New Editorial Staff

Peter LaFreniere informed the Board of Officers that he had decided to step down as Bulletin editor effective with the June 2004 issue. Peter had served as editor of the Bulletin since the start of 1999, taking over from Glenn Weisfeld. ISHE is indebted to him for his able service as editor, as well as Interim President following the death of Linda Mealey.

The Board of Officers has appointed Thomas R. Alley to replace Peter as Editor. Tom has been a member of ISHE for over 20 years, and has served as Chief Book Review Editor since 1999.

Beginning with this issue, the previous Associate Book Review Editor, Peter Gray, will take over as Chief Book Review Editor. In addition, a new Associate Book Review Editor has been appointed: Kristiaan Thienpont. Many members will know Kris as the very capable host of the 2004 ISHE conference in Gent.

Johan van der Dennen will continue as Current Literature Editor.

Full contact information for each staff member is available in the Editorial Staff box later in this issue.

The 17th Biennial Conference of the ISHE was held in Ghent, Belgium from July 27-30. The program was published in the previous issue (June 2004). The Minutes of the General Assembly appear below. A report on the meeting will appear in the next issue. Meanwhile, for more information on the conference, including abstracts of papers, visit: www.psw.ugent.be/bevolk/ishe2004

Minutes of the General Assembly
(From the biennial conference of the International Society for Human Ethology held in Ghent, Sofitel Hotel on 30 July 2004, beginning at 7 p.m.)

Officers present
Tom Alley (Bulletin editor)
Karl Grammer (Web Master)
Astrid Jütte (Membership Chair)
Frank Salter (Secretary: minute-taker)
Johan van der Dennen (President)
Glenn Weisfeld (Vice President)

Board of Trustees members present
Bill Charlesworth
Russ Gardner
John Richer

A total of 45 members attended the General Assembly

Chair of meeting: Glenn Weisfeld
Proposed by-law amendments
(The proposed amendments were detailed in a handout made available to members upon conference registration.)

Article 9
Weisfeld introduced a revised article on financial resources, referring to the distributed handout.
Jerome Barkow recommended having a lawyer vet the by-laws.
The amendment was proposed and carried unanimously by those present on a show of hands.

Article 10, section 5
A motion for an amendment was carried unanimously by a show of hands.

Articles 17 & 19
Weisfeld introduced each amendment, which were then proposed, seconded, discussed and then carried unanimously by a show of hands.

2006 site for ISHE conference
Carol Weisfeld proposed that the 2006 ISHE meeting be held at Wayne State University in Detroit. Moved by John Richer; seconded by Russ Gardner; carried unanimously by a show of hands.

2004 Linda Mealey Award for Young Researchers
Frank Salter announced three winners:
Mark J. T. Sergeant: “Sexual orientation, fertility, and body odour”.
Andreas Wilke: “Is male risk-taking a cue for mate quality?” (co-authored with Peter M. Todd and John M.C. Hutchinson).
Bernhart Ruso: “Age and gender differences in the behavioural responses to discrete environmental stimuli” (co-authored with Klaus Atzwanger, Renate Buber, Johannes Gadner, and Susanne Gruber).

Members expressed their gratitude to the judges:
Carol Weisfeld, Lisa Goos, and Frank Salter

Other business
Andreas Wilke recommended having an award for best poster, supported by Wulf Schieffenhövel. It was also suggested that posters be displayed for a longer time.
Bill Charlesworth suggested “tightening up” of talks, and encouraging handouts to ease the burden of taking notes. Glenn Weisfeld agreed, and John Richer suggested the pre-circulation of papers to facilitate discussion.
Glenn Weisfeld suggested that English speakers be asked to slow down to assist non-English speakers.
Arcady Putilov asked for longer abstracts.
Tom Alley announced that Peter Gray will be the new Chief Book Review Editor, and that Kris Thienpont will be the new Associate Book Editor.
Members expressed their gratitude to Kris Thienpont and his team for hosting a successful conference.

Meeting ended, circa 8 p.m.

Attention All ISHE Members
Please note that this issue contains a call for the election of 2 officers, as well as a call for nominations for an Information Officer (see below).

New dues/subscription policy
Thanks to the financial consequences of the generous bequest of former member Owen Aldis, ISHE has lowered its membership dues. The new rates are printed on the membership application included in this issue.
BOOK REVIEWS

Nature via Nurture: Genes, experience, and what makes us human


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Question: Do we really need yet another book on nature-nurture?

Answer: Only if it offers a fresh and imaginative treatment of the subject.

Happily, this book passes the test, with flying colors. Matt (not to be confused with Mark) Ridley gives us both new wine and new bottles. This scientifically trained science journalist, who became especially well-known for his previous book, Genome (HarperCollins, 2000), hits just the right tone for popularizing this challenging yet riveting subject matter.

The subtitle is revealing, for it signals that the book will focus on one species, the most narcissistic and picayunish of all, which takes the task even more difficult. Ridley’s device for tackling the human condition is the imaginary assemblage in 1903 at a European spa of 12 “hairy men” (most had beards). Who are this doughty dozen? According to Ridley, they are the folks who gave us the “chief theories of human nature that came to dominate the twentieth century” (p. 4). (At this point, readers who like riddles are invited to set aside this review, and see how many of the 12 they can name.) The eldest (present only as a guiding spirit since he died in 1882) is Charles Darwin; the youngest is Konrad Lorenz, who attends in his pram, having only just been born. The other 10 are: Franz Boas, Emile Durkheim, Sigmund Freud, Francis Galton, William James, Emil Kraspel, Ivan Pavlov, Jean Piaget, Hugo DeVries, and John Watson. (The British edition...
of the book provides a nifty photo-shopped group photograph; inexplicably this is omitted from the American edition.)

