been shown to share meat extensively with females, there has not been much direct evidence in this species to support the meat-for-sex hypothesis. Here we show that female wild chimpanzees copulate more frequently with those males who, over a period of 22 months, share meat with them. We excluded other alternative hypotheses to exchanging meat for sex, by statistically controlling for rank of the male, age, rank and gregariousness of the female, association patterns of each male-female dyad and meat begging frequency of each female. Although males were more likely to share meat with estrous than anestrus females, the relationship between mating success and sharing meat was significant when including in the analysis only sharing episodes with anestrus females. These results strongly suggest that wild chimpanzees exchange meat for sex, and do so on a long-term basis. Similar studies on humans will determine if the direct nutritional benefits that women receive from hunters in foraging societies could also be driving the relationship between reproductive success and good hunting skills.

NEW INVESTIGATOR COMPETITION WINNER

Andrew Delton, University of California Santa Barbara

Congratulations to Andrew Delton for winning the New-Investigator Competition for a paper entitled “Combining Ancestral Cue Structure with Direct Reciprocity Explains One-Shot Cooperation”, co-authored with Max M. Krasnow, John Tooby, & Leda Cosmides.

Abstract: People routinely cooperate with individuals they have never met before and may never see again. Why? Many theories propose that this is a by-product of selection for direct reciprocity, kin selection, or selection for maintaining a favorable reputation. According to other theories, however, additional selection pressures are required. This latter approach is motivated by findings that cooperation persists in anonymous, one-shot experimental settings despite the (apparent) removal of any cues relevant to the three selection pressures listed above. To account for these results, a variety of cultural or genetic group selection models have been proposed. However, by conducting a series of simulations, we show here that such a move is unnecessary: Our results reveal that once the probabilistic nature of ancestral cue structure is taken into account, selection for direct reciprocity creates agents willing to engage in one-shot cooperation despite an explicit belief that the interaction is one-shot. This occurs as a necessary by-product of machinery designed to capture the gains in trade made possible by repeated, mutually beneficial exchanges. Thus, the existence of human cooperation in one-shot experimental settings deductively follows from the premises of standard theories of selection.

HBES Conference 2009 Competition Winners

POST-DOCTORAL COMPETITION WINNER

Andreas Wilke, Clarkson University

Congratulations to Andreas Wilke, Assistant Professor of Psychology at Clarkson University, for winning the Post-Doctoral Competition for a paper entitled "The hot hand phenomenon as a cognitive adaptation to clumped resources", co-authored with H. Clark Barrett.

Abstract: The hot hand phenomenon refers to the expectation of 'streaks' in sequences of hits and misses whose probabilities are, in fact, independent (e.g., coin tosses, basketball shots). Here we propose that the hot hand phenomenon reflects an evolved psychological assumption that items in the world come in clumps, and that hot hand, not randomness, is our evolved psychological default. In two experiments, American undergraduates and Shuar hunter-horticulturalists participated in computer tasks in which they predicted hits and misses in foraging for fruits, coin tosses, and several other kinds of resources whose distributions were generated randomly. Subjects in both populations exhibited the hot hand assumption across all the resource types. The only exception was for American students predicting coin tosses, where hot hand was reduced. These data suggest that hot hand is our evolved psychological default, which can be reduced (though not eliminated) by experience with genuinely independent random phenomena like coin tosses.



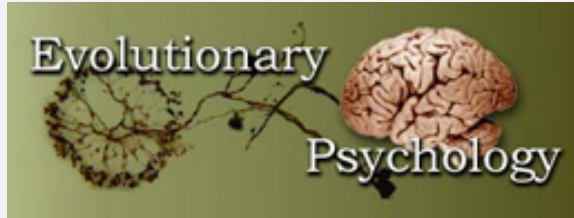
HBES 2010
June 16-20
University of Oregon
Eugene, Oregon



