HUMAN BEHAVIOR & EVOLUTION SOCIETY

























Winter 2007 Newsletter

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HBES CONFERENCE 2007

The next HBES conference will be held at the College of William & Mary, May 30 - June 3. The official conference web site is now live at http://www.wm.edu/hbes07.

Abstract submission is open and the deadline for all submissions is March 21.



HBES ELECTIONS

It's election time again! Please send nominations for president, secretary, treasurer, and two council members, to HBelectcomm@umich.edu.

Deadline for nominations is March 23.

SPECIAL FEATURES

Special features by Steve Gangestad and Gregory Webster.

View

From the President's Window | David Buss

A few months ago, an article appeared showing that male chimps preferred to mate with somewhat older rather than younger females. Does this violate a core tenet of human evolutionary science?

Can we do a better job at communicating the logic of our science to others?

Read more...

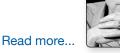


Interview

David Sloan Wilson

The featured interview is with David Sloan Wilson, Professor of Biology and Anthropology at Binghamton University. Known for promoting a multi-level selectionist perspective, David's new book

aims to bring evolution to everyone.



MisMannered

Doug Kenrick

In this newly named column, our fearless colleague sets the record straight. Hope ya'll enjoy: evolutionary psychology, Evolutionary Psychology, & EVOlutionary PSYCHOlogy: Capitalizing on Misconceptions.



Students

The Student Voice | Jennifer Davis

Congratulations to Aaron Blackwell, the new HBES student representative! In this edition, read about the ongoing Shuar Life History Project and profiles of fellow HBES

members: Sarah Hill and Andrew Gallup.



Read more...

View From the President's Window | David Buss

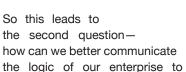
What Would Falsify the Core Tenets of Human Evolutionary Science?

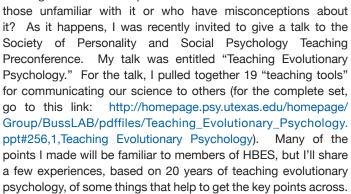
few months ago, an article appeared in Current Biology showing that male chimps preferred to mate with somewhat older rather than younger females. The article immediately unleashed a flurry of emails on the SPSP listserve, the primary email discussion group for social and personality psychologists. The first to bring the finding's attention to the group asked: "...I was wondering whether this finding violates one of the core assumptions of evolutionary accounts of mate selection?" A second joined the fray: "Wouldn't evolutionary psychology also predict that one would be less upset by, and less jealous of, a parent for poaching one's partner, than of or by a stranger for poaching one's partner, because the former infidelity, if it led to offspring, would still carry some inclusive fitness benefits? However, I suspect that the opposite might be true." A well-known social psychologist quickly chimed in, asserting that "There are a number of . . . findings that violate the core tenets of evolutionary psychology." Really?

A handful of evolutionary scientists tried to clarify the multiple confusions inherent in these comments. Some pointed out that different species have different adaptations. Humans, for example, have long-term mating in their menu of mating strategies; chimps do not. Human female fertility is sharply age graded; chimp females are fertile for most of their lives. It would be far more puzzling if chimps and humans had identical mate preferences, given these fundamental differences. Rob Kurzban also pointed out that the human "preference for younger females is an empirical finding, not a core assumption."

The flurry of exchanges raised for me two questions: First, what WOULD violate a core tenet of human evolutionary science? Second, can we do a better job at communicating the logic of our science to others?

In answer to the first question, I could think of only four things that would violate a core tenet of evolutionary science: (1) if the theory of evolution by natural selection turned out to be wrong; (2) if the theory of evolution by selection is correct, but humans were somehow magically exempt from this causal process; (3) if the theory is correct and does apply to humans, but selection only sculpted adaptations of the human body from the neck down, not those of the brain and the psychological mechanisms it contains; or (4) if the theory of evolution by selection is correct, and did create the human brain, but had forged an entirely domain-general brain devoid of any specialized functional psychological mechanisms. When I double-checked the chimp article, I was relieved to discover that the finding that chimp males prefer older females didn't fall into any of these four categories.





One difficulty is communicating that there are multiple levels of causation and explanation, many links in the causal chain from the ultimate causal process of selection to the fully developed proximate mechanisms that underlie manifest behavior. To get across the logic of ultimate causation, I sometimes use what I refer to as the "long bones" story. Once when teaching a graduate seminar in evolutionary psychology, I became frustrated with one student who simply failed to understand ultimate causation. Finally, in desperation, I grasped for a physical example that I thought would make the point obvious. I asked him: "Why are men taller than women, on average?" After a bit of thinking, he responded: "Because men have longer bones!" Although it is true that there is some weak sense in which this "explains" the sex difference in height (it's barely more than a re-description of the sex difference), most people feel that it is a woefully incomplete explanation. We want to know what causal process was responsible for creating the differences in bone length to begin with-an ultimate explanation, in this case likely linked to sexual selection (male-male competition, female mate choice, or both). Since I do not believe that the human mind was designed to understand the causal process that created it, I have found that using concrete examples such as the "long bones" story helps (although in truth, this particular graduate student never did get it).

A second teaching tool I use is to try to convey a sense of deep time. As Richard Dawkins has eloquently pointed out, humans evolved to solve adaptive problems that occur in time spans of seconds, minutes, days, months, sometimes years, and occasionally decades. We are designed to solve temporally delimited problems such as staying warm, finding food, fending off predators, attracting fertile mates, investing in children, helping other kin, forming coalitions, detecting cheaters, negotiating status hierarchies, and inflicting costs on our rivals. Our brains are not designed for understanding causal processes that occur in tiny increments over thousands or millions of years. Indeed, I think that it is precisely because we are designed to solve adaptive



problems that occur in brief time spans during our own lifetimes that social scientists, as members of our species, tend to look for causal events that occur during individual lives for complete explanations of human behavior (e.g., learning, socialization, culture). Using milestones in human evolution, such as the origins of sexual reproduction 1.2 billion years ago, vertebrates 500 million years ago, primates 85 million years ago, apes 35 million years ago, the emergence of stone tools 2.5 million years ago, successive expansions out of Africa hundreds of thousands of years ago, and so on, helps to communicate a sense of deep time.

A third teaching tool involves using lots of animal examples. I recall giving a talk at Cornell University, and presenting Trivers' theory of parental investment and sexual selection and support for the theory based on my findings about universal mate preferences and other sources of evidence. A faculty member from the audience stood up after my talk and stridently insisted that all the empirically documented sex differences were caused by "gender schemas" implanted in people's heads by socialization practices and sexist cultures. Apparently, it did not occur to her to wonder why these particular "gender schemas" and not others were chosen for implantation, nor why all cultures around the world would have chosen the same schemas. I responded by pointing to many animal species in which parental investment theory has been confirmed, including several "sex-role reversed" species. The faculty member remained unconvinced. I asked: "So we have one theory that parsimoniously explains the patterns found in thousands of species, including humans and sex-role reversed species, and you believe that we need an entirely separate theory to explain those patterns in humans?" She answered "yes." Well, I never did convince her, but I've found that the use of animal examples helps to escape the species-centric thinking characteristic of many social scientists.

A fourth teaching tool that I find effective is "thought experiments." One is this: "What would you do if you were a gene, and your mission was to increase your replicative success relative to other genes?" This invariably helps in communicating the "gene's eye" perspective, and people almost always come up with good answers—ensure the survival of the "vehicle" in which you are housed; influence your vehicle to reproduce (find fertile mates, etc.); aid in the survival and reproduction of other vehicles that contain copies of you.

A fifth teaching tool I use is emphasizing that there are evolutionary psychological hypotheses that have been falsified, or at least have not been confirmed as originally formulated. I use an example from my own work. Originally, for the 37 culture study, I had hypothesized that men had evolved a mate preference for chastity or virginity as a solution to the problem of paternity uncertainty. This hypothesis received only partial support. Cultures differ tremendously on the importance placed on virginity, both in the absolute magnitude of the value and in the presence or absence of sex differences. Although we did find sex differences in the predicted direction in 62% of the cultures, with no reversals, 38% of the cultures showed no sex differences on desire for virginity in a mate, and some men found virginity to be irrelevant in a potential mate. This does not mean that men lack adaptations

that function to lower the odds of cuckoldry. Abundant evidence suggests that they do have such adaptations (e.g., sexual jealousy; desire for sexual fidelity in a mate; predictable patterns of mate guarding). It's just that it is unlikely that an evolved desire for virginity per se is one of them. Interestingly, evolutionists often get accused of telling "just-so stories," advancing speculations that are unfalsifiable. It's simply not true, at least in most cases, and pointing to instances of evolutionary hypotheses that have been falsified helps to make this point. At the same time, and ironically sometimes from the same critics who argue that evolutionary hypotheses are unfalsifiable, it is sometimes asserted that there are findings that do falsify evolutionary psychology!

This brings me back to the colleague who asked whether the chimp finding falsified a core tenet of evolutionary psychology, and a common misconception about the study of evolution and human behavior. Many social scientists apparently believe that evolutionary science generates a single hypothesis about a particular phenomenon. I frequently get asked, as I'm sure as do many members of HBES, "What is THE evolutionary explanation for x, y, or z?" It helps to convey that there are often competing evolutionary hypotheses. For the female orgasm, for example, there are at least six (e.g., the Mr. Right function; the conception facilitation function), including the evolutionary hypothesis that it has no function, and is a byproduct rather than an adaptation. Competing evolutionary hypotheses should be pitted against each other; predictions made from each; empirical tests conducted—all the business of normal paradigm science.

