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Human Ethology Bulletin

Contents

This is the 200th anniversary year of the birth of Charles Darwin, an occasion marked in this issue by a brief look at the Darwin bicentenary (p. 15). This first issue of 2009 also includes a second Brief Communication, two book reviews, and a **call for nominations** for 2 ISHE positions: trustee and VP/President-Elect.

As announced last issue, tentative plans to transform the *Bulletin* to an on-line publication with additional content consisting of peer-reviewed articles are being developed and are under discussion. Input from ISHE members has been almost entirely supportive and encouraging, so 2009 may be the last year for the *Human Ethology Bulletin* in its present form. If so, the *Bulletin* should become more readily available and more widely read. ISHE officers remain eager to hear advice and comments from members on this potential change.

– Editor

Human Ethology Summer Institute

The 2nd ISHE sponsored Human Ethology Summer Institute will be held at the University of Maine in Orono (USA) 5-9 July. The meeting will be hosted by ISHE Trustee and past-President, Peter LaFreniere. Some program details and updates are included in this issue, including forms for registration and housing; more complete information is available at www.ISHE.org.

Back Issues of the *Bulletin* may be ordered following the policy and pricing available in the most recent issue.

Bulletin Policies

Submissions. All items of interest to ISHE members are welcome, including articles (*Brief Communications*); responses to articles; news about ISHE members; announcements of meetings, journals or professional societies; etc. **Book reviews** and review inquiries may be sent to the Editor or to an Associate Editor. Guidelines for book reviews are available from any staff member and on the ISHE web site. Other types of submissions should be sent to the Editor. These include **Brief Communications** and **Brief Reports** which may cover such topics as teaching ethology, ethological methodology, human evolution, and evolutionary theory.

All submissions must be in English, and sent to the appropriate editor via email, preferably as an attachment. If email is impossible, hard copies will be accepted, as long as they are accompanied by the same text on CD-R (preferably in Microsoft Word format). All submissions, including invited contributions, are subject to editorial review. Some submissions are rejected, but political censorship is avoided so as to foster free and creative exchange of ideas among scholars. Submissions are usually reviewed only by members of the editorial staff, although outside reviewers are used occasionally. All submissions should be original, and are not to be published elsewhere, either prior to or after publication in the *Bulletin*, without permission from the Editor.

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BOOK REVIEWS

Necessary Knowledge

By **Henry Plotkin**

Oxford University Press, 2007, viii + 348pp.
ISBN: 978-0-19-856828-5 [Hdbk, US$49.50]

Reviewed by **Shawn A. Collier**
Department of Psychology, University of Maine, Orono, ME 04469 USA
[E-mail: shawn.collier@umit.maine.edu]

The most enduring problems in cognitive and behavioral science include questions about the nature of knowledge and the processes by which knowledge is acquired and utilized, and hypotheses offered in answer to these questions spur some of the most interesting debates in these fields today. In *Necessary Knowledge*, Plotkin considers how evolutionary biology might inform such debates. Specifically, he asks: what might evolution have to do with the learning faculties of humans and other animals? In addressing this question, Plotkin sketches a brief history of ideas on the relation between evolution and learning, provides a brief survey of recent evidence from cognitive science, and challenges the 'blank slate' notion of the human mind at birth by proposing that "some representational knowledge is innate" (p. 1) and necessary for at least some forms of learning.

Plotkin notes (see also Plotkin, 2004; Richards, 1987) that early evolutionary thinkers such as Cabanis and Lamarck were greatly influenced by the sensationalist notion that the seemingly rational behavior of animals, including the intelligent behavior of humans, is guided by a general process involving the association of sensations and the formation of habits developed from environmental interaction. It was also recognized, however, that animals often exhibited seemingly well-practiced behavior before gaining the environmental experience that, from a sensationalist stance, would be required for the development of the behavior. Theorists who sought to include explanations of learning and behavior within an evolutionary framework were faced with the problem of articulating the processes underlying these two modes of behavior, behaviors emerging from an organism's interaction with the environment and the species-typical behaviors often displayed before relevant experience is gained, that is, learned behavior and instinctual behavior, respectively. Plotkin claims that while Darwin identified reasoning and a host of other mental faculties as evolutionary products, he did not develop fully the implications of learning as an adaptation. Plotkin points to Lorenz, in his *Evolution and Modification of Behaviour* (1965), as the first to explicitly consider the implications of learning as an evolutionary product.

Plotkin illustrates Lorenz's conception of learning and the innate with Lorenz's 'information metaphor'. To the extent that particular structures and behaviors of organisms are products of selection pressures, organisms are equipped for, or, metaphorically, informed about, certain recurrent aspects of the environment in which they have evolved. Lorenz conceived of the innate as information about an organism's environment provided by the genome. This information is modified slowly – at whatever pace a population's gene frequencies are capable of changing in response to selection pressure. However, many aspects of the environment change more rapidly than population-level changes in gene frequencies can match, and it is often crucial that an

organism meet such rapid changes with new behavioral responses. For Lorenz, this was the adaptive function of learning; Plotkin notes that Lorenz, in his 1965 monograph and thereafter, was committed to the view that "learning fulfils a specific function that cannot be carried out by the main evolutionary programme because the latter gains information at too slow a pace relative to rates of certain forms of environmental change" (p.118). Plotkin supports this view of learning, and, in support of the influence of evolution on at least *some* forms of learning, he presents evidence of 'learning constraints'.

What are learning constraints and why are they expected from a learning-as-adaptation view? Plotkin's answer is based on the assumption that if learning is an adaptation that serves an organism's response to rapid environmental change, information acquisition must occur relatively quickly. But it is unlikely that an unorganized and undirected sampling of environmental stimuli will provide information at a pace useful to the organism. As such, learning "must be directed to the specific places in the world about which learning has to occur if it is to have biologically utility" (p.129). Such direction is achieved by learning constraints. Additionally, the reader is asked to consider the world as faced by a newborn for whom the world can be "partitioned in a virtually infinitely large number of ways" (p.128; see also Edelman, 1987). Constraints on learning may influence 'partitioning'; they may be manifested as an innate disposition to direct attention toward particular elements of a learning problem over other elements, or as a disposition for making particular associations among stimuli in preference to other viable associations. Such constraints, it is presumed, have played a role in targeting a solution to a learning problem that conferred a fitness advantage in the organism's environment of evolutionary adaptedness.

After considering some of the paradigmatic animal studies of the late 1960s and early 1970s (e.g., Garcia, Ervin, & Koelling, 1966; Garcia & Koelling, 1966; Rozin & Kalat, 1971), Plotkin reviews evidence for learning constraints in humans from research on language acquisition, problem solving, imitation, and visual attention in newborns. For example, Plotkin notes the tendency of infants to follow the direction of another's gaze and the preference of newborns to attend to faces that engage them with eye contact (see Farroni, Csibra, Simion, & Johnson, 2002). Plotkin also points to the research of Johnson and Morton (1991) in noting the tendency of neonates to "pay more visual attention to human faces than any other visual object" (p. 144). The face is a crucial source of social information for humans, and learning constraints that guide attention to the face and eyes may be foundational for the development of an understanding of the intentionality of others (Baron-Cohen & Cross, 1992). Such is the "necessary knowledge" of Plotkin's title: the innate knowledge necessary to direct further learning. Moreover, the innate knowledge for which Plotkin argues is *representational*; the mind is equipped in some manner with a representation of the environmental information with which the learning constraint operates: "if at birth human infants are predisposed to attend to human faces rather than human elbows or the legs of tables, that can only be understood in terms of a predisposition to look at something that has a specific, certain, content" (p. 170).