**The 22nd Annual Meeting of the
Human Behavior and evolution Society**

Letters From the Editors

Letter from the Editors of Evolutionary Psychology

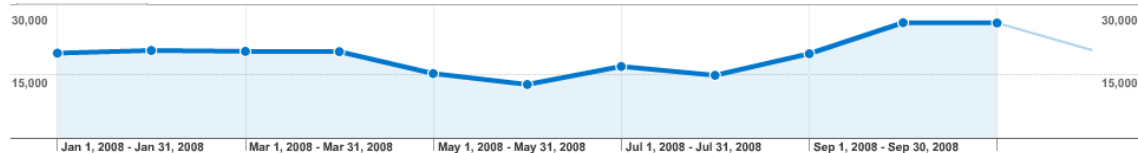


Evolutionary Psychology (www.epjournal.net) is proud to announce the arrival of two new Associate Editors: Harald Euler, Professor of Psychology, University of Kassel, and Craig T. Palmer, Associate Professor of Anthropology, University of Missouri.

The Editors would like to issue a special thanks to Book Review Editor David P. Barash, who is stepping down after six years of excellent service to the journal. We wish him all the best. We are delighted to report that Associate Editor Catherine Salmon will be taking over as Book Review Editor.

Evolutionary Psychology covers empirical, philosophical, historical, and socio-political perspectives and

includes a diverse editorial board composed of distinguished scholars who wish to encourage appropriate submissions across all relevant fields, including original research papers, subject reviews, topic reviews, and book reviews. Recent published articles continue to elevate the Journal's visibility, producing articles in mainstream media such as Newsweek, Wired, and The Boston Globe. Evolutionary Psychology received over 235,000 page views in the past 12 months (see Figure 1). If you would like to receive our monthly Table of Contents via e-mail, please see the Journal website (www.epjournal.net) for fast sign-up. We now also offer a RSS feed, which will notify you when new articles become available throughout the month. You can sign up for the RSS feed through the Journal website (www.epjournal.net) or through <http://feeds.feedburner.com/EvolutionaryPsychology>. Finally, we now have a Facebook group. Find us by searching for Evolutionary Psychology on Facebook, and look for our logo.



237,111 Pageviews

Letter from the Newsletter Editor

Dear HBES Members,

I hope you enjoy this installment of the HBES newsletter. Please send URLs of members in the news to newsletter@hbesociety.com. If you would like to suggest (or conduct) an interview, please submit your suggestions to the email listed above. Also, if you have suggestions for additional content in future newsletters (e.g., illustrations, photographs, poetry, or otherwise), please drop me a line at newsletter@hbesociety.com.

Debra Lieberman, Editor

Announcements

Redesigned HBES Website

The HBES website has a new look.

Coming soon to the website will be a members only section where you will be able to update your contact information, renew membership, vote in elections, search the member directory, and view the HBES newsletters.

Human Behavior & Evolution Society

[Home](#)[About](#)[Conference](#)[Resources](#)[Join HBES](#)[Contact](#)

Conference



22nd Annual HBES Conference
University of Oregon, June 16–20, 2010

Keynote Speaker: TBA
Plenary Speakers: TBA

MEMBERS (COMING SOON)

[View/Edit Profile](#)
[Member Directory](#)
[Elections](#)
[Newsletter](#)

ANNOUNCEMENTS

[HBES Awards](#)
[Academic Positions](#)

Previous Conferences



21st Annual HBES Conference
California State University, Fullerton
May 27–31, 2009

Keynote: Stephen Stearns

Plenary Speakers: Joseph Henrich, Hanna Kokko,
Hillard Kaplan, Caleb Finch, Robert Kurzban & Peter
DeScioli, Virpi Lummaa

[Program \(PDF, 1.3MB\)](#)

Announcements

Academic Positions

The Department of Human Evolutionary Biology at Harvard University is seeking to make a full-time tenure-track appointment at the assistant or untenured associate professor level in the field of non-human primate behavior, and seeks candidates who will complement the current strengths of the program. We are particularly interested in candidates whose interests in behavior extend to cognitive evolution, ecology, genetics, or physiology, and whose primate behavioral studies are explicitly related to human evolution. A strong doctoral record is required and the Department seeks candidates with exceptional promise as scholars and teachers to offer courses at the undergraduate and graduate levels. The Department administers a large and successful undergraduate concentration in Human Evolutionary Biology, hence excellence in undergraduate teaching is a priority. Our Doctoral program stresses integration of laboratory and field research and the cooperative training and mentoring of Ph.D. candidates. Harvard University is an Equal Opportunity/Affirmative Action employer, and applications from women and minorities are particularly encouraged. The appointment is expected to begin on July 1, 2010. Interested candidates should send a CV, example publications, teaching evaluations if available, and the names and addresses of three potential references, by **November 13, 2009** to: Prof. Richard Wrangham, Search Committee Chair, Department of Human Evolutionary Biology, Harvard University, 11 Divinity Avenue, Cambridge, MA 02138 USA, or by email to mlynch@fas.harvard.edu.