For each of these influential figures, the current situation in their particular area is updated in terms of the latest findings in genetics, with the implications for our understanding of human behaviour and cognition. This is done in 12 chapters that range over human-nonhuman differences, development changes, culture, disease, morality, intelligence, etc. At the end of six of the chapters is a bonus vignette arising from the controversy surrounding some of the hairy men, in the form of an imagined utopia based on their views.

The single-most useful chapter is called The Seven Meanings of “Gene”. It cleared up lots of confusion in two of my mixed classes of undergraduate natural and social scientists, this past semester. His treatment of the nature and nurture of schizophrenia is an especially useful case study, since the disease has been blamed on so many causes: abusive families, bad genes, malfunctioning synapses, viral infections, anomalous development or unhealthy diet.

Ridley’s argument shows how far we have been advanced by a continuing string of astonishing scientific discoveries in the life sciences: First, there was nature versus nurture, the old simple-minded dichotomy that regrettably continues to exist in the social sciences and humanities. Then, there was nature plus nurture, when we had to admit that every trait includes both influences. Then, there was nature times nurture, in which inextricable interaction is the only way to make of multiple levels of development. Finally, there is nature equals nurture, in which the two opposing forces can no longer be distinguished. Since genes are switched on during and by learning, which is now nature and which is nurture? Ridley is not reluctant to articulate the practical implications of such a predicament. For example, there is heavy irony in the fact that the more egalitarian is a society, the more innate factors will matter.

Does the book have flaws? Of course. Ridley cannot resist at times going down and dirty, as his journalism becomes sensationalist. He throws muck at Bettelheim, Boas, Freud, Harlow, Lorenz, etc., none of whom is alive to defend himself, in a way that suggests a hybridization of Scientific American and the National Inquirer.

All in all, however, this is a marvelous book, and a godsend for university teaching that seeks to bridge difficult disciplinary divides.

William C. McGrew is Professor of Anthropology and Zoology at Miami University (Ohio). His D.Phil. at Oxford was on ethological studies of 3-5 year-old children, but now he chases wild chimpanzees in Africa.

Exploring Animal Behavior in Laboratory and Field: An Hypothesis-testing Approach to the Development, Causation, Function, and Evolution of Animal Behavior


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The idea to organize the book Exploring Animal Behavior in Laboratory and Field was conceived in the meetings of the Animal Behavior Society of 1994 and 1995. This large collection of exercises (35 chapters written by 50 contributors) was devised to contribute to the formation of the research scientist in the area of animal behavior. In order to attain this goal, a group of members of the Animal Behavior Society developed a series of exercises especially designed to explore diverse aspects of animal behavior in laboratory and field. These exercises, used and tested by the contributors in their classrooms, were designed to teach the principles and methods of animal behavior and
to encourage students to outline, conduct, and analyze their own experiments. They are the result of the collective teaching expertise and experience of members of the Animal Behavior Society. The book, targeted for upper-level undergraduate courses (although adaptable for more advanced classes), illustrates current theoretical issues and methods. It was planned to provide a variety of exercises that actively engage students in all phases of scientific investigation, from formulating research questions through interpreting and presenting final results, in a program of inquiry-based learning, based on a hypothetico-deductive approach to research.

The organization of the book in four parts – description, causation, development, adaptation and evolution of behavior – is based on the classic ethological aspects of behavior. According to Niko Tinbergen, the scientific study of animal behavior is formed by four components: causation, development, evolution, and function. These components may be transformed into four questions: (1) What causes an animal to perform a certain behavior? (2) How does the behavior change as an animal develops from conception through death, but especially during its early life? (3) What is the evolutionary history of the behavior? (4) How does the behavior help the animal to survive and reproduce successfully?

Historically, these four components gave rise to two major dimensions in the study of behavior: proximate and ultimate mechanisms. The causation and development of behavior may be considered as proximate mechanisms. Causation mechanisms function as triggers of behavior (they are most closely related to the behavior itself). Development mechanisms enable the behavior to come into being as an animal develops from its earliest stages. A historical dispute in this area was about the differences between innate and learned behavior. According to the authors, most now think that the two do not really represent completely different developmental processes. The modern conception of development of behavior implies a range of different degrees of innateness or learnedness.

Ultimate mechanisms refer to the evolution and function of behavior. The concept of ‘ultimate’ is related to the ‘remote’ influence of evolutionary history in the performance of a particular behavior by an individual animal. Even being so ‘far removed’, it is an important aspect of that behavior. In parallel to evolution, the investigation of the function of behavior is also considered a study of ultimate mechanisms, as functions help to shape the evolutionary process. The functional analysis of animal behavior tries to determine whether and how a behavior affects an animal’s ability to survive and reproduce.

