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First Annual Moscow Summer School a Success!



The First Annual Moscow Summer School was held in Zvenigorod from June 19 to 26, 2001. Organized by ISHE members, Marina Butovskaya and Frank Salter, this year's conference addressed a wide range of research issues dealing with the theme: "Evolution, Behaviour and Society" with a special emphasis Human Ethology. Faculty from many on different countries representing a wide variety of scientific disciplines, including primatology, anthropology, sociology, behavioral genetics, developmental psychology, and human ethology

provided background lectures and cutting edge research presentations on topics dealing with fundamental questions of human evolution and The audience of lecturers and adaptation. students was treated to a number of outstanding talks, with plenty of time for films and discussions, including an impromptu panel on violence, its causes and strategies to contain or prevent it, a highly animated slide lecture on cross-cultural aspects of pregnancy and birth, and a multi-media display of a Darwinian analysis of aesthetics and human beauty. The week long meetings in Zvenigorod, a woodland retreat on the Moscow river, also provided an ideal venue for relaxed exchanges between Russian faculty and students and Western visitors.

Our Russian host, Marina Butovskaya, of the Institute of Ethnology and Anthropology, Russian Academy of Sciences, and the Center of Cultural Anthropology Russian State University for the Humanities in Moscow, directed an army of efficient students in providing all manner of assistance to their guests, including organized tours of the Kremlin and several monasteries near Zvenigorod ("City of Bells"). The conference was made possible by the enterprising efforts of ISHE Secretary, Frank Salter of the Max Planck Society, Andechs, Germany; and Human Sciences Centre, Ludwig Maximiliens University, Munich. Together, Frank and Marina made an outstanding team and are now busy planning a second conference. A complete list of speakers and topics for the first of what promises to be an interesting series is provided on pages 11-14, along with photos from the conference and tours.

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We are seeking one additional international scholar for help organizing and editing reviews Those interested in this position should send their CV and current research interests to the editor or book review editor.

BOOK REVIEWS

Jacobson's Organ and the Remarkable Nature of Smell

By Lyall Watson. Penguin Press, 1999, and Penguin Books Canada Ltd., 2000, US \$14.00; \$18.99 CAD, xi + 255 p., ISBN 0452282586.

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

Olfactory influences are an eminently suitable topic for ethological analysis. They are largely unconscious, and so tend to be ignored by mainstream experimental psychology. They are understood by appreciating best their phylogenesis and physiology, levels of analysis that are sometimes neglected by evolutionary They also seem to have psychologists. interesting developmental aspects such as sensitive periods. These mysterious but phenomena fascinating olfactory are competently described in this lively work by a biologist and science writer, Lyall Watson.

Watson begins by tracing the phylogenesis of olfaction. Many crustaceans sense amino acids using receptor cells on the legs. If these invertebrates had specialized receptors for amino acids, it is plausible that advanced mammals such as humans possess evolved preferences for essential amino acids. The hagfish has a single opening above the mouth leading to paired chambers where odors are isolated for identification ó the first nose. In migratory fish such as the salmon, paired nostrils conduct olfactory information to separate olfactory bulbs for stereo analysis and improved localization. Toads have a bicameral nose. Just inside each nostril is a valve for directing airborne and waterborne odors to separate chambers for analysis. When the toad is on land, it senses volatile air-borne odors; when in the water, dissolved and heavier molecules are detected. Aquatic turtles have stuck with this amphibian arrangement.

The noses of some amphibians contain sensory cells of a new type. In terrestrial reptiles such as some tortoises, lizards and snakes, these cells are concentrated in separate chambers of their own. This is Jacobson's (vomeronasal) organ of the accessory olfactory system. In garter snakes Jacobson's organ is essential for locating prey; the main olfactory system seems to have little function. By contrast, crocodiles are aquatic and terrestrial, and rely on both olfactory systems. Arboreal reptiles such as tree snakes and lizards have direct contact with few socially meaningful odors, and so have no Jacobson's organ. The same seems to be true of birds. However, many birds, especially carrion eaters, have a good sense of smell, mediated by the main olfactory system and used for identifying food and toxins.