While Plotkin maintains that learning constraints play a fundamental role in shaping the manner in which organisms approach some learning problems, he is quick to acknowledge the causal complexity of cognition and behavior. Plotkin pursues this complexity in the final chapters as he explores

relations among evolutionary processes, development, and cultural influences on learning. For example, Plotkin notes the disparate assignment strategies employed by European American and East Asian participants in the object categorization studies of Nisbett and colleagues (see Nisbett & Miyamoto, 2005; Nisbett, Peng, Choi, & Norenzayan, 2001) and he supports the proposal of these researchers that cultural practices may exert a causal influence, by way of developmental experience, on cognitive style. Plotkin closes on a decidedly philosophical note by reviewing some of the well-known Western pronouncements of rationalism and empiricism (Plato, Descartes, Hume, et al.) and he discusses the similarities and differences between his necessary knowledge thesis and Kant's conception of the a priori.

Plotkin's claims regarding the nature and importance of learning constraints constitute the heart of the book, and his arguments are convincing and well-supported. In light of the constraints that Plotkin enumerates, however, a reader may reasonably ask: are learning constraints indicative of 'learning as an adaptation' (the general phrase used throughout the book, connotative, perhaps, of a broad-based learning faculty), or are the learning constraints the adaptations of interest (e.g., domain-specific mechanisms that guide otherwise trial-and-error learning processes)? The question arises because Plotkin speculates on the possible 'generic' function of learning. Plotkin (following Lorenz) claims that "all learning is most probably an adaptation to the uncertain futures problem" (p.127); that is, "if learning has a generic function, it is to provide adaptive behaviours on the basis of information gain which is unavailable to the main evolutionary programme" (p. 128). The support Plotkin marshals for the learning-as-adaptation view is evidence of constrained learning. It is clear, however, that evidence of learning constraints doesn't bear directly on the 'uncertain futures' problem. A necessary condition for the evolution of a constraint that, for instance, biases attention toward a particularly important feature of a learning problem is the statistical regularity of the feature over evolutionary time. As such, the information with which evolved constraints operate *is*, in fact, visible to the main evolutionary program. Thus, with regard to an attentional bias toward faces, the future is not so uncertain; it is the projection of a long evolutionary past in which a neonate's world will be populated with faces. It might appear, then, in light of Plotkin's discussion of the uncertain futures problem, that although learning constraints are adaptations that have evolved to *guide* learning, they are not the specific adaptations that Plotkin has in mind when he uses the phrase 'learning as an adaptation'. Plotkin's point regarding the influence of evolution on cognition and behavior is not lost, but a more detailed discussion of the presumed computational structure of, and presumed relations among, the cognitive mechanisms underlying different forms of learning would help clarify this issue. Curiously, Plotkin offers relatively little discussion of the phenomenon that relates more directly to the uncertain futures problem – experience-dependent plasticity of neural structures. Plotkin notes that while neural plasticity is "more compatible with a general learning process stance than an extreme innatist position" (p.199), such plasticity and, more generally, epigenesis, "does not in any way exclude nativism" (p. 198). Indeed, as Plotkin recognizes, connectionists have developed models of neural networks that demonstrate the potential compatibility of innate knowledge and experience-dependent plasticity. In his discussion of such models, however, Plotkin focuses on the failure of some connectionists to admit the representational character of some forms of innate knowledge and he

misses the chance to highlight the evolutionary significance of endowments that resist a distinctly representational, in Plotkin's sense of the term, characterization, such as the innate specification of cortical architecture (see Clark, 1993; Fodor, 1983). Indeed, at a molecular level, differences in neural synapse architecture among early metazoans, invertebrates, and vertebrates appear to underlie significant differences in neural signaling complexity and experience-dependent plasticity and may underlie evolutionary differences in learning and behavior (Emes, et al., 2008).

Plotkin covers a lot of ground in a relatively short span of pages, and it is likely that a reader with more than an introductory-level background in cognitive science or ethology will wish for deeper coverage of some of the topics, but the breadth of *Necessary Knowledge* is appreciable and will likely ensure the book's appeal to a broad readership. The exchange of ideas between evolutionary biology and cognitive science has been fascinating and fruitful, and *Necessary Knowledge* is a thought-provoking introduction to this exchange.

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Shawn A. Collier is a PhD candidate in the Department of Psychology at the University of Maine. His interests include visual perception/cognition and evolutionary perspectives on cognition.

Oxford Handbook of Evolutionary Psychology

Edited by **R.I.M. Dunbar** & **L. Barrett**
Oxford University Press, 2007, xiv + 706 pp.,
ISBN 978-0-19-856830-8, $110 (Hdbk.)

Reviewed by **Glenn Weisfeld**
Dept. of Psychology, Wayne State University,
Detroit, MI 48202 USA
weisfeld@sun.science.wayne.edu

One can depend on a "handbook" being so heavy that it is anything but handy. This one weighs in at about 2 kg. However, its bulk and price are justified, in my view, by its breadth and quality.

The book is divided into philosophical issues, the comparative approach, neurobiology and cognition, development, reproduction, the self (whatever that means), and cultural evolution. It embraces most of the active areas of research in evolutionary psychology, and not just mate choice.

On p. 1, the editors argue for viewing the evolutionary perspective as not a "competing discipline within psychology," but rather as a framework for integrating psychology within the biological sciences (cf. Segal et al., 1997). This raises the question of whether we should offer separate courses in evolutionary psychology (or human ethology) or infuse the evolutionary perspective into various psychology courses. Both approaches have merit. I favor the latter, burrow from within approach, because it promises to eclipse the main psychological theories and not remain dominated by them. We now have introductory psychology textbooks such as Gray (2007) that cast mainstream psychological research in evolutionary terms. LeVay and Baldwin's (2009) textbook covers human sexuality from an evolutionary perspective. Evolutionary developmental texts are also appearing (e.g., LaFreniere, in press). Modesty prevents me from citing my own adolescent psychology textbook.

In this review I shall suggest that evolutionary psychology, as represented by this book, is moving toward the traditional ethological perspective. In line with Tinbergen's four questions, the book includes substantial material on development, primatology, and brain mechanisms, and not just functional explanations.

The Importance of Emotion

Also, the book pays extensive attention to emotion, in keeping with the idea that the ethogram is a catalogue of observable, instinctual (or emotional) behaviors such as feeding, flight, and mating. By contrast, evolutionary psychology often focuses more on cognitive mechanisms.

The book features numerous references to emotion. Baron-Cohen (Chapter 16) observes that the original notion of theory of mind refers only to understanding another person and not to empathizing with her, a component he now includes in his model. Schaller et al. note that the brain is biased toward responding to emotional stimuli, especially negative ones, and is not an indiscriminate information processor. Carroll asserts that a better understanding of literature will depend on "a more precise and adequate knowledge of the nature of emotion" (p. 644). Cross suggests that music may function partly to coordinate group mood. This is a very welcome and well done chapter, but it might have cited the fact that a certain type of music, such as the lullaby, evokes a similar emotional response across cultures.

Several chapters refer to another neglected emotion, dominance behavior. However, as usual, observational studies of dominance behavior, parental behavior, and play are seldom cited, e.g., Savin-Williams, 1976; Mann, 1992; Blurton Jones, 1972. A comprehensive ethogram of human behavior must include all of the major motivated behaviors, or emotions.