The exercises

Each chapter presents an animal behavior exercise. These exercises represent a variety of teaching styles. These range from traditional exercises in which students follow a predetermined protocol to test particular, explicitly stated, hypotheses, to inquiry exercises in which students first brainstorm to generate their own hypotheses and then design their own experiments to test their hypotheses. All exercises test specific hypotheses and recommend particular statistical analyses. Each chapter contains an explanatory introduction, the description of the necessary material, the procedure to be used in that particular exercise, hypotheses and predictions related to the problem, data recording and analyses to be done in the case, and, finally, questions for discussion. Most exercises include statistical analysis. Some exercises are based on ‘classic’ examples while others are new. The topics covered include descriptive ethology, causation and development of behavior, and behavioral ecology. Both field and laboratory exercises are included in a broad variety of taxonomic groups: arthropods, fish, amphibians, reptiles, birds, and mammals, including humans. Exercises illustrate issues of current theoretical importance and up-to-date methods used by biologists, psychologists, and anthropologists who study animal behavior.

The Structure of the Book

The book is divided in four parts in a total of 35 chapters covering description, causation, development, function and evolution of behavior. Part 1 is about the description of behavior and discusses the description and quantification of animal behavior. It also gives an example of development of operational
definitions and discusses the issue of reliability in measures involving different observers.

Part 2 focuses on the causation of behavior. This part of the book contains ten exercises covering the following topics: courtship, mating, and sex pheromones (beetles), courtship and mate attraction (wasps), chemoreception (lizards), behavioral thermoregulation (amphibians), temperature dependence of the electric organ discharge (fish), foraging behavior (ants and honey bees), foraging patterns (hummingbirds), and individual constancy to color (honey bees). For those teaching human behavior, the chapter about the observation and analyses of human nonverbal communication is of particular interest. The proposed exercise was designed to help the exploration of human nonverbal communication by observing smiles in different contexts and by using these observations to analyze the role of these signals in human interaction. The development of a message analysis of the signals is emphasized. The suggested sample data sheet includes the smile form (closed or open), what occurs before, during and after the smile, and its context and duration.

Part 3 is about behavioral development. Five chapters bring suggestions for exercises in the following topics: dog training laboratory, paternal care and its effect on maternal behavior and pup survival and development (prairie voles), the effect of prenatal visual stimulation on the imprinting responses and sensitive periods during development (domestic chicks), development of thermoregulation (altricial rodents), and aggregation and kin recognition (African clawed frogs).

Part 4, concerning the adaptation and evolution of behavior, is the largest part of the book and is subdivided into six sections: (I) foraging; (II) avoiding predators; (III) agonistic behavior; (IV) courtship and parental care; (V) games; and, (VI) evolution. The first section, on foraging, includes six chapters: a field study of benthic and piscivorous foragers (diving birds), foraging decisions (squirrels), economic decisions and foraging trade-offs (chickadees), seed selection (foraging birds), and competitive behavior at feeders (birds). The second section (about avoiding predators) also includes four chapters focusing on the function of ‘chat’ calls and vocal defense of nestlings (northern mockingbirds), diving and skating as alternative antipredator responses (whirligig beetles), and the response to conspecific and heterospecific alarm calls (squirrels). The chapter on vigilance and the group-size effect in humans is also of special interest for those teaching biological approaches to human behavior. The chapter presents four exercises aiming at examining the effect of group size on vigilant behavior and also discusses the test of different hypotheses: the dilution and many-eyes hypotheses, the predation risk and food competition hypotheses, and the conspecific detection hypothesis. Sample data sheets for each exercise and behavioral codes are suggested. The third section (agonistic behavior) comprises chapters on competition for breeding resources (burying beetles) and agonistic behavior (crayfish). The fourth section (courtship and parental care) contains chapters on costs and benefits of maternal care (earwigs), vocal behavior and mating tactics in field (spring peeper), the role of multiple male characters in mate choice by females (guppies), and investigating human mate choice using the want ads. This chapter suggests the investigation of personal ads which describe characteristics that one hopes others will find attractive and indicate the desired characteristics of a mate. Based on copies of personal ads from a variety of newspapers and online web sites devoted to personal ads, the student is asked to develop hypotheses about mate choice in modern society. The fifth section (games) is composed by two chapters on the demonstration of strategies for solving the prisoner’s dilemma and the use of empirical games to teach animal behavior. The only chapter in the sixth section (Evolution) discusses the evolution of behavior from a phylogenetic approach.

The end of the book contains a glossary and three appendixes covering A. guidelines for the treatment of animals in behavioral research and teaching (members of the Animal Behavior Society are strongly committed to animal welfare); B. ethical use of human subjects (a portion of the “Ethical Use of Human Subjects” policy of the American Psychological Association); and, C. an introduction to statistics with the basics of statistical description, inference and guidelines for selecting statistical tests.
Besides the general structure of the book, it is possible to note a regular structure within chapter. Each chapter, as a rule, begins with an introduction to depict the problem of investigation, followed by a section on materials. Two kinds of exercises are presented: those designed for the whole class and those prepared for small classes. The exercises include procedure, hypotheses and predictions (sometimes descriptions), data recording and analyses. Questions for discussion are suggested as well as literature is cited (sometimes, additional reading is suggested).

One of the most popular features of Classic Ethology is the proposition, by Tinbergen, of the four aspects of behavior to be studied by Ethology: development, causation, function and evolution. The insertion of these four aspects in the title and as the basis to structure the book is an important recognition of the seminal importance of Classic Ethology, and especially Tinbergen, for animal behavior investigation.