Mammals have an extensive olfactory epithelium and hence an excellent sense of smell, but seem to rely on Jacobson's organ for detecting pheromones. Newborn mammals are guided to their mother's nipples and milk by Jacobson's organ. Mammalian mothers and their young identify each other by olfaction as well as other senses. Ungulates direct inspired air toward Jacobson's organ during flehmen, a flaring of the nostrils, so as to test females for impending ovulation. Most mammalian pheromonal phenomena seem to depend upon Jacobson's organ, including the Coolidge, Whitten, Lee-Boot, and Vandenbergh effects and territorial scent marking.

Watson maintains that the main olfactory system is a generalist, whereas Jacobson's organ detects social information about gender, maturity, and reproductive status. Jacobson's organ is located near the nostril where it can detect heavy, less volatile molecules such as pheromones. This accessory olfactory system sends information via a branch of the trigeminal nerve (the vomeronasal nerve) through the accessory olfactory bulb directly to the amygdala and hypothalamus. Steroids from human skin attach to Jacobson's organ, which then stimulates the limbic system.

The main olfactory system routes information from the olfactory epithelium, which detects volatile chemicals arising through the nasal cavity, to the olfactory nerves to the olfactory bulb to the cortex en route to the limbic system.

permits cortical claims, This, Watson modification of motivated responses, and accounts for the conscious nature of the main olfactory system as contrasted with the largely Actually, the unconscious accessory system. main olfactory system leads first to the prepiriform cortex, a limbic structure. From there signals go to neocortical areas of the orbitofrontal cortex and then to the amygdala (Gloor, 1997).

Watson emphasizes the vital importance of olfaction. Feral children have relied heavily on their sense of smell, perhaps in lieu of verbal labels for sensory stimuli. Anosmics have a high suicide rate and are prone to accidents from failure to detect smoke, putrefaction, and other Watson speculates that without hazards. Jacobson's organ puberty could be delayed, since removal of the olfactory bulbs leads to atrophy of internal genital structures in male and female mice. In fact, this is Kallman's syndrome, characterized by anosmia and failure of pubertal development, and incomplete development of the olfactory bulb. However, the accessory olfactory system may actually be involved (Gloor, 1997).

Olfaction is important esthetically. Our ability to identify familiar scents verbally is generally poor, but task performance and mood are affected by exposure to particular scents, few of which are affectively neutral. Many common varieties of incense derive from a handful of resins bearing chemical similarity to natural steroidal sexual attractants. Women who were exposed to the scent of truffles, which resembles that of men's armpits, rated photos of men as more attractive. Women are drawn to such odors and, after exposure to them, are more proceptive and receptive to men. Hair color is associated with producing certain odors and preferring others. However, Watson fails to note that vaginal copulines released around ovulation can raise men's testosterone level (Grammer, 1996).

The book describes the literature on kin recognition in humans. Identification through olfaction is facilitated by genetic relatedness, not just familiarity. Subjects have been able to match mothers with their children but not husbands with their wives. However, Watson fails to explain the importance of kin recognition for kin altruism, and also neglects assortative mating and how it is apparently abetted by olfactory cues.

The adaptive interpretations offered are usually sound. The main male skin pheromone is consciously perceived by both sexes, but the female one is not: consistent, Watson notes, with the common female advantage in concealing her sexual status and inclinations. A baby's hair contains an endorphin that raises others' blood levels of oxytocin, a social bonding hormone. Watson argues that our large cortex probably compensates for humans' relatively low number of olfactory cells for odor interpretation. So olfaction, although largely unconscious, is probably very important for our ineffable sensory preferences as well as our social behavior. Unfortunately, Watson invokes a Freudian explanation for our lesser aversion for our own feces than for others'; obviously, others' excreta are more dangerous since we have already been exposed to our own pathogens.