This brings me to my last point, and back to one other implicit confusion contained in my colleague's initial question about the implications of the chimp finding. Some social scientists apparently believe that if an evolutionary hypothesis IS falsified, then a "non-evolutionary" hypothesis must be right. Don Symons was most eloquent on this point. He argued that there is no such thing as a "non-evolutionary psychology," since there are no known causal processes other than evolutionary ones capable of producing whatever psychological mechanisms are housed in our brains. It's just that the "non-evolutionary psychologists" are vague about the evolved psychological mechanisms they are implicitly assuming (e.g., an infinitely malleable and equipotential evolved mind containing no specialized mechanisms for processing different kinds of information in different domains).

In sum, we are all evolutionary scientists, including those who mistakenly believe that core tenets of human evolutionary science have been violated by findings such as chimp mate preferences that differ from human mate preferences. We will remain so until the theory of evolution by selection is proven to be false or until it is discovered that this causal process has had no role in creating human brains and the complex mechanisms they contain. In the meantime, we will continue to use the conceptual tools provided by evolutionary science to inspire hypotheses, guide psychological and anthropological research, and make discoveries about the human brain, mind, and behavior that could not have been made without them.

Featured Interview | David Sloan Wilson

avid Sloan Wilson is a Professor of Biology and Anthropology at Binghamton University. Research in his lab spans from social foraging in tadpoles to human eating disorders to religion. Specifically, David's interests include the relationship between genetic and cultural evolution, human social groups as adaptive units, and the nature of individual differences in personality traits such as shyness and boldness or cooperation and exploitation. What follows is a part in-person and part email interview that took place after a Conference on Religion held on Oahu, January 2007.

DL: What was your undergraduate major?

DSW: I decided to be an ecologist as a sophomore. I was struggling between a number of alternatives: music, philosophy, and biology. By the time I was a sophomore, I knew for a fact that I wanted to be an ecologist.

DL: Was there any one influential person or course that set you on this path?

DSW: I have a famous father, a novelist, and that really influenced my decision to become a scientist because on the one hand I respected him a great deal and really wanted him to admire me, but on the other hand, I couldn't top his act. So, I am convinced after a lifetime of thinking about it, that this was what sent me on a quest to become a scientist. I had also always loved the outdoors-fishing, boating, and such. When I went to college, I thought I was going to be the "white coated" kind of scientist, but I wasn't good at it. I had a C+ average as a freshman, and I struggled terribly. That summer I had a job as a stockboy at Wood's Hole, the great Marine Biological laboratory. It was at that time that I discovered the field of ecology, where I could be outdoors and study different creatures. My interests at the time had little to do with humans—I thought I was going to be an aquatic ecologist studying zooplankton. But this all changed my first year in graduate school when I took a tropical biology course. This was quite relevant because it was a time when ecology, evolution, and behavior were just coming together within the field of non-human studies. It was very exciting. In Tropics, I got the sense that people were asking general questions that could be applied to all organisms. Very soon after that I started to think about theoretical models and to ask questions that were applicable to all organisms.

DL: There seem
to be few evolutionary
biologists that think the
theoretical tools they apply to non-humans
also apply to humans. Why do you think this is?

DSW: I think there are two walls of resistance to evolutionary theory. Creationism and Intelligent Design deny the theory altogether, but there is another wall of resistance that accepts the theory yet denies its relevance to human affairs. That wall, as any in HBESer knows, is alive and well in academia. What is curious is that biologists respect that barrier just as much as human scientists. I have many evolutionist colleagues that start to sweat when you talk about humans. They have the same uncomfortable feelings as your average sociologist, so the wall is maintained on both sides.

DL: To what extent do you think particular research topics such as homicide, cognitive adaptations for social exchange, and mate choice lend themselves to a group selectionist analysis?

DSW: First of all, if you take the broad subject of our species, then there is a very clear answer to that – the human species is an ultra-social species. Our groups invite comparisons to single organisms and bee hives. There is a form of cooperation that you cannot explain easily in terms of narrow kin selection or reciprocity. Human sociality cries out for some kind of group-ish explanation. It will be amazing in retrospect that the evolutionary psychologists should miss the group-ish nature of our species. When you proceed to subjects such as homicide, no, there is no refuge because of course homicide takes its group-ish form as in warfare. It's not that EPs don't see groups, it's that they insist on seeing the groups through the lens of individualism.

DL: Is it ever legitimate to talk about genes or behaviors evolving for the good of the group?

DSW: I think a lot of people would say, "No, you can't do that -- we were taught that you can't do that because that would involve group selection." I would say yes, not only can you do it, but you should do it. It's not necessarily true, but it's just the same as asking "What would an

individual look like if it was adaptive?" You aren't saying it is adaptive, you are just forming an idea. Now I say that we should be doing that with groups. We should be looking at social groups and asking, "What would this group look like if it was adaptive—if the individuals were coordinating their behaviors and so forth?" I want to know what that group would look like if it was adaptive. It might be adaptive, but only if you have a process of group selection.

There is a huge sequence effect in the ease with which people learn multilevel selection. If they have already been taught that group selection is heretical and somehow different from other theories (kin selection, reciprocity, etc.), then they find multilevel selection "mindbogglingly complex" as Dan Dennett once put it. If they learn about it first, as a general framework for thinking about social evolution, then the average undergraduate student can master the basics in a single semester. Let me suggest two articles that are intended to serve as tutorials. The first is titled "Human groups as adaptive units: toward a permanent consensus" and is available on my website. The second is co-authored by Ed Wilson and titled "Rethinking the theoretical foundation of sociobiology." It is currently under review and will be available on my website once it is in press.

DL: So, if you will indulge me, can you use as an example my work on kin detection and kin-directed behavior to illustrate multi-level selection? What kinds of specific research questions could I ask to incorporate multi-level selectionist ideas into the investigation of kin detection mechanisms and kindirected behaviors such as altruism and inbreeding avoidance?

DSW: This is a fine example that also relates to your next question. Historically, Hamilton's rule was regarded as a momentous achievement and the coefficient of relatedness was regarded as the most important part of the rule. If you knew the value of r, then you could predict how altruistic organisms would be toward each other. Moreover, r was interpreted as genealogical relatedness, based on identity by descent. Today, kin selection theory (=inclusive fitness theory) has become much more abstract and generalized, even on its own terms, without worrying about its relationship with multilevel selection. The term r has been stretched way beyond genealogical relatedness to include genetic and phenotypic correlations in general. Outstanding examples of group-level adaptations exist when r is low, even zero,

because of other factors such as policing and ecological circumstances. The bottom line is that genealogical relatedness is only one of many factors involved in the evolution of group-level adaptations, and often not the deciding factor. This needs to be taken into account when studying kin detection mechanisms and kin-directed behavior. It is not a general rule that organisms should evolve to assess genealogical relatedness and dole out benefits accordingly.

DL: Since earning your PhD in Biology, what, if any, changes have you noticed in the field of ecology and evolutionary biology?

DSW: I received my PhD in 1975 and was lucky to be a graduate student when the fields of evolution, ecology, and behavior were merging. Applying evolution to human behavior wasn't even on the radar screen, as we know from the reception to Ed Wilson's *Sociobiology*. Another huge development during this period was the concept of major evolutionary transitions, in which groups literally become higher-level organisms. Human evolution probably represents a major transition, a possibility that HBESers need to consider very seriously.

DL: I see from your vita you spent two years in South Africa. What kind of research did you conduct there?

DSW: I was accompanying my wife, Anne Clark, who was doing postdoctoral research on bush babies, a nocturnal prosimian primate. I had a NSF grant to study body size as a niche difference, but I had lost interest in this subject and could think only about group selection. I wrote most of my first book (*The Natural Selection of Populations and Communities*) there. Anne and I also did a couple of projects on the side, including a cute study of predator avoidance in a species of termite that forages above ground.

DL: What kind of feedback did you receive about your book *Darwin's Cathedral*?

DSW: *Darwin's Cathedral* was one of several books on religion from an evolutionary perspective that appeared at about the same time. Others included Pascal Boyer's *Religion Explained*, Scott

Atran's In Gods We Trust, and Lee Kirkpatrick's Attachment,

Attachment, Evolution, and the Psychology of Religion.





More recently, we have Dan Dennett's *Breaking the Spell* and Richard Dawkins' *The God Delusion*. There is also a very exciting literature of journal articles in addition to these books. Superficially, there appears to be a lot of disagreement on major issues such as adaptation vs. byproduct, group vs. individual-level adaptation, and parasitic vs. mutualistic cultural evolution. However, I think that a rough consensus is in the process of forming, in part based on a memorable workshop in Hawaii in January 2007. At the end of the day, religions will be acknowledged as largely adaptive at the group level, which is the basic theme of *Darwin's Cathedral*.

DL: What topics are you currently working on?

DSW: One project funded by the Templeton Foundation examines religious conceptions of the afterlife as a model research project to establish a generally recognized field of evolutionary religious studies. I'm also becoming heavily involved in community-based research from an evolutionary perspective, which involves studying people in their natural (=everyday) environments, similar to field studies of non-human species. My grad students are studying selfish punishment (Omar Eldakar), conservative vs. liberal Protestant denominations as different cultural "species" (Ingrid Storm), the cultural evolution of political social organizations (David Gerstle), community-based research (Dan O'Brien), eating disorders as an example of maladaptive cultural evolution (Kevin Sheridan), and social foraging in American Toad tadpoles (Charles Sontag). The tadpole project harkens back to an earlier question; we think that toad tadpoles forage cooperatively, similar to social insects, using surface waves as their mode of communication. Way cool!