This is a detailed handbook for teaching animal behavior, especially in undergraduate classes, although it could be adapted to be used in graduate courses. The book is a valuable tool not only for someone teaching animal behavior but also for those teaching human behavior, as it brings relevant and up-to-date information about teaching methods and procedures in animal behavior that could serve as inspiration or even as a basis for comparisons with methods and procedures used to teach human behavior. As a manual, it is necessarily restricted in terms of theoretical discussions, as each exercise or experiment to be conducted in laboratory or field involves decades of theoretical and epistemological discussions. As a handbook, it provides a wide range of exercises covering a wide range of topics covered. Another positive aspect is the collective authorship. Fifty contributors belonging to the Animal Behavior Society collaborated to this work and so, the book is representative of the teaching experience of a large number of scholars of one of the most important scientific societies in the area. Another positive aspect is the expectation that the student should develop his or her own experiments, developing his or her own hypotheses and ways to test them.

Diversity is another characteristic that contributes to the attractiveness of the book. Different styles of exercises may be found (from the traditional to the inquiry–based pedagogical style). Several different taxonomic groups are represented in the book, from arthropods to mammals (including humans). There are exercises to be conducted in field and laboratory situation, allowing a wide range of options for biologists, psychologists, and anthropologists teaching animal behavior. As a book with very practical implications, it is not restricted to a closed set of instructions; instead the readers are continuously motivated (and challenged) to design, conduct, and analyze their own experiments, in inquiry-based learning with active participation in all phases of scientific investigation.

Still, the book presents only three examples of human behavior exercises. This small sample, however, is enough to demonstrate that animal and human behavior studies should keep in touch and it makes it clear that animal and human behavior (although each species is unique) are related. Possibly, the book may raise the question (and the challenge) whether it would be possible to organize a similar book specifically on human behavior, depicting exercises that could be used in the teaching of biologically oriented approaches to human behavior in field and laboratory.

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Evolutionary Aesthetics

In their introduction to this timely and handsome volume, the editors invoke Darwin’s (1871) puzzlement over the “sense of beauty” in all humans, although what was deemed beautiful varied among cultural groups. Evolutionary study since Darwin’s time has provided new models, tools, and vocabulary to investigate what Darwin also called “the aesthetic faculty” — described by the editors (p. 1) as preferences [for certain sensory stimuli or “signals” that] shape an individual’s behavioral choices.

Like other animals, humans evaluate elements of their environment. We like (prefer, are attracted by) and dislike (like less, avoid) certain kinds of faces, bodies, odors, landscapes, forms, colors, sounds, movements, motifs, symbols, and so forth. These preferences are the subject of *Evolutionary Aesthetics*. They are part of the “adapted mind”: our choices have (or have had) adaptive consequences, leading us to give selective attention to things in the environment that influence fitness (Orians, 2000, p. 29). Despite cultural variation, universal or near-universal preferences have been discovered, and these are described in 11 stimulating essays. There is also an introductory overview of the field by Randy Thornhill that replicates his 1998 essay on “Darwinian Aesthetics”.

The first three chapters (Section 2) concern topics relevant to visual art. Olaf Breidbach’s thoughtful essay “from the perspective of neuronal aesthetics” concludes that aesthetics cannot be explained by or reduced to a biological analysis (p. 65), and questions whether beauty should even be the object of such analysis. He makes the useful point (echoed later by Cunningham and Shamblen, who discuss body presentation) that what is interesting may capture attention as much as or more than what is beautiful.

Richard Coss presents an admirably comprehensive and well-illustrated review of empirical studies which suggest that perceptual biases, with adaptive consequences, have influenced the choice of common visual elements or motifs used cross-culturally by artists and designers (e.g., eye spots, glossy surface finishes, sharp and piercing forms, illusory facial expressions, and reptilian scale patterns).

In a chapter whose beautiful color illustrations no doubt contributed to the high cost (and appropriate visual “aesthetics”) of this book, Christa Sütterlin addresses the interesting question of why the majority of human visual art has been abstract (signlike and schematic) rather than representational. She gives evidence that the brain has evolved to analyze and organize information from the environment not only according to Gestalt principles of coherence and regularity but with cognitive preferences relevant to human life. Upon biases regarding faces, the human form, and natural surroundings, individual cultures impress their specific variants on evolved sensory and cognitive preferences for regularized and general schemata.

Except for the essays by Eckhart Voland and Steven Mithen, which I shall describe last, the eight chapters in Sections 3 and 4 are concerned not with made artifacts or art, but with the standard subject matter of evolutionary aesthetics, preferences that obviously contribute directly to survival and reproductive success.

Perhaps the earliest “aesthetic” subject to be treated by adaptationists, human habitat selection, is represented in the chapter by Bernhart Ruso, LeeAnn Renninger, and Klaus Atzwanger, which helpfully surveys the various evolutionary theories regarding landscape preferences and the empirical studies that they have stimulated. The authors contend that because of the extremely close connection ancestrally between habitat selection and everyday survival, habitat preferences are a rich area in which to learn about the foundations of present day aesthetic preferences, including artistic preferences.

An unusual and intriguing paper by Manfred Milinski reports that from the 10,000 odors that human olfaction can discriminate only a few are used to perfume the body, and only about 100 plant species are used in concocting perfumes. Individuals are typically extremely
choosy about their personal artificial scent. Milinski provides evidence that some subscents of the different odorants that comprise one natural flower oil are reminiscent of human body odors, and he proposes that perfumes have signal value to others. Scents selected by individuals for themselves may amplify their own immunogenetic odor, and what one likes in the perfume of others are scents that indicate immunocompatibility.