Identifying Evolved Behaviors and Their Functions

In Chapter 3, Mameli addresses the issue of whether or not to maintain the innate/acquired distinction of the ethological tradition. To neglect this distinction is to dismiss Darwin (1872) himself, who originated most of the research tests for innateness: cross-species prevalence, early onset, specific physiological mechanism, presence in handicapped individuals who cannot have acquired the behavior through experience, and phylogenetic continuity. The distinction is meaningful and an important guide to research. Shouldn't we first identify traits that have evolved in our species and determine their adaptive value, as opposed to dwelling on evanescent traits that vary across time and place?

It is true that Darwin's research strategies are imperfect. But one can employ multiple strategies in testing a given behavior or sex difference, to see what the bulk of the evidence indicates. Also, difficulties sometimes arise through use of dubious, non-Darwinian research strategies for addressing this question. Mameli cites developmental robustness and lack of learning during development as indicative of an innate behavior. As Mameli notes, however, many evolved traits appear only during certain periods of development, and many that have an evolved *basis* are modified by experience. Darwin's research strategies are generally more valid. Another common error is to conclude that because a behavior is heritable, it was selected for. Virtually every measurable trait that varies continually exhibits some heritability, such as driving ability, but that does not mean that it was selected for in prehistory.

Evolutionary psychologists try to identify evolved behaviors, but often stray from Darwin's guidance. For example, as Mameli explains, Cosmides and Tooby have championed the method of identifying an adaptive need in theoretical terms and then deducing the corresponding behavior that should be sought. There are numerous problems with this approach. The adaptive need may be met by a purely cultural adaptation. We may already know that a given behavior evolved, but we still need to identify its function. We may not be able to imagine all the adaptive needs of our species, let alone other species. We may not be able to imagine the particular behavior that has actually evolved to address a particular need. For example, who would have imagined that we seek mates who possess different Major Histocompatibility Complex genes from our own so as to optimize the immune competence of offspring, and that we identify these mates through body odor (cited by Wedekind, Chapter 22)? The ethological tradition, with its focus on identifying naturalistic behaviors and Darwin's tests, first establishes that a particular behavior has an evolved basis, and then proceeds to identify its function, mainly by comparative analysis to determine the selection pressure that led to the behavior.

One objection to functional analysis is that, because behavior does not fossilize, we cannot know about prehistoric behavior, especially language. Shennan (Chapter 40) notes that the presence of exotic materials indicates trade with distant communities, and that social class differences in diet are

revealed by animal remains in dwellings of different sizes. Furthermore, isotope analyses of skeletons reveal individuals' migration histories. Thus, empirically based inferences can be made.

Comparative Analysis of Behavior

Rendall et al., in Chapter 6, point out the anthropomorphism of beginning with a particular human cognitive ability and then seeking that ability in various other primates. It might be better to begin by documenting a given cognitive capacity in different simians and then try to determine its causal selection pressure. Along these lines, Barton recommends starting with naturalistic behavior in trying to understand human cognitive capacities, rather than with cognitive abilities demonstrable in artificial settings. Bshary et al. suggest taking some human capacity and seeking an appropriate animal model for experimental analysis. For example, scrub jays exhibit the Piagetian concept of transitivity. Along these lines, Todd and Gigerenzer note that rats and humans use some similar decision-making heuristics such as the recognition heuristic—e.g., preferring familiar foods. These examples indicate that simian models of human cognition may not be the only appropriate ones.

One nice application of an ethological idea, sexual imprinting, is Bereczkei's finding that people choose mates who resemble their opposite-sex parent. The same thing is common in birds and mammals. He discovered further that the closer a woman had been to her adoptive father emotionally (adopted daughters were used to reduce phenotype matching in mate selection), the more her husband resembled him.

Development

Lummaa's chapter on life history theory notes that sons are more costly to the mother than are daughters in being heavier at birth, lengthening the time until the next birth, and reducing the mother's life expectancy. The last effect may be due partially to daughters' helping at the nest more than sons. Having a daughter increases the number of subsequent children (Voland, Chapter 28).

Wyman and Tomasello (Chapter 17) explore the ontogenetic origins of human cooperation, noting that toddlers appear to be able to coordinate simple actions with other people. To investigate whether toddlers actually form shared goals with others, they manipulated the behavior of the adult experimenter during the cooperative tasks, introducing interruptions during which the experimenter ceased to act for no apparent reason. Toddlers responded by waiting for the adult to resume cooperation and by making eye contact, and using vocalizations and gestures to re-establish contact. This suggests that toddlers are learning to form shared goals and clearly have expectations about their partner's behavior, and understand that cooperation involves interdependent and interchangeable roles.

Mechanisms

Several chapters summarize research on brain areas. Certain cells in the superior temporal sulcus (STS) selectively respond to images of specific body parts or the whole body, sometimes only when a specific action is executed (Jellema and Perrett). About 95% of these cells respond to the action from the viewer's point of view, the rest from the target's. Other STS cells respond to facial expressions and gaze direction. Some cells respond only to combinations of actions and gaze direction; an action carried out while looking in the same direction may indicate

intentionality rather than an accidental occurrence. Some STS cells respond to someone walking near the subject, and others to someone walking at a distance; cf. the ethological notion of flight distance. Other STS cells respond maximally to the image of someone partially obscured by (hiding behind) a screen of some sort.

Rizzolatti and Fogassi's chapter describes mirror neurons. These neurons respond more strongly to familiar actions within the subject's movement repertoire. The human mirror neuron system responds even to meaningless actions that lack a goal, unlike the monkey's system.

Skowronski and Sedikides report that some hippocampal neurons respond to objects independently of their location, some to locations independently of the object, and others to combinations of the two. They cite Rolls' suggestion that this last capacity underlies episodic memory, which entails recalling what happened where.

There is limited coverage of hormones and behavior. In Chapter 25, Campbell argues that women inhibit impulsive behaviors more strongly than do men, consistent with women's larger prefrontal cortex. She suggests that this inhibition might favor greater control over impulsive sexuality and impulsive anger toward one's infant. However, she notes that the evidence indicates that women experience anger as often as men, and so women's higher oxytocin levels may cause greater compassion toward infants and restraint of anger. Also, of course, women's lower levels of testosterone could account for their lower average libidos.

Conclusion

The book is remarkably well edited, especially given that many of the contributors are not native English speakers (the contributors represent ten countries). Indeed, this international scholarship constitutes a strength of the book, and not one shared by other handbooks on the same subject. There are just a few misspellings, mainly of homonyms (principal vs. principle, weigh vs. way). The index mixes subjects and names, and is inadequate for a work of this size. However, pound for pound, this book is well worth buying.

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Glenn Weisfeld received his doctorate in human development at the University of Chicago under Daniel G. Freedman. His current research concerns marital satisfaction across cultures. His theoretical interests include adolescence, pride and shame, and humor.

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 the Editor or an Associate Editor. Publishers, authors, and others may call attention to recently published or forthcoming books by sending information to the Editor.