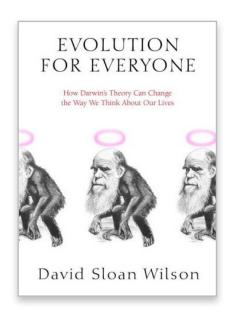
DL: What is the Evolutionary Studies Program at Binghamton? What disciplines are represented?

DSW: EvoS (http://bingweb.binghamton.edu/~evos/) is arguably the first program that strives to make

evolutionary theory the common language for studying all human-related subjects in addition to the rest of life. I won't attempt to describe it in detail here but encourage readers to visit the website. It is ambitious but can also be built out of parts that exist at almost any university. Glenn Geher has started a similar program at SUNY New Paltz (http://www2.newpaltz.edu/~geherg/evos/) and we have in mind a nationwide consortium of programs. Contact us if you're interested.

DL: Any words of advice to graduate students entering the field of human evolutionary science?

DSW: Although it might seem self-serving, I recommend reading my new book *Evolution for Everyone: How Darwin's Theory Can Change the Way We Think About Our Lives*, which begins with first principles and then applies them to a diversity of subjects, from the origin of life to religion. It provides the big, big, big picture to the best of my ability, which can serve as the background for the more detailed study of any particular subject.





Who would you like to hear from?

Email your suggestions for future interviews to:

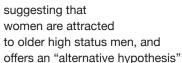
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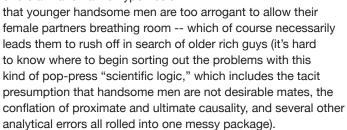
MisMannered | Doug Kenrick

evolutionary psychology, Evolutionary Psychology, and EVOlutionary PSYCHOlogy: Capitalizing on Misconceptions

Dear MisMannered:

I collect empirical data to test alternative hypotheses; I derive my hypotheses from different facets of evolutionary theory, in combination with whatever I have learned about cognitive and behavioral processes from researchers who adopt other perspectives. I sometimes disagree with other researchers about the meaning of my findings or theirs, but then I try to collect additional data to help sort it out. My politics are somewhere to the left of liberal, and I regard my willingness to entertain interdisciplinary theories as merely one symptom of my lifelong attempts to keep an open mind. Hence, I get irritated every time I see evolutionary psychology unfairly characterized as a monolithic system based on beliefs rather than data, or worse yet as a plot by political conservatives, anti-Semites, and misogynists. Despite several decades of empirical and theoretical advances by a diverse group of evolution-informed researchers testing a diverse set of evolution-inspired hypotheses, I still see reports that "evolutionary psychology" has been "disproved" or "debunked," or that it is a "pseudoscience." As one trivial example, consider the discussion of a recent finding by Muller, Thompson, & Wrangham (2006) that appeared on a chat-line for social psychologists. The Muller et al. (2006) paper was actually a good example of what psychologists can learn by being aware of evolutionarily-informed comparative research - among other differences, chimpanzees, unlike humans, have neither menopause or paternal investment, and chimpanzee males do not show a mating preference for youthful females. One researcher, who may or may not have read the original article, seems to have taken the chat-line depiction as evidence AGAINST an evolutionary perspective, and confidently stated "there are a number of evolutionary biology and developmental neurobiology findings that violate the core tenants (sic) of evolutionary psychology." That same person, who apparently had a self-concept as a great expert on these matters, proceeded to recommend that fellow social psychologists read a book by the popular press writer Natalie Angier for "an easily accessible summary" of our badly violated "tenants." Angier has published books as well as articles in places like the New York Times (where one would have expected reporting that goes beyond Fox News). Yet in her books and articles, Angier disdainfully and repetitiously refers to researchers like me as "Evo-Psychos," and she accompanies her silly name-calling with sometimes illogical rants that depict those who study human behavior and evolution as crazed idealogues. As one example, she brushes aside all the actual empirical research





And recently a fellow named David Buller has gotten massive amounts of press -- including a multi-page interview in Science magazine -- in which he expounds at length on his thoroughly muddled critique of what he calls "Evolutionary Psychology." When I search for more information about Buller, I find his website (Buller, 2006), which proudly opens up with a review of his book proclaiming: "In Adapting Minds Buller meticulously and relentlessly dismantles the pretensions of leading evangelists of the (evolutionary psychology) orthodoxy." And that ridiculous one-liner was published in something called the New Scientist (which you'd also expect from the title alone to be a magazine that should strive to present unbiased coverage of scientific issues; yet the review had the highly scientific title "We're Not Flintsones").

Jeez, I dunno, sometimes it seems like I don't get no respect.

Signed: Disrespected in Dataville

Dear Disrespected:

What I have to say will no doubt irritate a lot of Evolutionary Psychologists, but I think that the evolutionary psychologists out there will realize fully that they need to start taking their critics seriously. Face it, you folks have public image problems, and instead of worrying about the grammatical and logical errors of your critics, you need to start self-policing.

You people need to realize that it is not an effective strategy to simply take a belligerent and dismissive stance against your critics. For example, do you really think critics of Evolutionary Psychology appreciate being referred to as a "confederacy of dunces" (Kenrick, 1994)? Do you really believe they will welcome the argument that "resistance is futile" because those who do not think in evolutionary terms will eventually be "assimilated" (just as the fictional Borg of Star-Trek assimilate less integrated beings)? (Kenrick, 2007). And do you think that after publicly committing themselves to debunking you, they enjoy seeing unrepentant book titles such as the *Triumph of Sociobiology*? (Alcock, 2001)



My suggestions in what follows are offered with Sincere Thanks to one of your field's Constructive Critics -- Prof. David Buller. Some of y'all HyperAdaptationists will claim that Buller's conclusions about Evolutionary Psychology were based on twisted logic anyway, and you'll immediately start screaming that his claims to Debunking evolutionary psychology have been De-Debunked by those who actually conduct empirical research applying evolutionary models to human behavior (e.g., Buss & Haselton, 2005; Cosmides, Tooby, Fiddick, & Bryant, 2005, Daly & Wilson, 2005; Delton, Robertson, & Kenrick, 2006). However, let me point out two reasons not to be so smug: First, Buller is a Philosopher of Science, so he must by definition know more than street-level empiricists about Real Science. Second. this particular Meta-Scientist thinks there is hope for evolutionary psychology: he offers lots and lots of his own alternative Just-So Stories to help you people think more clearly, and he makes a Useful Distinction between Evolutionary Psychology (bad) and evolutionary psychology (kinda okay).

So, in the spirit of self-policing (which has worked out well for the oil, auto and lumbering industries), I suggest that evolutionary researchers stop protesting, and start self-categorizing. I propose a classification system arranged into several Castes -- based on the extent to which a researcher avoids certain scientific and moral failings common to "Evolutionary Psychology" and "Sociobiology."

First Pass at an HBES Caste System

evolutionary psychologist – true evolutionary psychologists conduct empirical studies testing alternative hypotheses derived from a diverse array of evolutionarily-informed ideas. They also replicate their findings, explore unexpected nuances in the data, subject their papers to peer review, and then conduct new studies when other alternatives are suggested (especially if the suggestion comes from the esteemed Reviewer C). They embrace informed controversy as a key element of scientific progress (they may get privately irritated by critics who advance inaccurate or muddled critiques, but they couch their responses in gentle terms, and suggest that the critic must be mistaking real evolutionary psychologists for unrelated categories of pseudoscientists such as SOCioBlOlogists [see below]).

Note: If some empirical researchers in HBES want to call themselves "evolutionary anthropologists" or "evolutionary biologists" they are welcome to use the alternative term in lower case letters only if they 1) conduct empirical research, 2) possess a graduate degree from the appropriate field, 3) have at least four publications in peer-reviewed journals within the field in question, and 4) have passed certification by the Licensing Panel (to be described below).

Evolutionary Psychologist – scientifically deficient; uses ultraDarwinian hyperadaptationist dogma to spin "just-so stories" about the adaptive value of behaviors such as repeatedly losing one's keys or eyeglasses; immediately

rushes off to write a press-release without collecting data (e.g., suggests there is a gene for absent-mindedness that was pre-adapted during the Pleistocene for later use by college professors).

EVOlutionary PSYCHOlogist – deficient on Moral Grounds; collects empirical data, but studies unsavory topics such as the linkages between infidelity and the menstrual cycle, only publishes those findings when they support the Darwinian Orthodoxy, and actively refuses to rule out alternative hypotheses (e.g., fails to exclude obvious possibility that cultural norms of Western Society encourage women to cheat on their husbands with handsome strangers two days before ovulation).

EVOLUTIONARY PSYCHOLOGIST – Moral AND Scientific Degenerate; may be found driving around in a Hummer sporting stickers supporting the NRA, Capital Punishment, the Right to Life (for the unborn only), and the Confederacy (The plantation system will rise again!) Does not like kittens or puppies.