Uta Skamel considers that although handicap and “good genes” models refer to honest advertising of fitness, other models recognize that dishonesty and artifice may also exploit a receiver’s aesthetic biases. For example, female breast size does not correlate with production of milk, and people regularly use cosmetic artifice to attract the opposite sex. She questions the hypothesis that the aesthetic sense evolved as an adaptation of choosiness in the context of sexual choice, and echoes Ridley’s (1990) view that beauty always swings between the two extremes of adaptedness and nonadaptedness, no matter whether it expresses hereditary quality or an arbitrary, extravagant result of Fisherian runaway sexual selection or is even a completely deceptive trait.

Michael R. Cunningham and Stephen R. Shamblen analyze multiple dimensions of physical attractiveness, including preferences for some neotenous and some mature features (e.g., large eyes or small nose in females, large shoulders and jaw in males) that may be universal, and self-adornment and grooming practices (e.g., tattoos, male facial hair, preferred female body weight) that are more culturally variable. They find that “what makes people look good is not simply attributable to conspiracies of the fashion industry,” (p. 231) and suggest that a portion of the variation in human grooming behaviors can be attributed to status competition and the desire for novelty, as well as to ecological dynamics (i.e., what is considered desirable in, say, a subsistence society as contrasted with a market-oriented one).

Karl Grammer and four co-authors present a novel perspective on sex and attractiveness studies, considering the face and/or body as a dynamic communicative device whose movements contribute to evaluations of attractiveness. They report recent studies that deal with gender recognition by human gait and the role of body movement in attractiveness assessments. Randy Thornhill and Steven W. Gangestad provide an extremely thorough analysis and review of studies that bear on the question of whether human females have an evolved adaptation for extra-pair copulation, and conclude that there is considerable empirical evidence supporting such a hypothesis. Because olfactory and visual judgments of women are important in this behavior, these findings are included in the larger subject of evolutionary aesthetics.

Eckart Voland’s stimulating, wide-ranging, and well-grounded theoretical article explores the possibility of whether costly signaling theory can explain the evolution of aesthetics in the world of artifacts (i.e., “art”). The costly signals (as excess or beauty) of art convey three types of messages: “I am fit” (sexuality); “I am strong” (dominance); “I am good” (morality). Voland concludes that aesthetic judgment of a signaler’s sexual and social quality is adaptive to the signalee and thus aesthetic preferences for artifacts can be considered as adaptations (rather than as nonfunctional byproducts of aesthetic preferences for kinds of bodies, landscapes, and other natural features). He refers to artifacts as signals of costliness, including the costly behaviors that produced them: skill, time, energy, pain, or acquisition of rare materials.

Steven Mithen addresses the earliest human artifact to have been created with an aesthetic quality: the handax. Initially produced 1.4 mya by human ancestors who lacked modern language skills and visual symbols, handaxes were unlikely to have had symbolic meaning [p. 266]. Yet, because some examples show deliberate symmetry and choice of a higher quality stone than was functionally required, they play a crucial role in understanding the evolutionary history of aesthetic objects. Mithen posits that they had a role in social (status) and sexual affairs – indicating to others the health, fitness, and intelligence of their makers.

Considerations of space restrict critical discussion of individual essays, which I found to be generally of high quality and interest in their own right but problematic when they assumed, as some authors did, automatic applicability to
the complex subject of human art. My misgivings in this regard are borne out by the disparate subject matter, approaches, and conclusions of the various essays (a characteristic of other adaptationist hypotheses about the arts, which may indicate exciting ferment rather than debilitating confusion).

Although five essays expressly concern visual art or artifacts (Breidbach, Coss, Sütterlin, Voland, and Mithen), the remaining six do not, although some of the latter suggest that their findings (with regard to landscapes, bodies, or mating adaptations) may be relevant to arts. Over half of all authors (Cunningham and Shamblen, Voland, Mithen, Grammer et al., Milinski, and Thornhill and Gangestad) either directly or indirectly consider sexual selection as the major adaptive consequence of preferences and, by implication, of human art. (The paper by Ruso et al. deals with habitat preferences, and the adaptive consequence they propose is, not surprisingly, survival, a function that is also proffered by Coss for visual design features). Yet, interestingly, the three first-mentioned authors of essays having specifically to do with visual art are silent or skeptical about the relevance of sexual selection to their subject, and Skamel, who treats beauty and sex appeal, questions sexual selection as the origin of the aesthetic sense.

Except possibly for some Middle Pleistocene handaxes, as described by Mithen, where skilled workmanship, symmetry and occasional use of rare materials are the only “aesthetic” characteristics, I would suggest that products or instances of art behavior are arguably more than, and different from, a display of adaptive choices or preferences (see also Dissanayake, 1998; 2000).

As presented in this volume, evolutionary aesthetics considers why some signals cause us to pay attention, but not (except for Voland’s chapter) why individuals sometimes do something more with those signals — even making them deliberately ugly or terrifying (e.g., van Damme, 1996, 153-54) — thereby drawing greater attention to them through additional artifice. It is not only the use of sensory and cognitive preferences but the drive toward extra-ness (e.g., extraordinary form or content, excessive size, unusual simplicity, novel use of materials) that characterizes art and that needs to be explained if we are to provide an evolutionary account of the arts’ motivation(s) and function(s).

Like other animals, humans obtain food, eat, and mate, based on their evaluation of signals. We also (unlike other animals) in some circumstances do more than satisfy an appetite or select a preference. Some humans, while singing and dancing, return swim bladders of dead seals to the sea from which they came; with rhymed words, they bless their food before consuming it; they formally lament (with literary language and song) rather than simply cry or moan with grief. Peoples who live in desirable habitats usually do not leave them that way, but additionally “humanize” or “artify” them with carefully arranged structures, spaces, evocative names, and dramatic stories. These humanizations may well make use of adaptive preferences, but such preferences are not always automatically at the service of sexual selection.