Jacobson's Organ is easy to read, except for some incomplete sentences and imprecise patches. It is illustrated with prints of botanical woodcuts, but would have benefited from anatomical drawings of the olfactory pathways. Classical and literary references are offered for the reader's delectation. The book provides a tantalizing introduction to this neglected but already significant field of research.

References

Gloor, P. (1997). The Temporal Lobe and Limbic System. New York: Oxford University Press.

Grammer, K. (1996, June). The human mating game: the battle of the sexes and the war of signals. Paper presented at the Human Behavior and Evolution Society meeting,

Recently overheard at the Moscow lectures:

"Can someone please turn on the lights, so that I do not have to speak into the darkness." - I. Eibl-Eibesfeldt

(Ed.: Was Eibl requesting that an assistant turn the lights back on while technicians adjusted the video, or was he summing up his lifelong mission to inform behavioral scientists as to the vital importance of human ethology?)

Genes, Peoples, and Languages

by L. L. Cavalli-Sforza. New York: North Point Press, 2000. 228p. ISBN: 0-86547-529-6 [Hdbk: \$24.00]

Reviewed by W.C. McGrew, Anthropology and Zoology, Miami University, Oxford, OH 45056, U.S.A. Email: mcgrewwc@muohio.edu

It is rare these days to find a polymath, but Luigi Luca Cavalli-Sforza may well be one. The Italian geneticist and emeritus professor at Stanford University is much more than a populational and molecular student of genes (even though few people are both). He is also an ethnographer (of central African pygmies), a phylogenetic modeler, a cultural theorist, a student of prehistoric agriculture, and an evolutionary linguist. (This makes it hard for a mere mortal to review his synthetic book). Genes, Peoples & Languages ties together all of these strands, but is mostly an update and popularization of his monumental, The History and Geography of Human Genes (Princeton University Press, 1994, co-authored with P. Menozzi and A. Piazza). At 78 years of age, Cavalli-Sforza also frames the material with autobiography, so that it is less a survey of current knowledge and more of a summary of a scientific life that has touched many bases.

In his preface, Cavalli-Sforza calls it a history drawn from three disciplines – archaeology, genetics and linguistics – but socio-cultural and biological anthropology also make major contributions. All are tied together by neo-Darwinian evolutionary theory, and the key phenomenon is dispersal (sometimes called migration or diaspora), which here means the movement and consequent distribution in space and time of gene-bearing, speaking and cultural organisms. (Of which there is only one example, <u>Homo sapiens</u>, he says.)

To understand this fully means crosscutting from the archaeological record of past cultural achievements, especially technological innovation and cultural change. For example, when Neolithic domestication of cereals spread into Europe from the Middle East, what moved, the farmers, the farming techniques, or both? Also needed is a reconstruction of the evolution of language so that phylogenetic trees can be constructed. Thus, the Basques can be seen as linguistic survivors from millennia past, surrounded by newcomers. Finally, the frequency and distribution of genes in modern populations can tie all of this together. Genotypes give us lines of descent in ways that phenotypes can not since phenotypes are complicated by forces like adaptation in response to environmental (This is not to say that gene influences. frequencies are straightforwardly understood; distinguishing between the results of natural selection versus random genetic drift is sometimes hard.) Cavalli-Sforza clearly shows that genetics and linguistics are powerful corroborative enterprises, sometimes uncannily congruent. At the very least, each throws up hypotheses for the other to test, whether the problem is the peopling of the New World, the colonization of Pacific islands, the prehistory of European settlement, or the origins of humanity in Africa. (All are based on dispersal!)

The book originated in the 1980s, but has been repeatedly revised, so that this is its fifth "version". It was written in Italian and then translated by a graduate student, Mark There are a few slips in which Seielstad. meanings get reversed, but overall the result is more readable than many produced by native English-speakers. The content is user-friendly for the non-specialist; maps and evolutionary trees as illustrations make all the difference in making the arguments intelligible. This reader's only real frustration was the lack of notes. There are no citations in the text (rightly so for a popular book), but with a limited bibliography of only 86 references and no notes, the reader cannot seek the sources of claims made or counter-arguments dismissed. This is exacerbated by the limited scope of the references, as 34 of 86 were authored by Cavalli-Sforza!