SOCioBlOlogist – follows a pseudoscientific approach that mainly involves selective searching for obscure animal behaviors that look vaguely similar to something performed by some humans in some cultural contexts, and then uses those odd coincidences to prove that a particular Power Difference in Modern Society is Universal and Natural, and therefore Good. For example, hearing about the hypothesized gene for absentmindedness, writes a book about a Clark's nutcracker that repeatedly forgot where he put his pinyon nuts, but found a mate while randomly wandering around. Spins this into a case for hiring only scatterbrained European American White Males into professorial positions, and allowing them free mating access to the subject pool. Likes kittens and puppies more than fellow human beings.

Aiming Ever Higher with yet lower-case punctuation

In keeping with the emerging emphasis on Positive Psychology, it makes sense that there be aspirational levels above the nocaps evolutionary psychologist (which after all merely reflects the absence of egregious scientific and moral sins). In order to reward striving, excellence, and intellectual heroism, I suggest four levels of punctuation that are even lower than lower-case (and therefore to be held in higher and higher regard):

evolutionary psychology – an empirical researcher who accepts evolutionary theory in general, but realizes it is easier to be Rigorous in Doing Science by focusing on proximate causes (preferably with a high-powered "Magnet"). Has no reservation about others who wish to apply an evolutionary approach to clean topics like language and taste aversion, but is hesitant about those who would present data on Dirty Topics such as gender differences, infidelity, or rape, realizing these will almost certainly be misconstrued by the lay public, politicians, social constructivists, and popular press writers.

MisMannered (cont.)

evolutionary psychology – not an empirical researcher, but an Epistemological Knight devoted to the philosophical critique of HyperAdaptationism, ever eager and willing to dismantle the pretensions of orthodox evangelists of Evolutionary Psychology, and to oppose and expose "Just So" stories whenever and wherever they are found (unless it becomes necessary to create one's own to show those illogical Pseudo-Scientists how it's really done).

_evolutionary _psychology – appreciates that both science and logic are secondary to Higher Ends, realizes moral values must come before "Science;" has never read Dawkins but knows from his book titles that he is a Bad Non-Collectivist person.

evolutionary psychology – this is the right-leaning version of evolutionary psychology. Understands that evolutionary theory has had a lot of influence, and also realizes that it appears unscientific to deny evolution. Instead advocates Intelligent Design and the importance of Faith in realizing that nothing so complex could have evolved by mere "Chance." Realizes in his or her soul that the Wondrous Complex Design of Nature can only be Parsimoniously Explained as caused by a Divine Being who independently created humans and other animals, as well as Boeing 747s, ... and then sent Richard Dawkins here to test our faith.

Of course, in categorizing yourselves, you people should go to great lengths to be Objective and to provide some Oversight, lest everyone in HBES decide that they're already worthy of being called the distinguished lower-case "evolutionary psychologists." So I recommend further that you appoint a Licensing Panel. And just as an Institutional Review Board includes some non-researchers and people from the community, you would be well-advised to have that Licensing Panel include Philosophers of Science, New York Times Science writers, and former members of Science for the People. The panel should develop a set of categories, and every member of HBES should be required to submit all written papers, which the panel should carefully consider in evaluating the applicant's scientific and moral caste. To put some teeth into this system, I propose further that your categories be printed clearly on your nametags

when you attend the annual convention. An alternative would be to have your category stamped onto your forehead, and the stamp checked at the annual conference dinner before any HBES member is permitted to eat cassava root.

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Note: Thanks to Prof. John Alcock for his editorial suggestions, and for his willingness to be the first to be tattooed as a Sociobiologist.

The Student Voice Jennifer Davis

INTRODUCING OUR NEW HBES STUDENT REPRESENTATIVE!

aron Blackwell, a graduate student in the Department of Anthropology at the University of Oregon, studies behavioral ecology and Darwinian medicine among Shuar Indians living in the Amazonas region of Ecuador. His work is done under the umbrella of the Shuar Life History Project



(see the following page) and examines the role the signs and symptoms of illness play in the provisioning of healthcare. He hypothesizes that the signs of illness have been modified by natural selection to act as costly signals for eliciting provisioning from others during periods of incapacitation, and that these signals are regulated by the receipt of provisioning,

resulting in phenomena such as the "placebo effect". He is also co-investigator of a study examining the life history of human attractiveness psychology, which is being conducted cross-culturally in Oregon and Ecuador.

Prior to his graduate studies, Aaron worked in a cell and developmental biology laboratory, conducted epidemiological studies of Hepatitis C, and helped run clinical drug trials. He took a brief sojourn from health related studies to write his master's thesis on Palestinian suicide bombers, and a paper based on this work, "Middle-class Martyrs: Modeling the Fitness Effects of Palestinian Suicide Attack" was named best graduate student paper at the 2006 Northwest Anthropological Conference in Seattle. Aaron is also secretary-treasurer of the University of Oregon Association of Anthropology Graduate Students (AAGS), which organizes colloquia and hosts evolutionary and anthropological speakers from around the world.



FEATURED (POST) GRADUATE STUDENT PROFILE Sarah Hill

Sarah Hill graduated from the University of Texas at Austin with a Ph.D. in Psychology in December. For the past five years, she has worked collaboratively and independently to develop a program of research aimed at understanding social behaviors and the emotional and decision-making processes that guide them. Her most recent research involves exploring the effects of intrasexual rivalry on decision-making behaviors. Specifically, Sarah is interested in the way

rivalry affects mating, economic and cooperative contexts. Sarah is currently on the job market and her plans include becoming an assistant professor where she will further develop, explore and expand her research program.

Select Publications

Hill, S. E. & Buss, D. M. (in press). The evolutionary psychology of envy. To appear in R. Smith (Ed.) Current Directions in Envy Research. Oxford University Press: Oxford.

Hill, S. E. (in press). Overestimation bias in mate competition. Evolution and Human Behavior.

Hill, S. E. & Ryan, M. J. (2006). The Role of Female Quality in the Mate Copying Behavior of Sailfin Mollies. Proceedings of the Royal Society of London: Biology Letters, 2, 203-205.

Hill, S. E. & Reeve, H. K. (2005). Low Fertility in Humans as the Evolutionary Outcome of Snowballing Resource Games. Behavioral Ecology, 16, 398-402.

Hill, S. E. & Reeve, H. K. (2004). Mating Games: the Evolution of Human Mating Transactions. Behavioral Ecology, 15, 748-756.

SHUAR LIFE HISTORY PROJECT

The Shuar are Jivaroan speaking people indigenous to the Amazonas region of Ecuador. Traditionally, Shuar were forager-horticulturalists who hunted, fished, and engaged in swidden horticulture for a livelihood. Today many Shuar grow crops for sale as well as family consumption and/or raise small numbers of livestock. Some live in towns and work wage labor jobs, while still others continue to subsist on the traditional combination of hunting, gathering, fishing and horticulture. Shuar are famous for being one of the few people to successfully fight off conquest by both the Incas and the Spaniards. Today many Shuar are organized under the Shuar Federation which acts in many ways as an autonomous government for the Shuar territories.

The Shuar Life History Project is part of the UCSB Center for Evolutionary Psychology's Human Universals Project, and is a collaborative effort involving researchers from the University of Oregon, UCSB Center for Evolutionary Psychology, UCLA, the Shuar Federation, and the Ecuadorian Health Ministry Hospital in Sucúa, Ecuador. The goal is to conduct a wide range of integrated studies in the Morona-Santiago region of Ecuador over the next four years. The range of conditions experienced by Shuar provides an excellent opportunity to test evolutionary life history predictions, as well as the universality of hypothesized psychological adaptations. Studies will investigate Shuar health, subsistence, economy, parenting, reasoning, and demography. For instance, preliminary data on over 2000 Shuar schoolchildren collected by our Ecuadorian colleagues show significant variation in child health both within and between villages, and between areas with different levels of acculturation and road access. The next stage of the project will involve the collection of medical histories, physical exams, census and genealogical data for nearly 20,000 people by Shuar Federation and Health Ministry medical personnel. Co-Director for CEP Field Research Lawrence

Sugiyama, project coordinator Aaron Blackwell, and their colleagues then plan to collect more detailed behavioral, dietary, socio-economic, and ecological data in individual study villages to explain observed health variance. The data collected will be used to test a wide variety of life history hypotheses related to evolution of the juvenile period and long lifespan, as well as the decision making adaptations



underlying economic, mating, reproductive, and parenting strategies, cooperation, health care, and health outcomes. Collaborators in psychology and anthropology will also send students to Ecuador to work in villages testing additional hypotheses cross-culturally.

The Shuar Life History Project is in its early stages, and is presently seeking students interested in working in the area. Graduate students already enrolled in other programs who are interested in conducting research in the area and collaborating on the project are encouraged to contact the organizers. Interested prospective students are encouraged to apply to the University of Oregon graduate program in anthropology. Research foci might include studying the socio-ecological determinants of birth outcomes, assessing water and soil quality, mapping and measuring garden productivity, examining attractiveness psychology and mating patterns, studying politics and warfare, measuring hormone levels in relation to behavior, or examining human/primate interactions, just to name a few possibilities. The broad goal is to collect as much data as possible about the Shuar, their socio-ecological environment, and their decision making psychology (broadly defined) to produce an integrated study of one society from an evolutionary, adaptationist perspective. For more information, see: http://www.uoregon.edu/~ablackwe/shuar/index.html



FEATURED UNDERGRADUATE STUDENT PROFILE Andrew Gallup

Andrew Gallup, a senior at the University at Albany, State University of New York, has been actively involved in research for the past two years. He has worked as an undergraduate assistant in the evolutionary psychology, cognitive psychology, and evolutionary biology laboratories at the university. The findings from his honor's thesis will soon be appearing in the journal Evolutionary Psychology. This April, Andrew along with co-authors, will be presenting the findings from his most recent research examining the relationship between

peer victimization, body morphology, and reproductive opportunities among college students at the first annual meeting of the Northeastern Evolutionary Psychology Society. Andrew will graduate this spring with an honors degree in Psychology and a minor in Anthropology. He has applied to both Biology and Psychology PhD programs in the United States and England. He has also applied for a graduate research fellowship, through the National Science Foundation. Ultimately, Andrew aspires to become a professor and conduct research in evolutionary psychology/biology.