Although artful behaviors may be costly, they are frequently even more costly to groups than to individuals—as in the Nigerian Owerri Igbo mbari described by Cole (1982), where 20 percent of able-bodied adults were excused from daily work and provisioned for a year by their families while they laboriously built a house-like structure from clay, on the verandah of which were placed dozens of life-size figures molded from anthill mud and painted in polychrome. To be sure, the mbari houses are covered with cognitively-satisfying geometric designs and the mud figures represent attention-getting benign and malign animals, humans, and spirits. Choosing such motifs, however, is only an elementary factor in the structure’s raison d’être, which is to assure group prosperity after being finally used as an occasion for feasting and dancing by villagers and their guests. Then it is abandoned and allowed to deteriorate until the next mbari, years later, when a new construction begins. Although an individual dancer might attract sexual interest, mbari does not seem to be made simply as an arena for males to advertise their good genes nor as a smorgasbord of visual and cognitive preferences. A costly signal may indicate not only that one is fit, strong, or good — and therefore desirable as a mate — but (as a group) such messages as kinship, generosity, and sociality.
Ethics and epistemology are traditional philosophical subjects for which evolutionary theory has provided new focus and direction. Will this volume do the same for aesthetics (philosophy of art)? I am skeptical, although it is a well-informed and important collection that both sums up past work and provides a starting reference for those interested in adaptive sensory and cognitive preferences. Preferences occur in non-art contexts as well: the truly philosophical (and evolutionary) aesthetic question is "Why is there art?" Why additionally shape, enhance, combine, and complicate preferences (or anything else) and evoke "aesthetic" experiences that feel qualitatively complex, deeply meaningful, and even transfiguring?

**References**


**Ellen Dissanayake** is a Visiting Scholar at the Walter Chapin Simpson Center for the Humanities, University of Washington. She has published three books and a number of scholarly papers on the arts and human evolution. In February 2005 she will visit the University of Western Australia where she has been named a Professor-at-Large in the Institute of Advanced Studies.”
Race: The reality of human differences


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In RACE: The reality of human differences, “race” is defined as a population or group of populations within a species that are separated geographically from other such populations or groups of populations and distinguishable from them on the basis of heritable features. This definition is consonant with those in nearly all available dictionaries.

There are two relevant audiences vis-à-vis this definition: The general populace and representatives of academia and the body politic. For the general populace, the existence of races is a given, a truism, an obvious reality. To wit: if asked to segregate a crowd of 100 Masai from 100 Finns from 100 Mongols, virtually everyone with functioning a visual system would be able to achieve remarkably high accuracy; and most would be surprised if anyone were to fail to make a successful cataloguing.

In contrast, many representatives of academia and politics would have a different perspective and probably not attempt the separations. For many influential academic and political entities, there are no races. For example, the following statement was adopted by the American Anthropological Association’s Executive Board on May 17, 1998: “race is not a direct function of biology, but is rather a creation of society.” The AAA Executive Board continues:

“Generally, the traits used to characterize a population are either independently inherited or show only varying degrees of association with one another within each population. Therefore, the combination of these traits in an individual very commonly deviates from the average combination in the population. This fact renders untenable the idea of discrete races made up chiefly of typical representatives.” (“AAPA Statement on Biological Aspects of Race” American Journal of Physical Anthropology, 1996, Vol. 101, 569-570).

Earlier, the United Nations claimed that “For all practical purposes ‘race’ is not so much a biological phenomenon as a social myth.” (Statement on Race, UNESCO, Paris, July 1950). The sentiments were re-affirmed in 1978 (the General Conference of the United Nations Educational, Scientific and Cultural Organization at its 20th session, on 27 November 1978): “The differences between the achievements of the different peoples are entirely attributable to geographical, historical, political, economic, social and cultural factors”.

Sarich is emeritus Anthropology professor from the University of California at Berkeley, and Miele is a senior editor at Skeptic. They begin their book with a disagreement with the recent PBS television series “Race: The power of an allusion”. The series, as the title suggests, argues that “race” was only a myth and an unwelcome myth at that. The series made 10 points; 8 of which Sarich and Miele contest as being factually inaccurate. One of the 8 points regard to genetics. The committee concludes that inequalities between racial groups are not based in biology but in social and ideological conditions”. (American Anthropologist, 1998, Vol. 100(3): 712-713)

Likewise, sociologist Alfred C. Maldonado writes: “Race is a concept of society that insists there is a genetic significance behind human variations in skin color that transcends outward appearance. However, race has no scientific merit outside of sociological classification.” (www2.austincc.edu/amaldona/id22.html). Physical anthropologists have produced a similar statement on race:
can be found on the PBS website for the documentary, wherein the producer writes: “What we discovered is that most of our common assumptions about race — for instance, that the world’s people can be divided biologically along racial lines — are wrong.” (www.pbs.org/race). The remaining 2 points involve social policy. The authors suggest that these two policy points given by the PBS documentary are not and would not be effective. The authors offer alternative policy guidelines.