Program/Research Manager, CCAS ADVANCE Initiative Women in Science Project

The College of Natural and Health Sciences at the University of Northern Colorado invites nominations and applications for the position of Program/Research Manager, position #E99538. This is a full-time, 12-month position associated with the CCAS ADVANCE Initiative, an NSF-funded project that aims to support the advancement of women science faculty through professional and leadership development of academic deans and department chairs. The initiative focuses on a national association of deans, the Council of Colleges of Arts and Sciences (www.ccas.net), through which these development activities are offered. The successful candidate will be a doctorally-qualified individual with an understanding of STEM gender equity issues. The full vacancy announcement and application instructions are available at: <http://www.unco.edu/nhs/employment.html>. Screening of applications begins **October 20, 2009** and continues until the position is filled. The University is an AAEO employer.

Announcements

Academic Positions

The Department of Psychology in the College of Arts & Sciences at the University of Miami is seeking to fill a tenure track faculty position in Neuroscience, starting in August, 2010. It is anticipated that this position will be filled at the Assistant Professor level. This search is emphasizing research interest in human cognitive neuroscience (e.g., using functional MRI) or animal models examining brain and behavior mechanisms. Individuals with clinical or nonclinical interests in neuroscience (cognitive or behavioral) are encouraged to apply. For clinical appointment, a Ph.D. in Psychology from an APA accredited program or equivalent is required. For non-clinical appointment, a Ph.D. in Psychology, Neuroscience or related area is required. Faculty members in the Department of Psychology are expected to develop their own independent areas of research, teach courses at the graduate and undergraduate level as well as supervise doctoral students. For more information about the Department go to www.psy.miami.edu. Review of applicants will begin immediately. Applicants should send a CV, reprints or preprints, a statement of research and teaching interests, and 4 letters of reference to: Neuroscience Search Committee, Department of Psychology, University of Miami, PO Box 248185, Coral Gables, FL 33124.

The Department of Psychology in the College of Arts & Sciences at the University of Miami is seeking to fill a tenure track faculty position in adult clinical psychology, starting in August 2010. It is anticipated that this position will be filled at the Assistant Professor level. Ph.D. in Psychology from APA accredited program or equivalent required. We particularly welcome inquiries from clinical psychologists whose interests extend to personality-social psychology, and whose interests dovetail with those of our existing clinical and nonclinical faculty. We are particularly interested in persons who strive to integrate social and biological approaches to behavior (examples are social and cognitive neuroscience and behavioral genomics). Successful candidates will be expected to develop their own independent area of research, teach graduate and undergraduate courses as well as supervise doctoral students. A more complete description of this program and the research interests of its current faculty is at <http://www.psy.miami.edu/adult/overview.html>. Review of applications will begin immediately. Applicants should send a CV, selected reprints or preprints, a statement of research and teaching interests, and 4 letters of reference to: Adult Faculty Search Committee, Department of Psychology, University of Miami, PO Box 248185, Coral Gables, FL 33124.

Announcements

Meeting: Penn State's 17th Annual Symposium on Family Issues

Biosocial Research Contributions to Understanding Family Processes and Problems

October 8-9, 2009

Penn State's University Park campus

Alan Booth, Distinguished Professor of Sociology, Demography, and Family Studies, explains, "Conceptual shifts and technological breakthroughs have placed new emphasis on the importance of combining nature and nurture to understand family processes and problems. The link between biology and behavior is no longer regarded as a simple, unidirectional, cause and effect process." Today's researchers emphasize bi-directional relations between physiological processes and behavior, processes that operate in the context of previous experience and the demands of a multi-layered ecology. Booth explains, "Biological factors mediate and moderate behavioral adaptation to a range of environmental challenges. At the same time, environmental challenges and behavioral responses affect biological processes." Family relationships are at the intersection of many biological and environmental influences.