Recent Publication

Gallup, A C, & Gallup, G G, Jr. (2007). Yawning as a Brain Cooling Mechanism: Nasal Breathing and Forehead Cooling Diminish the Incidence of Contagious Yawning. Evolutionary Psychology, 5(1), 92-101.

he 19th Annual Meeting of the Human Behavior and Evolution Society will be held at The College of William and Mary in Virginia, May 30-June 3. The official conference web site is now live at http://www.wm.edu/hbes07. New information is being added regularly to the site, so check back often. Abstract submission is now open: Click on the Abstract Submission link on the site to submit abstracts online for individual talks, posters, and symposia. The deadline for all submissions is March 21.

About the Hosts. Lee Kirkpatrick is an Associate Professor of Psychology at the College of William & Mary; Brandy Burkett is a doctoral candidate at UCSB.

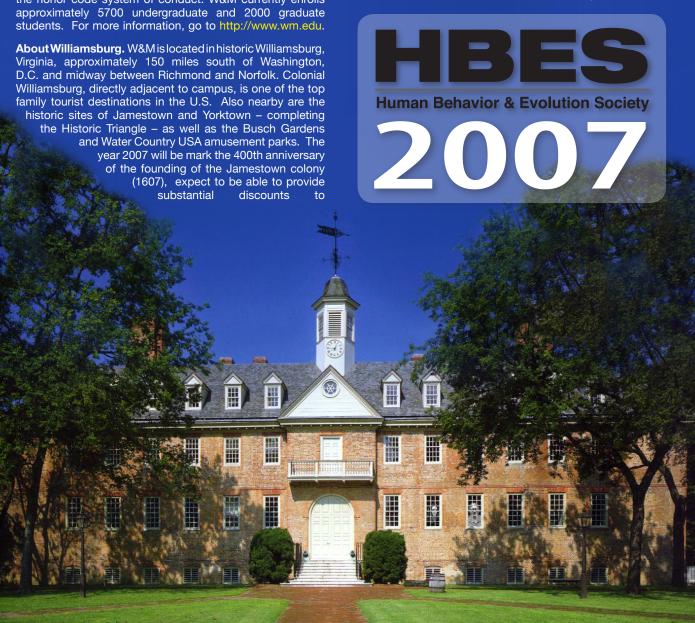
About the College. Contrary to some popular misconceptions, W&M is a state-supported, modern university -- the "College of..." rubric has been kept for historical reasons -- with colleges of Law, Business Administration, Education, and Marine Science, in addition to Arts & Sciences, and numerous graduate programs. Founded in 1693, it is the second-oldest college/university in the nation, and the birthplace of both Phi Beta Kappa and the honor code system of conduct. W&M currently enrolls approximately 5700 undergraduate and 2000 graduate students. For more information, go to http://www.wm.edu.

conference registrants for tickets to Colonial Williamsburg, and possibly some of the other local attractions. If you've never been to C.W., we can both attest that it is well worth a visit.

About Conference Facilities. All (or nearly all) conference events will take place in the University Center, which was built about ten years ago with modern professional conference facilities an integral part of the plan and design. Both inexpensive dormitory housing and quality hotel housing (with negotiated group rates) are available within a block's distance from the University Center. Also within a block's distance are three casual bar/restaurants, including the official conference tavern, the Greene Leafe Cafe.

About Transportation. The closest and most convenient airport, less than 30 minutes away from campus, is the Newport News/Williamsburg airport. Richmond International airport is less than an hour away, and Norfolk slightly farther (and more likely to involve traffic delays).

We look forward to another terrific meeting!



Announcements

HBES Elections

HBES members: it's election time again, and the election committee seeks nominations! Please send any nominations for president, secretary and treasurer, plus two council members, to HBelectcomm@umich.edu by the 23rd of March.

Members will receive an electronic ballot; please vote! The votes will be counted, and results announced at this year's HBES meeting.

HBES Officers & Council Members

President-Elect: Steven Gangestad

President: David Buss
Past-President: Bobbi Low
Treasurer: Raymond Hames

Secretary/Archivist: Lee Kirkpatrick Journal Liaison Officer: Eric Alden Smith Student Representative: Jennifer Davis

Council Members at Large:

Mark Flinn (2007)

Marikoh Hiraiwa Hasegawa (2007)

Steven Pinker (2009) Douglas Kenrick (2009) Martie Haselton (2011) Debra Lieberman (2011)

Members in the News

David Buss

http://www.latimes.com/news/opinion/la-oe-buss14feb14,0,7630882.story?coll=la-opinion-rightrail

Christine Garver-Apgar

http://www.chicagotribune.com/news/nationworld/chi-0612130320dec13,1,3695229.story?coll=chi-newsnationworld-hed

http://www.msnbc.msn.com/id/17048922/

http://www.newscientist.com/article/dn10847-dont-pair-up-with-matching-genes.html

Martie Haselton

http://www.abcnews.go.com/GMA/Renewal/story?id=2549182&page=1

Tim Ketelaar

http://tierneylab.blogs.nytimes.com/2007/02/21/why-are-these-models-scowling/

http://tierneylab.blogs.nytimes.com/2007/02/23/solved-the-mystery-of-the-miserable-models/

Steven Pinker

www.comedycentral.com/motherload/index.jhtml?ml_video=81914 (part 1) www.comedycentral.com/motherload/index.jhtml?ml_video=81913 (part 2)

Frances White

http://www.pbs.org/wgbh/nova/bonobos/about.html

Special Features

by Steve Gangestad

As a society of scholars, HBES is bound together by a common goal: To apply evolutionary biological theory toward an understanding of human behavior. The paths to that end, however, are potentially multiple. And, indeed, thoughtful minds disagree about which ones will go far. Perhaps the most fabled of the debates between perspectives represented within HBES played out as one between advocates of "Darwinian Psychology" and proponents of "Darwinian Anthropology" 15 to 20 years ago (or perhaps not so "fabled"—but rather, recounted quite accurately). But questions about the proper roles of a variety of other theoretical and methodological approaches—for instance, gene-culture coevolutionary approaches, phylogenetic methods, functional comparative biology, gene mapping, evo-devo biology—are raised nearly every year during the course of HBES sessions and in journal commentaries (e.g., in Behavioral and Brain Sciences).

Differences between "DP" and "DA" were openly debated, at times heatedly, during HBES meetings in the late 1980s and early 1990s. And an issue of Ethology and Sociobiology was dedicated to relevant controversies in 1990. Though debated less frequently in open sessions in recent years, tensions between evolutionary psychological approaches and behavioral ecology have not completely disappeared. In 1999, Martin Daly and Margo Wilson published a paper entitled "Human evolutionary psychology and animal behaviour" in the journal Animal Behaviour. They treated a variety of approaches, including evolutionary psychology, human behavioral ecology, and human sociobiology, under a common umbrella, "human evolutionary psychology"-in their view, quite benignly and, indeed, I suspect, inclusively by design. They furthermore argued that research within this broad field is "scarcely distinguishable from other animal behaviour research" (p. 509). Three behavioral ecologists - Eric Alden Smith, Monique Borgerhoff Mulder, and Kim Hill-however, took exception to this glossing over of differences within the broader field of human evolutionary behavior science and, accordingly, wrote their "guide for the perplexed" as, at least implicitly, a response to Daly and Wilson's "blending" of perspectives. In it, they explicitly distinguished approaches, emphasizing tensions between them (Trends in Ecology and Evolution, 2001). A year later, Laland and Brown's Sense and Nonsense appeared, a book aimed to describe and differentiate the ideas, methods, and findings of five schools of thought (in addition to the three explicitly clumped together by Daly and Wilson under human evolutionary psychologyhuman sociobiology, human behavioral ecology, evolutionary psychology-memetics and gene-culture coevolution). Though recognizing legitimacy of all five approaches, Laland and Brown also made clear that, in their view, human evolutionary behavioral science has been a mix of "sense" and "nonsense."

At the same time, there are signs that, at least tacitly, integration between perspectives is possible and, indeed, occurring. At the University of New Mexico, where evolutionary psychologists and behavioral ecologists jointly train students in multiple departments, to my knowledge key issues debated circa 1990

now rarely if ever arise in our classes. In general, I suspect that faculty views on the appropriateness of methodologies largely, though perhaps not completely, converge; I sense that interdisciplinary graduate training here is almost seamless. With greater assurance, I can say that, when Hilly Kaplan and I cowrote a chapter for Buss's *Handbook of Evolutionary Psychology*, we had no substantive disagreements on how to write it, despite our different backgrounds. In a more general way, Lee Cronk (in a blurb on the back cover of a recent volume I edited with Jeff Simpson) went further, asserting that, "a disciplinary realignment, under way for more than three decades, is now virtually complete. We have moved away from traditional disciplinary identities and ... toward an integrative human evolutionary behavioral science."