The first two chapters deal with race and the law and history. Chapter 3 traces the academic debate in anthropology on the status of race and how the current understanding arose. Chapter 4 explains the development of the molecular clock which determines both the relative separation of biologically distinct groups as well as the absolute age of separation. Both intellectual cul-de-sacs and successes are chronicled. Chapter 5 outlines a current interpretation of the trajectory of *Homo sapiens*. The evidence from several sources points to an emergence of our ancestry from Africa approximately 50,000 years ago. Chapter 6 offers a view on the relationship between the origin of grammar/language and our evolutionary success. Chapters 7 and 8 are key. Here the evidence is presented which seeks to validate the claim of the existence of races. Chapter 9 contains policy suggestions which are predicated on the existence of racial differences.

There are two sub-texts to the book relevant to human ethology, and these warrant a brief exploration: (1) shifting the burden of proof, (2) generations and variability.

**Burden of proof.** Western science nominally places the burden of proof upon the individual who is making an assertion. The proof would include falsifiability of the assertion. In the current marketplace of ideas, there is an asymmetry in the conceptualization of race. The advocates that races do not exist are not required to provide evidence for their position. Advocates for the existence of racial differences, such as Sarich and Miele, are required to produce evidence. In other words, one school of thought is the default position: races do not exist. Oddly enough, differences in physical characteristics and behavioral characteristics are often used to fortify the notion that there are no races. The logic is that, because there are differences within populations, any differences between populations are irrelevant.

The analogy of the nature-nurture debate is illustrative. For decades after World War II, the *tabula rasa* proponents were not required to eliminate biological tendencies as an influence on the behavior under analysis. On the other hand, those proponents of biological predispositions were required by critics, editors, and referees to eliminate environmental parameters as the variables which were aligned with the behavior in question. The Sarich and Miele book acts to help redress the differential requirements in the burden of proof. Such a shift is advantageous to human ethology.

**Time and variability.** The time frame given to us by the molecular clock, especially data from the evolution of our mitochondrial DNA and the Y-DNA, seems to be about 50,000 years. That is, about 50,000 years ago, a group of our ancestors left Africa, swept the field clean of competitive groups, and then populated the globe with their descendants. At 25 years to a generation, the number of generations is 2000. So, at least 2000 generations are available for selection on human variation to result in systematic differences in groups. Is that enough?

The answer seems to be "Yes". Tryon’s in-breeding experiments with white rats’ maze running cleanly separated the two groups — "fast", "slow"— in less than 25 generations. The separation was generated by different genetic information, not by different learning histories. Hirsch’s in-breeding of geotaxis in flies resulted in two groups: those that navigated upward and those that navigated downward. Even though the flies breed quickly, the significant separation of the two groups was quick enough to be contained within one experiment. Again, this separation was a consequence of genetic differences, not of learning differences.

Sarich and Miele use the analogue of the domesticated dog. The point Sarich and Miele make is that, while behaviors and temperaments and physical structures are clearly different in different breeds, the genetic differences are negligible. Indeed, the wolf and the domesticated dog have extremely close genotypes. That is, the genetic distance is minimal across breeds, but the behaviors and
temperaments and structure — all inheritable — are demonstrably quite distinct across breeds.

The critics of the notion of the existence of races argue that most genetic variability of the human condition is within populations, not between them. The figures often used are 85% of the variability in human characteristics is within-populations, while 15% of the variability is between-groups. Accordingly, the logic continues, even if there are races, the differences between races are swamped by differences within the putative races. Ergo, racial differences must be so miniscule as to be functionally zero and need not be considered.

However, as noted, the differences between breeds of dogs in temperament, behavior, and physical structure are easily detected and are inherited. Yet, the differences in the genetic composition of the various breeds are extremely small and not (yet) aligned with the breed specific characteristics. The oft repeated genetic closeness of the chimpanzee with humans is belied by the enormous differences in behavior. The Rubicon crossed by humans to separate us from the apes represents qualitative differences which are very difficult to reconcile with the small quantitative percentages of DNA differences.

In sum, this book makes a cogent argument for the meaningful existence of races:

- Over generations, reproductive success would not be totally egalitarian, especially for men.

Thus, it would be expected that differences between groups would reflect disparate adjustments and adaptations to the different environments, e.g. Bergmann’s Rule and Allen's rule. The greater the (geographic) distances between any two compared groups, and the longer the time (measured in generations) the groups are separated from each other, then the greater the racial differences would be expected.

Lastly, Sarich and Miele profile the problems continuously nagging the behavioral sciences when social agenda and activism infuse themselves into the scientific inquiry about what it means to be human.

Wade C. Mackey, PhD., has been researching and publishing in human ethology since the late 1970s. Recent publications have appeared in Social Biology, Evolutionary Psychology, Journal of Ecological Anthropology, and Genetic, Social, and General Psychology Monographs.
ANNOUNCEMENTS

JEAN-MARIE DELWART FOUNDATION

2005 Animal and Human Ethology Award

The Jean-Marie Delwart Foundation will award in 2005 a prize for an original work or series of works, individual or collective, realized in the joint perspectives of Ethology and Cultural Anthropology.

The Prize of $10,000 will be given to works written or translated in French or English, which should be sent by 15 April, 2005 to the following address:

Fondation Jean-Marie Delwart
A l’attn de Raphaëlle Holender
U.C.L. Bâtiment Pythagore
4, Place des Sciences (Bte 4)
B-1348 Louvain-la-Neuve
Belgique

info@fondationdelwart.org
http://www.fondationjeanmariedelwart.org

Candidates can submit their own application or be presented by a specialist in the field or an academic institution. All applications should be accompanied by a letter of presentation, a detailed C.V., and a complete list of publications, in 4 copies. The candidate should include reprints, books and anything else he would consider relevant.