Bedau, M. A., & Humphreys, P. Emergence: Contemporary Readings in Philosophy and Science. MIT Press, 2008, 482 pp. ISBN: 0262524759

Boyer, P., & Wertsch, J. V. Memory in Mind and Culture. Cambridge University Press, 2009, 400 pp. ISBN: 0521758920

Cochran, G., & Harpending, H. The 10,000 Year Explosion: How Civilization Accelerated Human Evolution. Basic Book, 2009, 304 pp. ISBN: 0465002218

Coolidge, F. L., & Wynn, T. The Rise of Homo Sapiens: The Evolution of Modern Thinking. Wiley-Blackwell, 2009, 320 pp. ISBN: 1405152532

Desmond, A., & Moore, J. Darwin's Sacred Cause: How a Hatred of Slavery Shaped Darwin's Views on Human Evolution. Houghton Mifflin Harcourt, 2009, 448 pp. ISBN: 0547055269

Dutton, D. The Art Instinct: Beauty, Pleasure, and Human Evolution. Bloomsbury Press, 2008, 288 pp. ISBN: 1596914017

Fairbairn, D. J., Blanckenhorn, W. U., & Szekely, T. Sex, Size and Gender Roles: Evolutionary Studies of Sexual Size Dimorphism. Oxford University Press, 2009, 280 pp. ISBN: 0199545588

Jensen, P. The Ethology of Domestic Animals. CABI, 2009, 304 pp. ISBN: 1845935365

Miklosi, A. Dog Behaviour, Evolution, and Cognition. Oxford University Press, 2009, 304 pp. ISBN: 0199545669

Nettle, D. Evolution and Genetics for Psychology. Oxford University Press, 2009, 320 pp. ISBN: 0199231516

Ruse, M. Darwinism and its Discontents. Cambridge University Press, 2008, 326 pp. ISBN: 052172824X

Slater, P. J. B., & Halliday, T. R. Behaviour and Evolution. Cambridge University Press, 2008, 360 pp. ISBN: 0521429234

Smith, P. K. Children and Play. Wiley-Blackwell, 2009, 272 pp. ISBN: 0631235213

Tommasi, L., Peterson, M. A., & Nadel, L. Cognitive Biology: Evolutionary and Developmental Perspectives on Mind, Brain, and Behavior. MIT Press, 2009, 384 pp. ISBN: 0262012936

This year marks the 200th anniversary of Darwin's birth and the 150th anniversary of *The Origin of Species* (see ***Brief Communications*** below). Accordingly, a number of books about Darwin's life, his influence, and his letters have been published recently. A particularly notable example is Cambridge University Press, which provides a list of these recent publications at: http://www.cambridge.org/features/science/darwin/newbooks.htm.

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

Brief Communications

Human Ethology from the South Pole to the North Pole

by **Carole Tafforin**

Ethospace, 13 rue Alsace Lorraine, F-31000 Toulouse, France
E-mail: ethospace@orange.fr

The Individual-Environment relationship is in the spotlight when we consider human behavior in Polar Regions. Individual adaptation and environmental consequences are questions of special concern this year as it is the International Polar Year (IPY). The current IPY, organized through the International Council for Science and the World Meteorological Organization, is actually the fourth of its kind, following those in 1882-1883, 1932-1933, and 1957-1958. The IPY is a large scientific program focused on the Arctic and the Antarctic from March 2007 to March 2009, and involves over 200 projects, with thousands of scientists from over 60 nations. They examine a wide range of physical, biological, and social research topics (Natural History Museum, 2007; Fox Rogers, 2007; Barr, 2008). Human Ethology is concerned with this latter topic and was applied in both the South Pole in the Franco-Italian base Concordia and in the North Pole on board the schooner Tara.

The scientific interest of such an approach in that field is to carry out tools of objective observations of men and women living and working in extreme conditions. The guiding assumption is to consider the observed behavioral strategies as positive solutions to the specific factors of the polar environment (isolation, confinement, monotony and climate) in the adaptive process. This is a new direction in the studies of isolated and confined teams with mixed-gender and multi-cultural characteristics, assuming salutogenic consequences of their behavior (Suedfeld, 2001) for better physiological and psychological comforts (Tafforin, 2005). The general hypothesis is that the strategies are indicators of optimal relationships with the environment. Applying the ethological method in the South Pole and in the North Pole, the working hypotheses are that the behavioral changes occurring (social indicators, temporal indicators, spatial indicators and motor indicators) are culturally-dependent, gender-dependent, and time-dependent with cyclic or periodic variations.

In the South Pole

On the Antarctic continent, during summer campaigns (from November to March) and the winter-overs (from April to October), polar teams composed of glaciologists, climatologists, seismologists, ecologists, meteorologists, technicians, and medical physicians work in shifts during a one-year mission. At Concordia station, located at Dôme C (75°06'S-123°21'E), the environmental conditions are extreme. The temperatures range from –30 degrees Celsius to –70 degrees Celsius, with an average wind speed of 2.8 meter/second. The total isolation and confinement period is of 8 months duration with social constraints and physical restraints to which the winterers have to adapt.

Ethological data were collected over the Concordia 2 mission with a focus on the ten winterers, in the collective area, at mealtimes. The team was composed of four Italian (2 women and 2 men) and six French (1 woman and 5 men) with an average age of 37 years. The physician made the weekly observations.

The observations consisted of numbering and identifying the team-members, mapping their position around the tables, and noting the durations of the meals. The ethological results showed changes in social behavior over time. The *collective attendance*, evaluated by the percentage present at mealtimes, was high at midday during the summer campaign. The *social orientations*, evaluated by the number of winterers in the visual field of one team-member, were low during the first weeks, then increased in the second half of this period. The *space sharing* and *place preferences* were both multi-culturally-dependent and mixed-gender-dependent. Finally, the *collective time*, evaluated by the arrival time of the first winterer at the table, the leaving time of the first winterer and the leaving time of the last winterer, showed cyclic variations every seven weeks, during the three winter periods. In such temporal dynamics, these whole adaptive behaviors could be considered as indicators of optimal relationships with the environment. This means that the team-members have chosen their best positions within the social group, taking into account the group characteristics (gender, culture) in such long exposure to isolation and confinement.

In the North Pole

On the Arctic Ocean, in summer when the daylight predominates (from April to September), the warmest temperature can reach up to + 9 degrees Celsius and the ice melts. Then, in winter during the polar night (from October to March), the coldest temperature can reach – 41 degrees Celsius and the ice-pack forms. This polar environment has entered a period of profound and rapid change. The Tara expedition was adrift during 507 days across the moving sea ices. This "journey on the heart of the climatic machine" is a unique international scientific program (Damocles mission) for data acquisition in glaciology, oceanography and climatology. The polar schooner was embedded in the ice from North-Eastern latitude (79°53'N-143°17'E), crosses 5,200 kilometers and was released from the ice at North-Western latitude (74°08'N-10°04'W). The team on board the Tara experienced 230 days of permanent light and 230 days of complete night.

Ethological data were collected over one summer period then one winter period and focused on the successive ten crew-members, in the wardroom, during dinner-time. The summer crew was composed of 2 women (French) and 8 men (five French, one New Zealander, one Estonian, one Norwegian) with an average age of 30 years. The winter crew (3 members being replaced) was composed of 3 women (two French, one American) and 7 men (four French, one New Zealander, one Russian, one Norwegian) with an average age of 37 years. The same physician who was in Concordia mission made the weekly observations. The observations made followed the same protocol on the positions around the table and on the durations of the meals. They were completed with video recordings of the meals for later processing on postural changes, facial expressions, and non-verbal communications. The ethological results showed adaptive strategies according to the drifting periods. A first spatial analysis revealed a *diversity of position* within the crew without strong *place preferences* in order to vary the social context next to the crew-members, thus optimizing the confined space. A first temporal analysis would underlie an irregularity of the *collective times* in order to break the daily rhythm, thus preventing the monotony of social life. A comparative analysis of the average *meal duration* between the summer crew (in permanent day) and the winter crew (in permanent night) would highlight a slight decrease in the collective time during the polar night. The behavioral strategy could be

to adapt the time to the unlighted living and working space, sliding to individual activities.