It was partly in the spirit of finding out just how much tension persists between different approaches within the larger human evolutionary behavioral sciences that Simpson and I put together this unusual volume. This was unlike most edited books, in which scholars contribute largely independent chapters. For this one, we first drafted 12 questions to which we could be fairly certain representatives of different approaches would offer different answers. For each question, we then invited up to a half-dozen (but more typically, three or four) prominent scholars to write brief, essay-like responses. (We wish we could have included even more.) A number of the questions concerned methodological approaches (e.g., how the evolution of mind might be reconstructed), some pertained to metatheoretical assumptions (e.g., implications of developmental processes as a target of selection), and yet others concerned specific outcomes of human evolution (e.g., how the evolution of culture might be construed). We solicited responses from authors with a wide range of training backgrounds and favored approaches: those who generally identify as human behavioral ecologists (in addition to Smith, Borgerhoff Mulder, Hill, and Kaplan, Kathryn Coe, Mark Flinn, and Mike Gurven), researchers typically adopting an evolutionary psychological framework (Athena Aktipis, Clark Barrett, Pascal Boyer, David Buss, Elsa Ermer, Leda Cosmides, Charles Crawford, Peter DiScioli, Dave Geary, Ed Hagen, Satoshi Kanazawa, Doug Kenrick, Rob Kurzban, Debra Lieberman, Geoffrey Miller, Mark Schaller, Jill Sundie, Don Symons, and John Tooby), a number of biologists, behavioral ecologists, and primatologists by training (and who adopt a variety of perspectives: Richard Alexander, Paul Andrews, Robin Dunbar, Jane Lancaster, Kern Reeve, Joan Silk, Paul Sherman, Craig Stanford, Randy Thornhill, and David Sloan Wilson), and scholars representing a variety of other distinct or overlapping perspectives (Rob Boyd, Alice Eagly, Barbara Finley, Hunter Honeycutt, Bob Lickliter, Steven Mithen, Pete Richerson, Kim Sterelny, and Wendy Wood).

Admittedly, Simpson and I hoped to not only assay divides within the field; we also hoped to nudge the field toward greater integration or, at least, fruitful conversation. Naturally, we couldn't do so by dictating that people agree. And, of course, on some matters our authors clearly didn't. We did hope that the essays themselves would reveal where common ground exists, where disagreement persists, and how disagreements might be resolved.

So what emerged? Though a few sentences or even paragraphs don't suffice as a summary, a few noteworthy observations can be offered. As we expected, some disagreements do remain. An example concerns how we can know about ancestral selective environments. Those of an evolutionary psychological persuasion tend to think that, even in absence of direct observation of those environments, we can bootstrap our way toward an understanding of them through examination of the artifacts they produced: human design features. By contrast, some behavioral ecologists, while perhaps not doubtful of the general logic of reverse engineering, remain much less sanguine about the degree of leverage that modern psychological features offer in this regard. That is, some remain skeptical that modern psychological features render much in the way of readily decipherable, telltale signs about ancestral environments. They hence prefer to bet that some aspects of current selective environments, particularly those occupied by traditional people, mirror those of ancestral environments, and hence remain interested in knowing the features that predict reproductive success in current environments.

As those who witnessed the DP vs. DA debates no doubt recognize, this matter is very related to a core matter at stake 15 years ago: the question of whether we, as evolutionary scientists, should be studying adaptations or current adaptiveness. It is perhaps not surprising that different views on this matter persist. I myself was struck, however, more by the level of core agreement by sides on basic assumptions than by differences in bottom-line opinion. All parties agreed that selection in past environments, not current selection, yielded adaptations of interest to evolutionary scientists. All agreed that demonstration that a feature is currently advantaged by selection is neither necessary nor sufficient to show that the feature is an adaptation. As already noted, all parties appeared to accept, in principle, arguments from design. Where differences persist, they appear to pertain to bets on which research strategies will yield practical utility and an ultimate payout. Again, some researchers are skeptical that design features contain within them sufficient information about ancestral selection to render firm claims about ancestral selection. And some argue that, while demonstration of current selection for a feature is neither necessary nor sufficient to show that the feature is an adaptation, examination of current selection pressures, when interpreted within a sophisticated evolutionary framework, can nonetheless yield meaningful insight into adaptation. Even as someone who has relied a great deal on arguments of design in my own work, I find these views defensible or, particularly with regard to the latter, eminently reasonable.

On matters of specific substantive outcomes of evolution, I was struck by the extent to which views simply didn't align along traditional disciplinary boundaries. On the matter of what primarily caused massive encephalization in hominins, for instance, Kaplan, Gurven, and Lancaster's emphasis on a "human adaptive complex" driven by increased commitment to dependence on high quality foods, subsidization in youth, and prolific productivity through information acquisition maintained well into adulthood is, in some notable ways, kindred to Barrett,

Tooby, and Cosmides' emphasis on entry into the "cognitive niche" enabled by "improvisational intelligence." Kaplan et al.'s perspective is, in fact, probably more akin to Barrett et al.'s views than to the views of fellow behavioral ecologists (albeit also psychologically minded ones) Flinn, Alexander, and Coe, who emphasize "ecological dominance" and subsequent elaboration of social adaptations through Red Queen coevolution. And Flinn et al.'s views are kindred to those of evolutionary psychologists Geary or Miller. (These varied ideas, however, need not be mutually exclusive, as also emphasized by some writers.)

Another example: In an essay on the evolution of culture, Boyd and Richerson emphasized a role for psychological specializations for the social transmission (both sending and receiving) of information, which they noted may account both for why humans are so smart (we learn much useful information we need not have innovated ourselves) and stupid (in that we foolishly copy lots of nonsense too). Evolutionary psychologist Kurzban also commented on precisely this theme. His elaboration suggests that humans have evolved frames for social transmissibility (or scope-syntax; Barrett et al.) that allow us to copy adaptively while also refraining from at least some forms of foolish gullibility. His perspective, it strikes me, is simultaneously inspired both by the spirit of evolutionary psychological analysis and by recognition of gene-culture coevolution.

Of course, the disagreements that do persist are not necessarily bad things. A la Feyerabend, it's worth recognizing that, in an inductive endeavor such as science, it's probably desirable that, collectively, practitioners' bets cover the field of horses, not just a single one. At the same time, disagreement between parties leads to fruitful conversation only when parties can agree on some core assumptions.

My own sense is that Cronk is mostly right. There are a lot of ideas out there about how to conduct evolutionary behavioral science, some conflicting. (In addition to core approaches already mentioned, authors in Simpson's and my volume had much interesting and provocative to say about roles for functional comparative biology, phylogenetics, and developmental perspectives.) Nonetheless, since the early 1990s meaningful integration and disciplinary realignment has quietly crept forward—sufficiently so, that conversation between proponents of competing perspectives now can and will lead to meaningful progress. And, I hope and do bet, yet greater integration, not polarization.

Next year, HBES enters its third decade. I don't know that it's had a better moment. But I am confident that even better moments await us in the decades that lie ahead.

Steve Gangestad is a Professor of Psychology at the University of New Mexico, Albuquerque. For information about the Human Evolutionary Behavioral Science (HEBS) Program go to: http://www.unm.edu/%7Ehebs/psych.html

INCREASING IMPACT, DIVERSITY, AND EMPIRICISM: THE EVOLUTION OF EVOLUTION AND HUMAN BEHAVIOR, 1980-2004

by Gregory D. Webster - University of Illinois at Urbana-Champaign

Abstract

The purpose of the present research was to chronicle the publication trends in the journal *Evolution and Human Behavior (EHB)* across its inaugural quarter century. To this end, all of the *EHB* articles published in 1980, 1992, and 2004 were sampled (N = 81). Planned contrasts compared the linear and quadratic effects of time. Significant (*p* < .05) linear increases over time were observed for the numbers of authors, section headings, studies, participants, references to other *EHB* articles, and empirical research articles (vs. theoretical or review articles). Footnotes decreased significantly over linear time. Marginal (*p* < .10) linear increases over time were observed for the numbers of words in titles (even after controlling for colon presence) and institutions represented by authors. In a multiple regression, the numbers of references, section headings, studies, and figures (but not tables) were significantly related to increased article length. These changes in article characteristics were often consistent with the publication trends of a peer journal, the *Journal of Personality and Social Psychology* (cf. Reis & Stiller, 1992; Webster, Bryan, Haerle, & O'Gara, 2005). *EHB* was highly interdisciplinary, with a plurality of articles authored by neither anthropologists nor psychologists/psychiatrists. *EHB* became increasingly international over time, such that the number of articles authored exclusively by Americans declined significantly. *EHB*'s impact factor (an index of how frequently the average *EHB* article is cited) also increased significantly between 1997 and 2005. Some possible implications of these publication trends for readers, authors, reviewers, and editors of *EHB* are discussed.

Introduction

Over a quarter century ago, the journal *Ethology and Sociobiology* (*ES*) set out to "establish a forum for ethological and sociobiological studies where the primary emphasis is man" (Blurton Jones & McGuire, 1979, p. 1). A decade ago, this anthropocentric emphasis was revitalized with a new title, *Evolution and Human Behavior* (*EHB*), and a new team of editors, who sought to publish "good papers from scientists and scholars in a broad range of disciplines" (Daly & Wilson, 1997, p. 2). As the journal currently embarks on a new era with its third editorial team and an expanded physical layout, many readers, authors, reviewers, and editors may want to know how *EHB* has evolved over the last 25 years. Has *EHB* become more international and interdisciplinary? Have *EHB* articles become more impactful and empirical over time?