The goal of this symposium is to stimulate conversation among scholars who construct and use biosocial models, as well as among those who want to know more about biosocial processes. Researchers interested in both biological and social/environmental influences on behavior, health, and development will be represented, including researchers whose work emphasizes behavioral endocrinology, behavior genetics, neuroscience, evolutionary psychology, sociology, demography, anthropology, economics, and psychology. Sixteen symposium presenters will consider physiological and social environmental influences on parenting and early childhood development, followed by adolescent adjustment, and family formation. Finally, factors that influence how families adapt to social inequalities will be examined.

Lead speakers include: Alison Fleming, University of Toronto at Mississauga, Jenae Neiderhiser, Penn State, Steven Gangestad, University of New Mexico, and Guang Guo, University of North Carolina, Chapel Hill. For a complete list of presenters and to register, visit <http://www.pop.psu.edu/events/symposium/2009.htm>. The Symposium is supported by a grant from the Eunice Kennedy Shriver National Institute for Child Health & Human Development.

Announcements

Meeting: 28th Annual Meeting of Association for Politics and the Life Sciences

Call for Papers
Indiana Memorial Union
Indiana University, Bloomington, IN
October 14 – October 16, 2010

Announcement: The 2010 Annual Meeting of the Association for Politics and the Life Sciences (APLS) will be held on October 16, 2010 at the Indiana Memorial Union on the campus of Indiana University, Bloomington. In celebration of our 30th birthday, the theme of this year's Meeting is: "Towards Consilience: Thirty Years of the Association for Politics and the Life Sciences."

Call for Papers: Individual paper presentations, panel, and roundtable proposals are welcome on any topic that pertains to the following broad categories: New directions in politics and the life sciences, biobehavior, life science policies, neurology and politics, bioethics, bioterrorism, genetics and politics, biotechnology, and the environment

Program: Recent meetings of APLS were highlighted by keynote speakers: E.O. Wilson, Frans de Waal, Lionel Tiger, Francis Fukuyama, Matt Ridley, Arthur Caplan, Gary Marcus, Napoleon Chagnon, and Owen Jones. We are currently negotiating with an exciting group of possible plenary speakers and keynoters. More details about the program are forthcoming. Also forthcoming are details about hotel accommodations and registration for the Meeting.

To Submit Proposals: The Program Committee will consider proposals for individual paper presentations, for research panels, and for roundtables. For paper presentations, please send via email attachment, an abstract (preferably in Word) not to exceed 200 words that includes: the title of your presentation, your name and title, and institutional affiliation to aplswebmaster@gmail.com. For research panels and roundtables, send to the same email address a description not to exceed 200 words of the proposed panel or roundtable that includes the panel title, your name as "organizer," your affiliation and contact information for all other panel and roundtable participants. All panel members should still submit abstracts for their individual papers and also indicate their panel affiliation.

Deadline: The deadline for receipt of proposals is May 1, 2010.

Announcements

Collaboration/Studies

Meta-Analysis of Trivers-Willard Hypothesis for Human Birth Sex Ratio

Together with Gillian Brown, Jonathan Sayers and Joan Silk I am carrying out a meta-analysis of the Trivers-Willard hypothesis for the human birth sex ratio. We have virtually completed data acquisition from the journal literature but in order to be as inclusive as possible and to deal with the file-drawer problem (the potential under-reporting of negative findings) I would be interested to hear from anyone who has relevant data, either unpublished or published in books, dissertations, theses, conference proceedings, etc. We will of course acknowledge all contributors in our publication of this work. Please contact: John Lazarus, Centre for Behaviour and Evolution, Institute of Neuroscience, Room 285 Henry Wellcome Building, Newcastle University, Newcastle upon Tyne, NE2 4HH, UK, Tel: +44 (0)191 222 6181

Collaboration/Studies

WAITRESSES NEEDED FOR A STUDY ON MOOD

Participants must be between 18 and 40, in good health, and working as a restaurant waitress or food server where tips are a part of income.