In both situations, the results issue from case studies because each paradigm is unusual and based on a small size population. Nevertheless, they support the general hypothesis of the adaptive behavioral strategies in a positive way as both Concordia mission and Tara expedition were achieved with success. This highlights the functionality of groups referring to the concept of adaptation defined in ethology.

The perspectives of such ethological investigations at the Poles are, on one hand, to better understand human adaptation by addressing a quantitative description of the observed behaviors, complementary to environmental psychology, social psychology, and anthropology, in order to improve the comfort of polar teams. On the other hand, the new objectives are to go further in space and time by preparing for future interplanetary missions. A journey towards Mars would be of over 500 days in duration, with a 250-day Earth-Mars flight, a 30-day Mars surface operation, and a 240-day Mars-Earth return flight. The Mars team would be international and mixed-gender and would include less than 10 astronauts. The environmental conditions are more and more extreme as human exploration of the solar system is growing. As a result, the adaptation of individual and social behavior is of prime importance, with several unusual physical factors (radiation, short alternation of day/night, delayed communications) operating in synergy with physiological factors (weightlessness [lack of gravity force], sensorial deprivation [vestibular cues, proprioceptive cues]), and psychological factors (isolation, confinement, monotony, and danger). Human Ethology deals with the interfaces between these factors and brings useful data, in terms of predictive indicators on human factors from South Pole to North Pole, on our planet today and as scenarios of stays on the other planets tomorrow.

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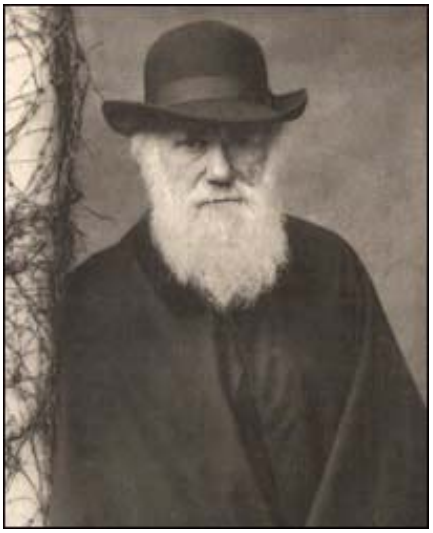
Acknowledgment: These studies were supported by the Institut Polaire Paul Emile Victor (IPEV), the Centre National d'Etudes Spatiales (CNES), the European Space Agency (ESA) and Tara expeditions. Dr. Minh-Ly Pham Minh made the observations at the South Pole and at the North Pole.

Charles Darwin Bicentenary



"I thank you sincerely for all your most kind words & good wishes on my birth-day. My health has been better of late, & I am able to do every day what I consider a fair amount of work, but what you would consider a mere trifle."

Letter from Ch. Darwin to Ernst Haeckel (12 Feb. 1878)

As most readers of this publication are sure to know, 2009 marks the 200th anniversary of the birth (12 February 1809) of Charles Darwin. It is also the 150th anniversary of the publication of his major work, ***On the Origin of Species***. Literally hundreds of events worldwide will mark this anniversary. More than 300 are scheduled in Britain alone. An extensive list of events is posted at http://darwin-online.org.uk/2009.html.

One of the most impressive and ambitious of the festivities is the Darwin 2009 Anniversary Festival [http://www.darwin2009.cam.ac.uk/] to be held this July at the University of Cambridge (England), where Darwin was a student. ISHE is sponsoring a talk by (ISHE member) **Sarah Hrdy** at this event. At least one other ISHE member, **Randolph Nesse**, also will be a speaker.

Other events related to the Darwin anniversaries include exhibitions, art works, films and television programs, new postal stamps, special issues of journals (e.g., ***American Journal of Botany***, 2009, **96**, issue #1; ***Nature*** [http://www.nature.com/news/specials/darwin/index.html], new and reissued books [e.g., www.cambridge.org/ExploreDarwin], and the development of on-line resources with material by and about Darwin. Springer has a dedicated website [springer.com/darwin2009] featuring free access during to the 2009 articles in *Evolution: Education and Outreach* and to a good number of other articles from as far back as 1925. Australia is issuing a special commemorative silver coin. One can even buy commemorative playing cards! More importantly, Charles Darwin's home and neighborhood at Downe, in Bromley, is receiving the UK's World Heritage Property nomination bid for 2009. This property is the area where Charles Darwin lived and worked from 1842 till his death in 1882, and where he wrote *Origin of Species* (1859). The website devoted to this property is http://www.darwinatdowne.co.uk/.

This is an opportune time to remind readers that the complete works of Charles Darwin are available online at http://darwin-online.org.uk/Introduction.html. This site contains over 76,000 pages of searchable text, including a substantial volume of materials that have never been published, such as the diaries of his wife Emma. His own dairies offer an abundance of insights into Darwin and his meticulous, analytical approach to nature; an approach extended to his own life as revealed, for instance, by his listing of the pros and cons of getting married. This amazing site has over 184,000 images, and translations of various works into several

languages, including Danish, Dutch, French, German, Italian, Norwegian, Russian and Spanish. The site even provides free audio MP3 files of some texts, including Darwin's *Beagle Diary*, *The Descent of Man*, *The Expression of Emotions*, and his *Autobiography*. Unfortunately, only the *Beagle Diary* is read by an actual human, with the others produced by text-to-speech software. This computer speech is better than I expected and should be much appreciated by some visually impaired scholars.

The Darwin Correspondence Project supports a companion web site [http://www.darwinproject.ac.uk/] that holds the full text of more than 5000 of Darwin's letters together with additional information on Darwin and his correspondence. It is scheduled for a relaunch later this year to celebrate the Darwin Bicentenary. The project has managed to locate a total of around 14,500 letters exchanged by Darwin and about 2000 correspondents between 1821 and his death in 1882. The Project continues to search for, and find, more in both libraries and private collections.

Darwinian theory remains controversial 127 years after his death. While progress in evolutionary biology has been exponential, acceptance of evolution in society as a whole has advanced at a snail's pace. Here in the U.S. we no longer put teachers on trial for teaching evolution, as in the famous 1927 "Scopes Monkey Trial" (biology teacher John Scopes lost and was fined) [http://www.law.umkc.edu/faculty/projects/ftrials/scopes/scopes.htm]. But battles continue to rage over whether creationism, usually thinly veiled in recent years as "intelligent design" or "creation science", can or must be taught alongside evolution; or whether biology textbooks incorporating standard evolutionary theory should have warning labels applied, or whether teachers could or must issue disclaimers whenever they teach about evolution. As recently as 1987, when the U.S. Supreme Court ruled it unconstitutional, Louisiana's "Creationism Act" prohibited the teaching of evolution in public schools except when accompanied by instruction in "creation science." Outside the U.S., education has also been a battleground, as in Serbia where an order to ban the theory of evolution from schools was issued in 2004 but quickly retracted. More recently, in Poland the deputy education minister declared in 2006 that evolution was a "lie" and initiated a debate on teaching Darwin's theory of evolution in Poland's schools. Skirmishes over evolution and creationism still occur even in Darwin's own country [http://news.bbc.co.uk/2/hi/uk_news/education/1896164.stm]. Those of us in academia may rarely encounter resistance to the theory of evolution but we should remain vigilant and aware that the controversy remains alive even within academia.