Peer journals with similar readerships such as the Journal of Personality and Social Psychology (JPSP) have witnessed extensive changes over time (1968-2002) in terms of increased analytic complexity and the average numbers of words it titles, authors, authors' institutions, studies, section headings, tables, figures, footnotes, participants, total references, and JPSP references per article (Reis & Stiller, 1992; Webster, Bryan, Haerle, & O'Gara, 2005). A recent review of journals in physics, biology, sociology, and social and experimental psychology found that the number of references per article had increased over time (1972-2000), but drastically so for social and experimental psychological journals (Adair & Vohra, 2003). An even broader review of two dozen of the American Psychological Association's (APA) primary journals revealed that, although article length had increased over the last two decades (1986-2005), this growth had leveled-off since the turn of the century (Webster, in press). To what extent are similar trends present in EHB?

The purpose of the present study was to chronicle the publication trends for the first 25 years of *EHB*. Based on the publication trends observed in related journals, substantial increases in title length, authors, authors' institutions, section headings, footnotes, studies, participants, and references in *EHB* articles were predicted.

Method

Sample and procedure

All original articles (i.e., no book reviews or editorials; N = 81) were sampled from three evenly spaced time points over the first 25 years of *EHB*: 1980 (*ES*, Vol. 1; n = 22), 1992 (*ES*, Vol. 13; n = 24), and 2004 (*EHB*, Vol. 25; n = 35). (Note, however, that the first issue of *ES*, Vol. 1, was actually published in late 1979.)

Variables that were easily quantified were recorded (e.g., numbers of authors, studies, and figures). Articles were categorized as "empirical" if they were experimental, observational, correlational, survey-based, or secondary analyses of pre-existing data. Articles were categorized as "non-empirical" if they were either narrative reviews or theoretical papers.

Data on *EHB*'s impact factor were obtained from the Institute for Scientific Information's (ISI) Journal Citation Reports (JCRs): Social Sciences website (http://portal.isiknowledge.com). The ISI's website provided JCRs from 1997 to 2005. According to the ISI's website, "journal impact factor is a measure of the frequency with which the 'average article' in a journal has been cited in a particular year."

Design and analysis

The design of this study was the regression analog of a one-way factorial analysis of variance (ANOVA) with planned contrasts for linear and quadratic time. Thus, the publication years of 1980, 1992, and 2004 were respectively coded -1, 0, and 1 for linear time and 1, -2, and 1 for quadratic time.

Results

Article characteristics

See Tables 1 and 2 for regression statistics and Table 3 for means. Significant linear increases over time were observed for the numbers of empirical articles, authors, section headings, studies, participants, and references to other EHB articles. The numbers of empirical articles and studies also had significantly and marginally positive quadratic terms, respectively, which indicated that their rates of increase were also increasing (i.e., an accelerating effect). A significant quadratic effect of time for the number of total references indicated an increase between 1980 and 1992, but a significant decrease between 1992 and 2004. Marginal increases were also observed for both the numbers of words in titles (even after controlling for colon presence) and institutions represented by authors. A significant linear decrease over time was observed for numbers of footnotes. No significant changes over time were detected for numbers of tables, figures, or self-references (i.e., how often the lead author cited his or her other first-authored works).

Table 1. Regression results: Changes in Evolution and Human Behavior articles, 1980-2004

Variable	b	t	pr ²		
Words in title					
Linear time	0.98	1.73 [†]	.037		
Quadratic time	0.22	0.64	.005		
Colon in title	2.61	2.56*	.079		
	Authors ^a				
Linear time	0.54	4.22***	.188		
Quadratic time	0.06	0.73	.007		
Institutions re	presente	d by author	rs		
Linear time	0.14	1.65 [†]	.034		
Quadratic time	0.01	0.24	.001		
Section headings ^a					
Linear time	1.47	2.32*	.065		
Quadratic time	-0.09	-0.22	.001		
F	ootnotes	1			
Linear time	-0.92	-3.17**	.115		
Quadratic time	0.11	0.64	.005		
Studies					
Linear time	0.23	3.43***	.131		
Quadratic time	0.08	1.90 [†]	.044		
Participants (log units) ^b					
Linear time	0.95	5.05***	.367		
Quadratic time	-0.51	-3.92***	.259		
Total references ^a					
Linear time	-7.72	-1.51	.029		
Quadratic time	-9.00	-2.96**	.102		
1992 vs. 2004	-17.35	-3.54***	.140		
EHB references ^c					
Linear time	1.78	6.46***	.358		
Quadratic time	-0.10	-0.60	.005		
1992 vs. 2004	0.74	2.72**	.090		

Note. pr² = squared partial correlation. N = 81. a N = 80. N = 47. N = 78. $^{\dagger}p \leq .10. *p < .05. *^{p} < .01. *^{*+}p < .001.$

Temporal trends in article length were difficult to assess due to changes in page layouts over time; however, the extent to which

Table 2. Logistic regression results: Changes in Evolution and Human Behavior articles, 1980-2004

Variable	b	χ^2_{Wald}	OR		
Empirical articles					
Linear time	1.58	8.20**	4.85		
Quadratic time	0.65	8.05**	1.91		
Articles authored exclusively by Americans					
Linear time	-0.69	5.52*	0.50		
Quadratic time	-0.20	1.25	0.82		

Note. OR = Odds Ratio. N = 81 $^{*}p < .05. ^{**}p < .01$

Table 3. Changes in marginal means (±SE) for Evolution and Human Behavior articles. 1980-2004

	Year			
Variable	1980	1992	2004	%∆
Words in title ^a	9.31 (±0.89)	9.63 (±0.85)	11.26 (±0.70)	2
Authors ^b	1.50 (±0.20)	1.88 (±0.19)	2.59 (±0.16)	7
Institutions represented by authors	1.23 (±0.14)	1.33 (±0.13)	1.51 (±0.11)	2
Section headings ^b	8.14 (±1.00)	9.87 (±0.98)	11.09 (±0.79)	3
Footnotes ^{b,c}	2.05 (±0.46)	0.78 (±0.45)	0.20 (±0.36)	-9
Studies	1.00 (±0.10)	1.00 (±0.10)	1.46 (±0.08)	4
Participants ^d	28 (±138)	655 (±138)	240 (±64)	75
Total references ^b	48.9 (±8.1)	68.2 (±7.5)	33.5 (±6.2)	-3
EHB references ^e	0.10 (±0.44)	2.18 (±0.43)	3.66 (±0.34)	6
Empirical articles	0.59 (±0.17)	0.50 (±0.16)	0.97 (±0.13)	6
Articles authored exclusively by Americans	0.73 (±0.10)	0.71 (±0.10)	0.40 (±0.08)	-4

Note. $\%\Delta$ = percent change from 1980 to 2004. N = 81. *Adjusted for colon presence in title. b N = 80. *EHB's instructions for authors now restrict footnote use to tables. d N = 47. *N = 78. *Percent change from 1992 to 2004, because only three 1980 articles cited other Ethology and Sociobiology articles.

article characteristics impacted article length was examined. The number of pages per article was first standardized (i.e., z-scored) within each *EHB* volume to control for variations in page layouts over time. Next, standardized article page length was regressed onto the numbers of references, section headings, studies, figures, and tables per article. Each of these article characteristics—except tables—significantly contributed to increased article length, even after controlling for the other article characteristics in the model (Table 4).

Author characteristics

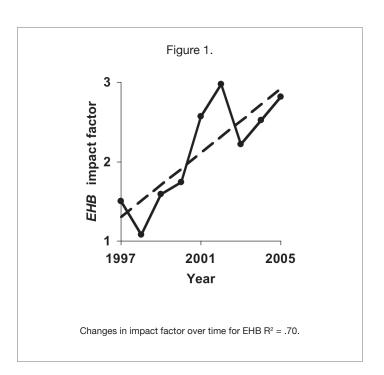
The authorship of *EHB* has become increasingly interdisciplinary and geographically diverse. In the present sample, 20% of lead authors were anthropologists, 38% were psychologists/psychiatrists, but 42% were neither (e.g., evolutionary biologists

Table 4. Multiple regression results: Standardized pages per article as a function of article characteristics in Evolution and Human Behavior

Variable	b	t	pr ²
References	0.015	9.52***	.55
Section headings	0.064	5.67***	.30
Studies	0.390	3.49***	.14
Figures	0.092	3.44***	.14
Tables	0.029	1.20	.02

Note. pr^2 = squared partial correlation. N = 80. $R^2 = .74$. ***p < .001.

and members of various interdisciplinary research groups). Articles published in *EHB* also had a geographically varied cast of authors, with 58% of articles having authors exclusively from institutions in the United States, 14% from Canada, 19% from Europe, and 1% from elsewhere, whereas 9% of articles had authors from multiple countries. *EHB* has become even more international over time, with the number of articles authored exclusively by Americans declining significantly between 1980 and 2004 (Tables 2 & 3). Although not a significant trend, the percentage of female lead authors increased by 28% over time, from 36% in 1980 to 46% in 2004.