The Jury is composed of members of the scientific committee of the Jean-Marie Delwart Foundation and of members of the Académie Royale des Sciences de Belgique. The Prize will be awarded in December 2005 at the occasion of the Public session of the Académie Royale des Sciences de Belgique.

The next biennial conference of the International Society for Human Ethology will be held at Wayne State University in Detroit, MI (U.S.). The tentative dates are 30 July to 3 or 4 August of 2006.
Linda Mealey Award for Young Investigators

The International Society for Human Ethology has officially established a separate fund to maintain the Linda Mealey Award for Young Investigators in perpetuity. The Society wished to honor Linda, a past president and chief book review editor, for her tireless work for the Society, her outstanding scholarship, and her devoted mentoring of students. The Society seeded the fund with $40,000, and Linda’s father George Mealey matched that amount. The award will go to outstanding researchers at the graduate school level in Linda’s field, human ethology.

In the past, the equivalent award, the Young Investigator Award, went to one or more young researchers at each biennial congress, who received a nominal sum. With the new, well-endowed fund, ISHE will be able to provide appreciable funds for winners. Fund earnings over the two year period between conventions should cover most of the recipients’ travel expenses to the subsequent congress, and an additional cash award may also be possible. To make the award even more substantial and thereby further encourage and reward researchers in human ethology, ISHE is hereby soliciting additional contributions to the fund. Mr. Mealey has kindly offered to match additional contributions by individuals, dollar for dollar, up to $10,000. Donations should be sent to our treasurer, Dori LeCroy (see back cover for her (NEW) address and payment information), made out to ISHE but designated for the Linda Mealey Fund.

Note: The 2004 winners of the Linda Mealey Award are announced above in the minutes of the 17th biennial ISHE conference.

ISHE Board of Officers Election Notice

All current ISHE members are encouraged to vote for one person for each of the following two positions. Any current ISHE member is eligible to serve for either position.

Ballots may be submitted by e-mail or postal mail to T. R. Alley (see Editorial Staff box for addresses).

**Deadline:** 15 November, 2004.

**Secretary:** Nominees are Frank Salter (incumbent) and Maryanne Fisher

**Membership Chair:** Nominee is Astrid Juette (incumbent)
NEW BOOKS

Any qualified individual interested in writing a review of one of the following books, or any other recent and relevant book, should contact one of the Book Review Editors.

Publishers, authors, and others may call attention to recently published or forthcoming books by contacting the Chief Book Review Editor.


For a list of books (in all European languages) on human ethology, sociobiology, evolutionary psychology, Darwinian psychiatry, biopolitics, hominid evolution and related disciplines visit: http://rint.rechten.rug.nl/rth/ess/books1.htm
CURRENT LITERATURE

Compiled by Johan van der Dennen

Barclay, P. (2004) Trustworthiness and competitive altruism can also solve the "tragedy of the commons". *Evolution and Human Behavior*, 25, 4, 209-220 (McMaster Univ., Dept. Psychol., 1280 Main St W, Hamilton, ON L8S 4K1, Canada)


ratio and facial asymmetry. *Evolution and Human Behavior, 25*, 2, 125-132 (see above)


Wyoming, Dept. Sociol., Laramie, WY 82071, USA


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**Call for Nominations**

All current ISHE members are invited to submit nominations for the position of **Information Officer**. Self-nominations are permitted. The Information Officer will be a non-voting officer, whose functions will include press officer, maintaining contact with other societies, and the writing of ISHE history.

Send nominations to HEB Editor Tom Alley: Alley@Clemson.edu

**Deadline** for receipt of nominations (to be listed in the next issue of the *Bulletin*): 29 November
Attendees during a talk at the 17th Biennial Conference of the ISHE held in the Sofitel Hotel in Gent. (Photo courtesy of K. Théinpont)

In the Next Issue:

- Report on the 2004 biennial meeting in Gent, Belgium.
- More photos from the conference.
Membership and Bulletin Subscriptions

Annual dues (tax-deductible in the US) are $US20 per year, $50 for 3 years, or $75 for 5 years ($10/yr. or $25 for 3 years for professors emeriti/-ae). Membership includes the quarterly Human Ethology Bulletin and the current Membership Directory.

Students may request free 1-year membership by contacting the membership chair. A free student membership entitles the student to an electronic version of the Bulletin sent by e-mail; to receive a printed version by postal mail, students must pay $10/year.

Library subscriptions cost the same as regular annual dues.

Please pay by check in US funds made out to ISHE or by credit card (VISA or Mastercard or Eurocard).

If you must pay by foreign check, please add $10. European members may also pay to: International Society for Human Ethology, Account Nr: 501 680 783 00, Bank Austria, Bank Code: 20151, Swift Code: BKAUATWW

Recommendation: For convenience we suggest you start a standing order (Dauerauftrag) with your new member-fee payment.

Please send payment to: Dori LeCroy, ISHE
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The International Society for Human Ethology aims at promoting ethological perspectives in the scientific study of humans worldwide. It encourages empirical research in all fields of human behavior using the full range of methods developed in biology and the human behavioral sciences and operating within the conceptual framework provided by evolutionary theory. Founded in 1972, the Society fosters the exchange of knowledge and opinions concerning human ethology with all the other empirical sciences of human behavior. A not-for-profit scientific society, ISHE administers its funds to support this purpose.

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