ISHE and the *Human Ethology Bulletin* are, of course, very "Darwin friendly". Every issue bears his imprint, and "Darwin" or "Darwinian" appears in most or all issues. Nonetheless, 2009 would be a particularly suitable year to reflect on Darwin and his impact in the pages of this quarterly publication. Any readers with good ideas along these lines are encouraged to contact the Editor.

Thomas R. Alley, Editor

ISHE Yahoo Human Ethology Group

Dear ISHE members:

We have just passed the 2nd year anniversary of the ISHE Yahoo Human Ethology Group. The

group now (16 Feb.) has 232 members. About 1/4 of the members have made at least one posting to the group. The rest are just readers (lurkers). If you have any suggestions for making the group better, please either post them to the group or contact me personally at jfeierman@comcast.net. If any of you know people who you think would enjoy the group, please send them the link for the home page: tech.groups.yahoo.com/group/human-ethology/

We are now averaging about 20 to 30 postings a day. That seems about right, especially for people who get the group as individual e-mails. The Search function on the group's home page is a data base for any type of search for a topic in human ethology. One of the most valuable uses of the group is to get comments on drafts of publications prior to submission. The group is set up in such a way that the draft is not accessible by web crawlers, such as Google. Only group members can have access to the draft. In addition, the draft can be removed after the comments have been received. At times the comments on a draft become posts to the group. They are a good source of pre-publication informal peer review. Another valuable use of the group is to get feedback and input on new ideas that are not quite ready for publication. There are members of the group who come from different disciplines – such as evolutionary psychology, animal ethology, anthropology, and Skinnerian behaviorism – which at times makes for some very lively debates in terms of how to study and understand human behavior. I encourage ISHE members who are not members of the group to join. You can get all the daily postings in a single folder or get them as individual e-mails or just access them through the web on the home page. The group is not restricted to ISHE members. Hopefully, it is a recruiting tool for ISHE. However, its value as a recruiting tool is only as good as the contributions by ISHE members make it.

Jay R. Feierman, Moderator
ISHE Yahoo Human Ethology Group

2009 Summer Institute in Human Ethology

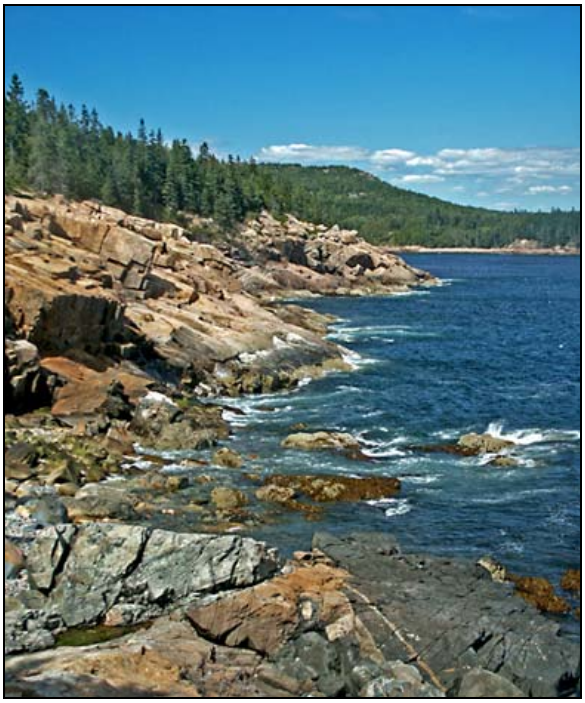
An ISHE sponsored **Summer Institute in Human Ethology** will be hosted by the University of Maine at Orono on July 5-9, 2009. ISHE Summer Institutes are designed for advanced graduate students and researchers around a few important themes derived from emerging research trends in the field of human ethology, broadly conceived as the study of human adaptation and behavior from an evolutionary perspective. The timing is immediately before the meeting of the **Northeastern Evolutionary Psychology Society (NEEPS)** [9-12 July 2009 – State University of New York at Oswego – http://neepsociety.org/] for those who might want to attend both meetings.

Submission Deadline Extended to March 18
See www.ISHE.org or the previous issue for detailed instructions

The ISHE 2009 Summer Institute will include 3 plenary addresses (90 min each), 7 workshops (60 min each), approximately 20 to 30 oral presentations (20 min each) as well as poster presentations and film sessions.

Lucerne Inn: the banquet venue.

We will be meeting in Wells Commons, the recently renovated state-of-the-art conference facility on the Univ. of Maine campus, with restaurants and lodging nearby. We have planned a banquet at a scenic Maine inn (see photo above) and a fieldtrip to Bar Harbor and picturesque Acadia National Park, about an hour's drive from the University. Both items are listed as options on the Registration Form. The Acadia Tour will depart from Orono in small vans for in order to provide a more pleasant driving tour, with stops for hiking and sightseeing, including Otter Cliff (see photo below). We will finish the day at a seaside restaurant with a full menu, including Maine lobster. See schedule (next page) for dates and times.



Otter Cliff in Acadia National Park

Plenary Addresses

David Geary (University of Missouri, USA) – ***The Origin of Mind: Evolution of Brain, Cognition, and General Intelligence***

Kevin MacDonald (California State University: Long Beach, USA) – ***Effortful Control, Explicit Processing and the Regulation of Human Evolved Predispositions***

Daniel Povinelli (Cognitive Evolution Group, University of Louisiana - New Iberia, USA) – ***Humanizing the Human Mind***

Workshops

Karl Grammer (Ludwig-Boltzmann-Institute for Urban Ethology, Vienna, Austria) – *Reverse engineering: A new approach to behavior analysis*

Daniel Kruger (University of Michigan, USA) – *Understanding Statistics with Tinbergen's Four Questions*

Peter LaFreniere (University of Maine - Orono, USA) – *Evolutionary Developmental Psychology*

Elisabeth Oberzaucher (Ludwig-Boltzmann-Institute for Urban Ethology, Vienna, Austria) – *Observational Methods in Research on Emotional Expressions*

John Richer (Paediatric Psychology, John Radcliffe Hospital , Oxford, UK) – *Diagnostic schemes in child psychiatry, where they help and where they hinder, and ethologically based alternatives for describing problems in children's behaviour and development*

Wulf Schiefenhövel (Human Ethology Group, Max-Planck-Institute, Andechs, Germany) – *Fieldwork Methods in Crosscultural Human Ethology*

Glenn Weisfeld (Wayne State University, USA) – *Ethological perspectives on the basic emotion of pride and shame*

Transportation to Orono:

We recommend flying into one of these airports (driving times to university):

Bangor [BGR] - (15 min.)
Portland [PWM] - (2.5 hrs.)
Boston Logan [BOS] - (5 hrs.)
Montreal – (6.5 hrs.)

Lodging

A Housing Registration Form can be found below (p. 21) and will be posted on our website soon. Rates and fees are shown on this form. Campus housing fees are the same for faculty and students. Students who are presenting a talk or poster or a co-author may request partial reimbursement of on-campus housing costs if needed by completing a form that will be provided at the meeting.

Two **campus lodging facilities** are available, both located within a short walk to the conference site.

Doris Twitchell Allen Village at UMaine

Doris Twitchell Allen Village:
www.umaine.edu/conferences/meetingspacegallery/DTAV/DTAV.htm

Patch Hall:
www.umaine.edu/conferences/meetingspacegallery/Patch%20Hall/Patch.htm

Off campus housing is also available at two nearby inns:

Best Western Black Bear Inn/Conference Center
4 Godfrey Road, Orono, ME 04473
1-207-866-7120 or 1-800-528-1234
Fax: 1-207-866-7433
www.bestwestern.com

University Inn Academic Suites
5 College Avenue, Orono, ME 04473
1-207-866-4921 or 1-800-321-4921
Fax: 207-866-4550
www.universitymotorinn.com

The University Inn is a pleasant walk (less than one mile) to Wells Commons, the conference site. The Black Bear Inn is a short drive away.