Impact factor trends

From 1997 to 2005, the mean (±SE) impact factor for *EHB* was 2.11 (±0.22), and impact factors increased significantly over linear time, simple regression: b = 0.20 (CI 95%: 0.08-0.32), $t_7 = 4.03$, $\rho < .01$, $R^2 = .70$ (Fig. 1). In other words, since its name change, *EHB*'s impact factor has increased at the rate of about 1.0 every five years on average. For comparison, *EHB*'s increase in impact was greater than that of the average APA primary journal from 1997 to 2005 (b = 0.083) but not significantly so (independent samples t-test: $t_{23} = 1.36$, $\rho = .19$, $R^2 = .074$).

Discussion

During its first quarter century, *EHB*'s articles have increased in terms of their citation impact, authorship diversity, and empirical emphasis. The observed increases in article characteristics such as numbers of authors, section headings, studies, participants, and *EHB* references were similar to those seen in *JPSP*. In contrast to *JPSP*, *EHB* has not witnessed a significant increase in tables or figures, and has even seen a recent decline in total references per article (cf. Adair & Vohra, 2003; Reis & Stiller, 1992; Webster et al., 2005). In general, however, *EHB* seems to be following a life history trajectory that is not dissimilar from one of its cousin journals.

If readers, authors, reviewers, and editors should ever become concerned about curtailing article length, but do not wish to impose precise word or page limits on manuscripts, they might wish to start curbing total references per article, or to begin using tables when they can provide a more efficient presentation of information than figures (Table 4). It is noteworthy, however, that *EHB* articles are still fairly brief, especially compared to those of APA journals.

Although *EHB* has become a significantly more impactful journal over the last nine years, the impact of evolutionary theory on scholarly research has not been isolated to *EHB*. For example, articles citing evolutionary theory have increased over time in *JPSP* (Webster, 2007), as have references to evolutionary psychology in introductory psychology textbooks (Cornwell, Palmer, Guinther, & Davis, 2005). Thus, evolutionary research appears to be enjoying a broad and sustained period of adaptive radiation within at least some of the social sciences.

One limitation of the present study was that only three time points during the first 25 years of *EHB* were sampled. Although a clearer picture might have emerged by obtaining a more comprehensive sample, the present sample had adequate statistical power to detect the effects of interest and provided an efficient, parsimonious snapshot of the first quarter century of *EHB*.

As *EHB* enters a new era, it is hoped that the present research will inform readers, authors, reviewers, and editors about the evolution of *EHB*, so that they may adapt accordingly.

Acknowledgements

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Letter from the Newsletter Editor

Dear HBES Members,

We hope you enjoy this installment of the HBES newsletter. In this edition, we are proud to include a section of Special Features, contributed by Steve Gangestad and Gregory D. Webster, and, as in the first edition, the untamed MisMannered. To help make the newsletter even better, we have a few requests:

- Send URLs of members in the news to newsletter@hbesociety.com. As you might have noticed, the section on Members in the News is pretty thin, though we suspect there is much more going on out there that has not been brought to our attention!
- If you would like to suggest (and even conduct) an interview with an individual HBES members might find of interest, please submit your suggestions to the email listed above.
- Also, we'd like to include additional (entertaining) content in future newsletters (e.g., illustrations, photographs, poetry, or otherwise). Please send any materials you would like to be considered to the email listed above. (Please keep it clean.)

Thanks to everyone for their hard work on this edition! Special thanks to Robert Oum, Ilanit Tal, Josh Tybur, & Mary DeLaveaga

Debra Lieberman, Editor

Letters From the Editors

Letter from the Editors of Evolution & Human Behavior

With the publication of volume 28, *Evolution and Human Behavior* has initiated many changes. The most conspicuous is an attractive new cover developed by Elsevier inspired by the newsletter design. Now readers presumably will be able to "tell a journal by its cover," and *Evolution and Human Behavior*'s entirely new editorial board should emphasize the point. Both the cover design and the board composition reflect our broad, multi-disciplinary focus. A further change, a larger trim size with the same number of pages, will allow us to publish more material than previously, our publisher's response to the vigor of evolutionary approaches to human behavior.

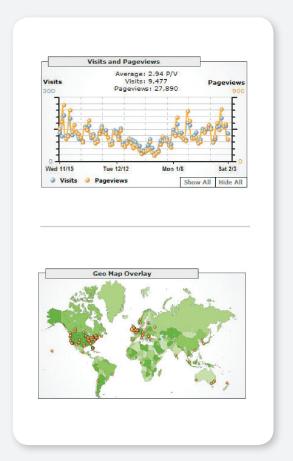
Your editors, Steven Gaulin, Ruth Mace, Daniel M. T. Fessler and Martie G. Haselton, encourage the submission of evolutionarily motivated research articles on diverse topics from across the spectrum of academic disciplines. In addition *Evolution and Human Behavior* will regularly publish solicited review articles and book reviews; the latter under the editorship of Rob Kurzban. With more than 800 individual and 275 institutional subscribers, and a current impact factor of 2.814, Evolution and Human Behavior is an appropriate venue for your very best work.

Much credit is due to outgoing editors Martin Daly and Margo Wilson, whose 10 years of wise leadership brought *Evolution and Human Behavior* to its current position of prominence.

Letter from the Editors of Evolutionary Psychology

Evolutionary Psychology (http://www.epjournal.net) announces recent changes, most notable the appointment of Todd Shackelford as Editor-in-Chief, who welcomes Steven Platek and Catherine Salmon as Associate Editors. David Barash remains as the Journal's Book Review Editor. The Journal continues to publish the highest quality empirical and theoretical work in the evolutionary sciences. To mark a new era for Evolutionary Psychology, the Journal and its website have undergone major revisions. The new website is more visually appealing and includes features such as: highlighting on the home page the most recent articles, a new Table of Contents alert, and reports of site visit data.

Authors interested in submitting their work to *Evolutionary Psychology* will be pleased to learn that the editorial staff is making strides toward increasing the visibility of the Journal, the impact and scientific rigor of articles published in the Journal, and the speed with which submissions are reviewed and published. As a result, the Journal is now indexed in PsychINFO and EBSCO Host and applications for indexing have been submitted to all major indexing services (e.g., PubMed, ISI). The Journal has instituted a template-based submission process to quicken the post-acceptance processing of manuscripts, making the average delay between acceptance and publication approximately 4-6 days. Since May 2006, when the new Editor-in-Chief was appointed, the Journal has received over 75 submissions with an acceptance rate of about 25%. Since 15 November 2006 *Evolutionary Psychology* received over 25,000 page views from all over the globe (see Figures).



Resources

Conferences

American Anthropological Association November 28 - December 2, 2007, Washington, DC http://www.aaanet.org/mtgs/mtgs.htm

American Psychological Association August 17-20, 2007, San Francisco, CA http://www.apa.org/convention06/

Animal Behavior Society
July 21-25, 2007, Burlington, VT
http://www.animalbehavior.org/ABS/Program/

Association for Psychological Science May 24-27, 2007. Washington, DC http://www.psychologicalscience.org/convention/

Behavior Genetics Association
June 2-6, 2007, Amsterdam, The Netherlands
http://www.bga.org/pages/1/Home.html

Cognitive Neuroscience Society May 5-8, 2007, New York, NY http://www.cogneurosociety.org/

Cognitive Science Society
August 1-4, 2007 Nashville, TN
http://www.cognitivesciencesociety.org/cogsci.html

European Conference on Complex Systems August 15-18, 2007, Dresden, Germany http://www.trafficforum.org/dresden

European Human Behavior and Evolution March 28-30, 2007, London, UK http://www.hbes.com/Hbes/EHBE-2006].htm

European Society for Evolutionary Biology August 20-25, 2007, Uppsala, Sweden http://www.eseb.org/

Foundation for Psychocultural Research March 30 - April 1, 2007, Los Angeles, CA http://www.thefpr.org/conference2007/index.php

Human Behavior & Evolution Society May 30 - June 3, 2007, Williamsburg, VA http://www.hbes.com

Human Mind - Human Kind August 15-18, 2007, Aarhus, Denmark http://www.psy.au.dk/humankind

International Society for Human Ethology Date: TBA, 2008, Bologna http://evolution.anthro.univie.ac.at/ishe/ International Society for Intelligence Research December 13-15, 2007, Amsterdam, The Netherlands http://www.isironline.org/

Neural Systems of Social Behavior May 11-13, 2007, Austin, TX http://mindbrain.ucdavis.edu/content/Labs/Beer/Conference-Registration%20and%20Hotels

NorthEastern Evolutionary Psychology Society (NEEPS) April 13, 2007, SUNY New Paltz http://www.newpaltz.edu/~geherg/neeps/

Organization for Computational Neuroscience July 8-12, Toronto, Canada http://www.cnsorg.org/cns_meeting.htm

Society for the Evolutionary Analysis in Law October 26-27, 2007, Bloomington, IN http://law.vanderbilt.edu/seal/index.htm

Society for the Study of Evolution June 16-21, 2007, Christchurch, New Zealand http://www.evolutionsociety.org/

Job Postings

HBES: http://www.hbes.com/jobs___collaboration.htm

APA: http://www.apa.org/jobs/

PsycCareers (APA): http://jobs.psyccareers.com/search/

APS: http://www.psychologicalscience.org/jobs/ Nature: http://www.nature.com/naturejobs/index.html Science: http://sciencecareers.sciencemag.org/

AAA: http://www.aaanet.org/careers.htm Chronicle of Higher Education

http://chronicle.com/jobs/faculty_resources.htm

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