Please let us know of anyone who might qualify, or pass along our contact information to them. Thank you!

Peter.Gray@unlv.edu

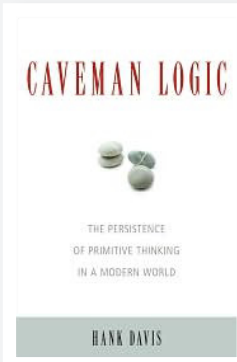
Fred.Kuch@unlv.edu

More information is at the project website:

www.unlv-waitress-study.com

Announcements

New Books



Caveman Logic: The Persistence of Primitive Thinking in a Modern World by Hank Davis, encourages us to transcend the mental default settings and tribal loyalties that worked well for our ancestors back in the Pleistocene age. Davis laments a modern world in which more people believe in ESP, ghosts, and angels than in evolution. Superstition and religion get particularly critical treatment, although Davis argues that religion, itself, is not the problem but “an inevitable by-product of how our minds misperform.” Davis argues, “It’s time to move beyond the one-size-fits-all, safety and comfort-oriented settings that got our ancestors through the terrifying Pleistocene night.” In contrast, Davis advocates a world in which “spirituality” is viewed as a dangerous rather than an admirable quality, and suggests ways in which we can overcome our innate predisposition toward irrationality. He concludes by pointing out that “biology is not destiny.” Just

Spent: Sex, Evolution, and Consumer Behavior

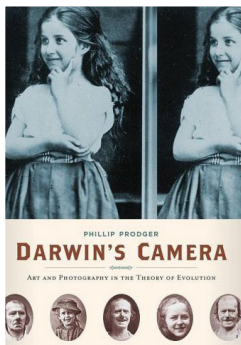
by Geoffrey Miller, analyzes consumer psychology, economic behavior, and contemporary culture from a unique new scientific perspective. It is grounded in the latest research on both the human universals that constitute human nature, and the individual differences that loom so large in our social interactions. In particular, *Spent* clarifies how human instincts for displaying our intelligence, personality traits, and moral virtues to mates, friends, and family drive much of runaway consumerism.



Spent.

Sex, Evolution, and Consumer Behavior
Geoffrey Miller

as some of us succeed in watching our diets, resisting violent impulses, and engaging in unselfish behavior, we can learn to use critical thinking and the insights of science to guide individual effort and social action in the service of our whole species.

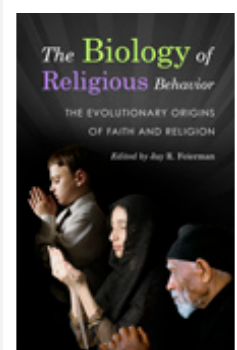


Darwin's Camera: Art and Photography in the Theory of Evolution by Phillip Prodger, tells the extraordinary story of how Charles Darwin changed the way pictures are seen and made. In his illustrated masterpiece, *Expression of the Emotions in Man and Animals* (1871), Darwin introduced the idea of using photographs to illustrate a scientific theory--his was the first photographically illustrated science book ever published. Using photographs to depict fleeting expressions of emotion—laughter, crying, anger, and so on—as they flit across a person's face, he managed to produce dramatic images at a time when photography was famously slow and awkward. The book describes how Darwin struggled to get the pictures he needed, scouring the galleries, bookshops, and photographic studios of London, looking for pictures to satisfy his demand for expressive imagery. He finally settled on one the giants of photographic history, the eccentric art photographer Oscar Rejlander, to make his pictures. It was a peculiar choice.

Darwin was known for his meticulous science, while Rejlander was notorious for altering and manipulating photographs. Their remarkable collaboration is one of the astonishing revelations in *Darwin's Camera*.