Recommended web links for those wishing to tour Maine before or after the meetings:

http://www.barharborinfo.com/
http://www.acadiamagic.com/
http://www.mainevisitorsnetwork.com/
http://www.vacationcottages.com/
http://www.mainevacationrentalsonline.com/
http://www.BlueHillpeninsula.org

Conference Registration will open on March 15, 2009. A list of fees, showing a discount for registration prior to June 1, and a Registration Form are printed on the following page.

Schedule of Activities (The full program will be posted on-line and available in the June *Bulletin*)

7/5	Sun	3-5	Officer's Meeting #1
		5-7	Opening Reception, Registration
7/6	Mon	8-10	Registration
		10-12; 1-4	Paper Sessions
		4-6	Poster Session
7/7	Tue	9-12; 1-4	Paper Sessions
		4-6	Kayak Tour, Stillwater River
		6-8	Officer's Meeting #2 (dinner)
7/8	Wed	9-12; 1-4	Paper Sessions
		6-9	Banquet at the Lucerne Inn
7/9	Thu	9-12	Paper Sessions
		1-5	Bar Harbor & Acadia Tour
		5-7	Dinner at Seaside Lobster Pound

REMINDER: **The deadline for abstract submission has been extended to March 18, 2009**. Please check the ISHE web site [www.ishe.org] for the latest 2009 ISHE Institute updates.

-Peter LaFreniere, Institute Organizer
peter.lafreniere@umit.maine.edu

Registration Form

Summer Institute of the International Society for Human Ethology

University of Maine -- July 5-9, 2009

Registration fees:	**Faculty**	**Student**
Registration (before June 1)	**$125**	**Free**
Registration (after June 1)	**$150**	**$25**
Banquet (optional)	**$50**	**$25**
Bar Harbor/Acadia Trip (optional)	**$50**	**$25**

Name (last, first) ……..

Organization ……..

Postal address ……..

……..

……..

E-mail address: ……..

Registration fee: ……

Banquet (Wed, July 8th) ……

Acadia Tour (Thurs July 9th) ……

Total amount due ……

Payment by credit card (VISA or Eurocard or Mastercard) is preferred:
Type of credit card: ……..

Credit card number: ……..

Expiration date: ……..

Amount (U.S.) $ ……

Signature: ……..

If you prefer to pay by check, please make your check out to ISHE and send it together with a completed Registration Form to Dori LeCroy at the address below.

Send payment and completed form to: Dori LeCroy, ISHE Treasurer,
175 King Street,
Charleston, SC 29401 USA
Fax: (1) 843-577-9645

CAMPUS HOUSING REGISTRATION FORM

2009 ISHE Summer Institute – University of Maine – July 5-9, 2009

Last Name: _____ First Name: _____

Home Address: _____

City: _____ State: _____ Zip Code: _____

Home Phone: _____ Work Phone: _____

Fax: _____ E-Mail: _____

Special accommodations required for lodging: _____

Campus lodging available Saturday, 7/4 through Thurs., 7/9. Sheets, towels, pillows and blankets provided.

Saturday night 7/4 Single Room	$54.40	_____
Saturday night 7/4 Double Room (per person)	$35.35	_____
Sunday night 7/5 Single Room	$54.40	_____
Sunday night 7/5 Double Room (per person)	$35.35	_____
Monday night 7/6 Single Room	$54.40	_____
Monday night 7/6 Double Room (per person)	$35.35	_____
Tuesday night 7/7 Single Room	$54.40	_____
Tuesday night 7/7 Double Room (per person)	$35.35	_____
Wednesday night 7/8 Single Room	$54.40	_____
Wednesday night 7/8 Double Room (per person)	$35.35	_____
Thursday night 7/9 Single Room	$54.40	_____
Thursday night 7/9 Double Room (per person)	$35.35	_____
Lodging processing fee	$15.00	$15
Total due for lodging	**$**	_____

Late Fee: A late fee of $25.00 will be assessed to all registrations received **after June 15, 2009**

I would like to room with (*enter name*) _____

Please assign me a roommate: _____

Payment Information

____ **Check** enclosed (please make checks payable to: The University of Maine) Check # _____

Charge to: _____ Visa _____ Master Card

Card Number : _____

Expiration Date:_____ Signature: _____

Please send completed housing form and payment to:

University of Maine - Conference Services Division
2009 Maine Summer Institute in Human Ethology
5713 Chadbourne Hall
Orono, ME 04469-5713
Tel (207) 581-4094, Fax: (207) 581-4097

Email: csd@umit.maine.edu **Visit Conference Services Division Website:** www.umaine.edu/conferences

ISHE 2008 FINANCIAL SUMMARY

Dori LeCroy – ISHE Treasurer

INCOME

FUNDS FROM TIAA-CREF	107,000.00
MEMBERSHIP DUES	355.00
TOTAL	**$ 107,355.00**

EXPENSES

BULLETIN PRINTING/POSTAGE	7,393.08
EDITOR'S COMPENSATION	5,000.00
BOLOGNA CONFERENCE	37,357.47
BOT/OFFICER'S TRAVEL	16,008.39
SIBERIAN SUMMER SCHOOL	4,020.00
CONTRIBUTION	2,000.00
BANK CHARGES	1,219.41
TREASURER'S EXPENSES	845.00
BOT/OFFICERS' EXPENSES	270.19
MEALEY AWARDS	6,089.85
ALDIS AWARDS	24,000.00
POSTER AWARDS	1,000.00
AWARDEE TRAVEL	6,500.00
TOTAL	**$ 111,703.39**

ISHE Projected 2009 Budget

Based on the expenses in 2008, an estimate of four 2009 Aldis Awards, and on projected Summer Institute costs, Treasurer Dori LeCroy projects ISHE costs for 2009 as follows:

2009 SUMMER SCHOOL	$16,700
BULLETIN	$13,000
2008 Mealey Awards	$4,000
2009 Aldis Awards	$32,000
TREASURER'S EXPENSES	$850
other OFFICER & TRUSTEE EXPENSES	$600
BANK FEES	$600
TOTAL	**$68,150**

Call for Nominations

All current ISHE members are invited to submit nominations for the following positions:

Vice-President/President Elect
Trustee – 4 year term

The **Vice-President/President Elect** shall serve as Vice-President prior to assuming a 4-year term as ISHE President.
"The Vice President is responsible for seeking invitations for the annual meetings and for the quality of its scientific program. He or she may delegate such responsibilities in whole or in part to a conference host and/or program committee. The Vice President shall substitute for the President when necessary."
(ISHE Constitution, Article 6; Sect. 4).

"The President represents the Society in official matters, acts as its speaker, and initiates and coordinates the activities of the Society. He or she presides at the Board Meeting and the General Assembly. She or he answers any requests or complaints and brings these to the attention of the Board of Officers"
(ISHE Constitution, Article 6; Sect. 3).

Members of **Board of Trustees** "(a) ensure that the activities of the Society are consistent with its purposes; (b) ensure the proper administration of the Society's finances; and (c) provide general oversight of the administration of the Society"
(ISHE Constitution, Article 19; Sect. 1).

Nominees must be full ISHE members. Self nominations are permitted. Send nominations to the *Chair of the Nominations and Elections Committee*, Astrid Juette at astrid.juette@kli.ac.at or using the postal address printed on the last page of this issue.

Deadline for receipt of nominations: **30 June 2009**

ANNOUNCEMENTS

HEB to be Transformed into an On-Line Journal?

As previously announced, the *Bulletin* staff and ISHE officers are considering transforming the *Human Ethology Bulletin* into **an on-line publication with additional content consisting of peer-reviewed articles**. At this time, no final decisions have been made and the input and advice of members is being sought. The benefits foreseen include [1] establishing a new publication outlet for research and theory on human ethology, [2] increasing the availability, subscriber base, and global impact of the *Bulletin* and, probably, [3] a reduction in costs for ISHE. In any case, we plan to maintain *HEB* as a quarterly publication and retain the existing content (e.g., book reviews and announcement of new books and papers). It is hoped that we also will retain the ability for members to create a printed copy of each issue by simply printing an electronic (probably PDF) document.

Members are encouraged to submit any questions, comments, advice or suggestions they may have on this matter. The Editor would like to hear suggestions about **potential vendors (hosts) for on-line publication.** All responses from members can be sent to the *Bulletin* Editor at Alley@Clemson.edu.

ISHE members seeking graduate students or postdoctoral appointees are invited to submit material to inform and attract potential applicants for inclusion on the ISHE web site. Research interests, recent publications, etc. may be included, along with links to the person's department and personal or lab web pages. Such material can be sent to the ISHE Webmaster, Karl Grammer (see back cover).

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www.ISHE.org

Information on the 2009 ISHE Summer Institute is being updated regularly. There's a link to this information on the home page.

More past issues of ISHE *Newsletters* and *Bulletins* have been posted on the ISHE website. At this time almost all issues from 1992 – 2007 are posted, as well as 1987 – 1988. These **searchable** issues are in PDF format and can be found at:

http://evolution.anthro.univie.ac.at/ishe/about%20us/bulletin%20contents/index.html

The ISHE website has recently undergone some minor redesign, making it easier to find the archived issues from the home page.

Electronic Subscriptions

Would you like to receive the *Bulletin* sooner? … up to 4 weeks sooner**!** Wish you had an electronic version to allow easier searching of the *Bulletin*'s contents and easier filing of back issues? Want to see full color, higher resolution photographs in the *Bulletin*? … You can easily make these wishes come true by requesting an electronic (PDF) subscription. Switching to an electronic version will get you the *Bulletin* faster and with

full color photographs and working URLs. You can also feel good about this choice because an electronic subscription reduces the environmental impact of the *Bulletin* and saves ISHE the funds required for printing and mailing.

To request an electronic copy in place of the printed version, members should simply send their full name and e-mail address to the Membership Chair (astrid.juette@kli.ac.at). The default for new and renewed *Bulletin* subscriptions is now an electronic subscription, although members who pay dues can still receive the printed version by requesting it at the time of renewal. At present, members now receiving the *Bulletin* in printed form will continue to do so until they renew or request otherwise.

The **National Evolutionary Synthesis Center** (**NESCent**) is now accepting proposals for sabbatical scholars, working groups and catalysis meetings. Proposals for postdoctoral fellowships are accepted at the December 1 deadline only. Proposals for sabbatical scholars (one semester to a full year), working groups and catalysis meetings are accepted twice a year, with June 15 and December 1 deadlines. Proposals for short-term visitors (2 weeks to 3 months) are considered four times a year, with deadlines on January 1, April 1, July 1 and September 1. For more information, please see our website at https://www.nescent.org/science/proposals.php.

Transaction Publishers will issue a series of books on ***ANTHROPOLOGY AND HUMAN NATURE***. Prof. **Lionel Tiger** is the Series Editor and will be happy to respond to queries about the series or specific potential projects. He can be reached at ltiger@anthropology.rutgers.edu.

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FORTHCOMING in the *Human Ethology Bulletin*

Book Reviews

- ***IQ and Global Inequality*** (Oxford University Press, 2007) by **Richard Lynn Tatu Vanhanen,** and ***A Farewell to Alms: A Brief Economic History of the World*** (Princeton University Press, 2007) by **Gregory Clark** – reviewed by **Aurelio José Figueredo**
- ***The Bonobos: Behavior, Ecology, and Conservation*** (Springer, 2008) by **Takeshi Furuichi** and **Jo Thompson** (Eds.) – reviewed by **Wm. C. McGrew**
- ***The Evolution of Morality*** (MIT Press, 2007) by **Richard Joyce** – reviewed by **Pouwel Slurink**
- ***The Ten Thousand Year Explosion: How Civilization Accelerated Human Evolution*** (Basic, 2009) by **Gregory Cochran and Henry Harpending**– reviewed by **Aurelio José Figueredo**

The **Bass Harbor Head Light:** a lighthouse located at the mouth of Bass Harbor within Acadia National Park, Maine. Although the house is a private residence, visitors can take a short walk to a series of wooden steps that lead down onto the granite boulders that provide a great view of the harbor side of the lighthouse.

(photo courtesy Brett Cohen)

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Compiled by Johan van der Dennen

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Darwin's Reach: Celebrating Darwin's Legacy Across the Disciplines
12-14 March, 2009 – Hofstra University (USA)
http://www.hofstra.edu/Community/culctr/culctr_events_darwin.html

[Numerous other events in honor of Darwin's anniversary occur during 2009 (see article in this issue). An extensive list of events is provided at: http://darwin-online.org.uk/2009.html]

European Human Behaviour and Evolution Association (EHBE)
6-8 April 2009 – University of St Andrews
Abstract submission deadline: 31 December 2008
http://biology.st-andrews.ac.uk/ehbe2009/

Society for Biological Psychiatry
14-16 May 2009 – Vancouver, Canada
http://www.sobp.org

Association for Psychological Science (APS)
22-25 May 2009 – San Francisco, California
http://www.psychologicalscience.org/convention/schedule.cfm

ISHE Summer Institute in Human Ethology
5-9 July 2009 – University of Maine, Orono (USA)
www.ISHE.org *(and see article in this issue)*

Northeastern Evolutionary Psychology Society (NEEPS)
9-12 July 2009 – State University of New York at Oswego (USA)
http://neepsociety.org/

Keynote speakers: **Helen Fisher** (Rutgers University) and **Satoshi Kanazawa** (London School of Economics and Political Science).

Contacts: Conference Host: Rebecca Burch (rburch@oswego.edu)
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American Psychological Association (APA)
6-9 August 2009 – Toronto, Ontario, Canada
12-15(?) August 2010 – San Diego, California
www.apa.org/convention09/

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President
Glenn Weisfeld
Wayne State University
Dept. of Psychology, Detroit, MI 48202 USA
Tel: 1-313-577-2835
Fax: 1-313-577-7636
E-mail: weisfeld@sun.science.wayne.edu

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Membership Chair
Astrid Juette
Konrad Lorenz Institute
Adolf Lorenz Gasse 2
A-3422 Altenberg, Austria
E-mail: astrid.juette@kli.ac.at

Treasurer
Dori LeCroy
175 King St., Charleston, SC 29401 USA
Fax: 1-843-577-9645
E-mail: DoriLeCroy@aol.com

Webmaster
Karl Grammer
Ludwig-Boltzmann-Institute for Urban Ethology/Human Biology
Althanstrasse 14, A-1090 Vienna, Austria
Tel. 49-815237355
E-mail: karl.grammer@univie.ac.at

From: Thomas R. Alley, Editor
Department of Psychology
418 Brackett Hall
Clemson University
Clemson, SC 29634-1355 U.S.A.