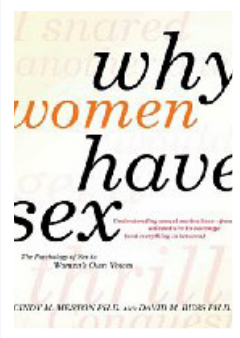
The Biology of Religious Behavior: The Evolutionary Origins of Faith and Religion

edited by Jay R. Feierman, offers a fresh and detailed take on the evolution of religious behavior from a biobehavioral perspective, promoting a new understanding that may help build bridges across the religious divide. Religious conflict and divisiveness have been important themes in human history, and their effects are no less evident today. The scientific study of religion cannot by itself mend these divisions, but by enhancing our understanding of behavior, it can make an important contribution towards that end. There has been much recent interest in the study of religion from the perspective of Darwinian evolution. In addition to its primary focus on religious behavior, the book addresses other important aspects of religion, such as values, beliefs, and emotions as they affect behavior.

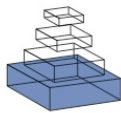


Announcements

New Books (cont.)



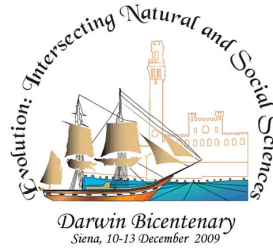
Why Women Have Sex by Cindy M. Meston and David M. Buss explores whether women have sex simply to reproduce or display their affection? Through the voices of real women, Meston and Buss reveal the motivations that guide women's sexual decisions and explain the deep-seated psychology and biology that often unwittingly drive women's desires—sometimes in pursuit of health or pleasure, or sometimes for darker, disturbing reasons that a woman may not fully recognize. Drawing on more than a thousand intensive interviews conducted solely for the book, as well as their pioneering research on physiological response and evolutionary emotions, *Why Women Have Sex* uncovers an amazingly complex and nuanced portrait of female sexuality. They delve into the use of sex as a defensive tactic against a mate's infidelity (protection), as a ploy to boost self-confidence (status), as a barter for gifts or household chores (resource acquisition), or as a cure for a migraine headache (medication). *Why Women Have Sex* stands as the richest and deepest psychological understanding of female sexuality yet achieved and promises to inform every woman's (and her partner's) awareness of her relationship to sex and her sexuality. Other important aspects of religion, such as values, beliefs, and emotions as they affect behavior.



frontiers in EVOLUTIONARY NEUROSCIENCE

Frontiers in Evolutionary Neuroscience is a first-tier electronic journal devoted to understanding the evolution of neural processes, neuroanatomical structure, neural structure - function relationships, and cognition and behavior. Brains regulate behavior and as such have been designed by evolution to solve specific adaptive problems faced by organisms during evolutionary history. Frontiers in Evolutionary Neuroscience is dedicated to publishing papers that lead the field in discovering mechanisms that have undergone selection pressures resulting in evolution (divergent or convergent) of structure or function that leads to a greater understanding of 1) the neural processes of animals and humans; 2) neuropsychiatric disease states and the paths in which normal neural processes have gone off course; 3) the genetics underlying variations across species in neurocomputational hardware and behavior; and 4) evolutionary underpinnings that gave rise to advanced social and cognitive capacities. Evolutionary neuroscience is the discipline poised to answer fundamental questions about the nature of the nervous system such as the degree to which behavioral, cognitive, and neural modularity exists (e.g., domain specificity versus domain general processing); heritability and variations (species, regional, cultural, ethnic, and individual) in intellectual, social, and personality characteristics; make predictions about ancestral neural states (paleoneurology); and inform behavior and clinical modification programs from an evolutionary perspective. The journal welcomes submissions that tackle questions from a broad spectrum of disciplines and use myriad methodologies including, but not limited to: comparative genetics and genomics; investigations of allelic variations of behavior, cognition, and neural structure and function; comparative investigations of animal and human behavior that address the underlying cognitive and neural architecture; and functional neuroimaging studies that have been guided by an evolutionary framework.

Announcements



Evolution: Intersecting Natural and Social Sciences

an International Congress organized by the Santa Chiara Graduate School and Pro.M Chair in Bioeconomics of the University of Siena.

The Congress will be held on **10-13 December 2009 in Siena (Italy)**, and will focus on three major themes at the intersection between organic evolution and social sciences:

- **Bioeconomics and evolutionary mechanisms in social and natural sciences**
- **Behavioural evolution and comparative studies of animal societies**
- **Human nature and human culture: crossroads of evolution**

In the context of Darwin bicentenary celebrations, we wish to approach his groundbreaking works trying to investigate the relationships between natural evolution and human social systems, and their possible implications for society. Both methodological and data driven presentations are welcome. The congress will include multiple sessions, invited lectures by leading researchers in each field and oral presentations by participants.

Invited speakers:

Edoardo Boncinelli, University Vita-Salute and Santa Chiara Graduate School; **Samuel Bowles**, University of Siena and Santa Fe Institute; **Luigi Luca Cavalli-Sforza**, Stanford University; **Marcus W. Feldman**, Stanford University; **Michael T. Ghiselin**, California Academy of Sciences and Santa Chiara Chair in Bioeconomics; **Telmo Pievani**, University Milan Bicocca.

Scientific Committee:

Samuel Bowles, Santa Fe Institute and University of Siena; **Francesco Frati**, University of Siena; **Michael Ghiselin**, California Academy of Science and Santa Chiara Chair in Bioeconomics; **Janet Landa**, York University; **Ugo Pagano**, University of Siena; **Robert Rowthorn**, University of Cambridge and Santa Chiara Chair in Bioeconomics; **Lucia Sarti**, University of Siena.

Under the auspices of:

Santa Chiara Graduate School and Chair in Bioeconomics; Monte dei Paschi Foundation; SIBE-ISEB, Italian Society for Evolutionary Biology; Pikaia.eu, the portal of Evolution; UZI, Italian Zoological Union

Organization

The Congress will be held at the College Santa Chiara, University of Siena, in Siena downtown. The official language of the Congress will be English. Most participants will be lodged in the College Santa Chiara, although alternative accommodations can be found in private Hotels in town.

Additional information, session schedule and a preliminary program can be found on the Congress website, or you can e-mail us for any inquiry or to be entered in the Congress' mailing list.

<http://www.darwin.unisi.it> - darwin@unisi.it

Please forward this announcement to whoever might be interested or through your favourite mailing lists.

Announcements



Cultural transmission and the evolution of human behaviour

Compiled and edited by Kenny Smith, Michael L Kalish, Thomas L Griffiths and Stephan Lewandowsky

Published November 2008

Special offer price: £47.50 (usual price: £59.50)



People learn from other people in a wide variety of domains. Consequently, systems of knowledge and behaviour are *culturally transmitted* in human populations – passed from individual to individual through this type of social learning. Cultural transmission forms the basis of some of humanity's most surprising achievements: sophisticated technologies, highly-developed sciences and elaborate social or religious rituals are products of a cumulative process of cultural evolution, with new innovations being added to old ideas as they are transmitted. The articles in this theme issue seek to understand the evolution of this capacity for cultural transmission.

Many of the articles use an experimental approach to studying cultural transmission: simple micro-populations are created in the lab (usually involving human participants, but sometimes animals) and then the transmission of behaviours in these populations is studied, with a view to understanding how cultural transmission works, how the population's behaviour changes over time, and how it changes. This experimental method has a fairly long history, but is undergoing a recent resurgence in interest, mainly because these experiments provide a useful bridge between studying complex real-world behaviours and highly abstract theoretical models. This issue provides a snapshot of the current state of the art of this field, with articles on experimental methodology, cumulative cultural evolution, conformity and social learning, cultural transmission and evolutionary psychology, and the evolution of communication and language.

Subscribers to *Philosophical Transactions B* can access the full content online at:
<http://rstb.royalsocietypublishing.org/site/2008/cultural-evolution.xhtml>

Non-subscribers can purchase the print issue at the specially reduced price shown above. To place an order at the discounted price, please send payment by cheque (made payable to Portland Customer Services) or by Visa or MasterCard (quoting reference **TB 1509**) to:

Portland Customer Services, Commerce Way, Colchester CO2 8HP, UK

Tel: +44 (0)1206 796351

Email: sales@portland-services.com

For further information on related organismal, environmental and evolutionary biology issues please visit
<http://rstb.royalsocietypublishing.org/site/misc/environment-evolution.xhtml>

Please note that all content more than one year old (back to 2001) is **FREE** to view



Philosophical Transactions is particularly interested in receiving Theme Proposals. For further information, please visit our web site at <http://rstb.royalsocietypublishing.org> and click on 'Editor Information'.

Full contents are listed overleaf...

Announcements



Mechanisms and functions of brain and behavioural asymmetries

Compiled and edited by Luca Tommasi

Published April 2009

Special offer price: £47.50 (usual price: £59.50)



Behavioural asymmetries are widespread in the animal kingdom. There is growing evidence of population level lateralisation in vertebrate and invertebrate species, both in motor behaviour (i.e. handedness) and in perception and attention (i.e. biases towards the left or right side of sensory stimuli). These behavioural asymmetries are supported by asymmetries in brain structures and functions, whose nature and development are the object of converging interest in the life and cognitive sciences.

The research and review papers presented in this issue, offer a range of examples on how an integrated approach to lateralisation, taking into account genetics, developmental biology, neuroscience and behaviour, is helping to understand the complex evolutionary history of this phenomenon.

Subscribers to *Philosophical Transactions of the Royal Society B: Biological Sciences* can access this issue online at

<http://rstb.royalsocietypublishing.org/site/2009/lateralisation.xhtml>

Non-subscribers can purchase the print issue at the specially reduced price shown above. To place an order at the discounted price, please send payment by cheque (made payable to Portland Customer Services) or by Visa or MasterCard (quoting reference **TB 1519**) to:

Portland Customer Services, Commerce Way, Colchester CO2 8HP, UK

Tel: +44 (0)1206 796351

Email: sales@portland-services.com

For further information on related neuroscience and cognition issues please visit

<http://rstb.royalsocietypublishing.org/site/misc/neuroscience-cognition.xhtml>

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Full contents are listed overleaf...

Resources

Conferences

American Anthropological Association
December 2-6, 2009, Philadelphia, PA
<http://www.aaanet.org/meetings/>

Animal Behavior Society
<http://www.animalbehavior.org/>

American Psychological Association
August 12-15, 2010, San Diego, CA
<http://www.apa.org/>

Association for Psychological Science
May 27-30, 2010, Boston, MA
<http://www.psychologicalscience.org/convention/>

Behavior Genetics Association
2010, South Korea
<http://www.bga.org/pages/1/Home.html>

Cognitive Neuroscience Society
April 17-20, 2010, Montreal, Canada
<http://www.cnsmeeting.org/>

Cognitive Science Society
August 11-14, 2010, Portland, OR
<http://cognitivesciencesociety.org/>

European Human Behavior and Evolution
March 25-27, 2010, University of Wroclaw and
Polish Academy of Sciences, Poland
<http://www.ehbea.com/>

Human Behavior & Evolution Society
June 16-20, 2010, Eugene, OR
<http://www.hbes.com>

International Society for Human Ethology
<http://evolution.anthro.univie.ac.at/ishe/index.html>

NorthEastern Evolutionary Psychology Society
<http://www.neepsociety.com>

Organization for Computational Neuroscience
July 25-29, 2010, San Antonio, TX
<http://www.cnsorg.org/2010/index.shtml>

Society for Evolutionary Analysis in Law (S.E.A.L.)
<http://www.sealsite.org/>

SPSP Evolutionary Psychology Preconference
January 28, 2010, Las Vegas, NV
<http://www.spspmeeting.org/>

Society for the Study of Evolution
June 25-29, 2010, Portland, OR
<http://www.evolutionarysociety.org/meetings.asp>

Predoctoral Fellowships/Grants

NSF: Graduate Research Fellowship Program
<https://www.fastlane.nsf.gov/grfp/>

Ford Foundation: Diversity Fellowships
<http://www7.nationalacademies.org/fellowships/>

NIH: Predoctoral Fellowship for Minority Students
<http://grants.nih.gov/grants/guide/pa-files/PA-00-069.html>

APA: Predoctoral Fellowship in the Neurosciences
<http://www.apa.org/mfp/prprogram.html>

AAUW: American Fellowships (women)
http://www.aauw.org/fga/fellowships_grants/american.cfm

Guggenheim: <http://www.hfg.org/df/guidelines.htm>