Few scholars would even have thought of such a challenging book, much less attempted to write it. Fewer still would have succeeded in making such a range of science so accessible to the general public. This reviewer read the book while sitting on a Caribbean beach, on Spring Break, and highly recommended it as holiday reading, especially when it comes out in paperback. [The paperback is now available: ISBN: 0520228731, \$15.95 USD – ed.]

Human Instincts, Everyday Life, and the Brain: A Paradigm for Understanding Behavior

By Richard Wills, The Book Emporium, Charlottetown, Prince Edward Island, Paperback, 1998, 510p. ISBN 0-9684020-0-3.

Reviewed by Bill Charlesworth, P.O. Box 18, Stockholm, WI 54769 USA

This book is the first volume in a multi-volume series. This raises the problem of what to do with those related volumes to come. My solution was to interview the author during the ISHE convention in Salamanca in August 2000 where a symposium was held on the significance of naturalistic observation for human ethology. Thus, the present review is a consequence of both reading the first volume and interviewing the author himself about future volumes.

In his Origin of Species, Darwin noted that the "noble science of Geology loses its glory from the extreme imperfection of the [its] record" (p. 372). Contemporary geology has gained glory with the assistance of vastly better technology and, of course, thousands of painstaking field studies conducted since Darwin's time. In contrast, the science of human behavior from an ethological perspective has yet to gain glory. A "glorious" science of ethology, in my opinion, has to begin with a comprehensive and reliable picture of behavior. In chemistry this picture is the periodic table; in genetics it is the full complement of sequenced human DNA. Both pictures are grand, minutely detailed and absolutely indispensable. An analogous picture of human behavior does not exist. What does exist are tens of millions of travel narratives, letters, novels, journalistic accounts, clinical reports -- in short, micro-studies of relatively small specimens of human behavior scattered over centuries of different genres, disciplines, and approaches. Many of these micro-pictures are interesting, some are true, some not. The vast majority, however, are not scientifically respectable since they omit any account of the methods used to produce them. Unlike geology or

astronomy, sciences of human behavior in general have not constructed a universallyaccepted method of description and classification required for a reliable and comprehensive atlas of human behavior. There are, of course, a few partial exceptions to this broad claim. We do have a mini-atlases for facial expression as well as good descriptions of children's play and agonistic behavior. Still, no overall atlas of human behavior exists.

I can think of at least four reasons why this may be the case: (1) atlases are labor and time intensive, (2) they are usually not as professionally rewarding as hypothesis testing studies, (3) they are frequently unexciting, especially when their content is familiar as is the case with much of human behavior, and (4) given the complexity of human behavior, establishing universally satisfactory units or categories for coding is a difficult task. Despite producing an atlas these obstacles, is indispensable for doing research on human behavior. Not only do atlases depict the content of a field, they also stimulate further research. As Wills (2000) pointed out in his ISHE symposium paper, "if our understanding of phenomena is messy, it means the models we are using are inappropriate and need to be replaced. Field studies enable us to discover new models." In his own work, Wills structures his field research (he describes it as "biological") in terms of both instincts and the brain as they are expressed in "everyday life". For him instinctual behaviors are observable on a daily basis; he simply infers the brain as the origin and guiding mechanism of the instinctual behavior. He finds no need in defining the brain in traditional terms of anatomy and specific function.

Wills spells out the rationale behind his approach in the book's introduction which covers 19 pages and contains 137 ideas or models that have been produced by his research to date And what a list! To me they appear as a set of mixed Wittgensteinian propositions of fact, faith cogitation and speculation, all written with great confidence, many requiring explication of terms. Nevertheless, they are clearly worthy of attention. The familiar human behavior incidents that constitute the empirical basis of these 137 "Ideas or models" are clustered in such categories as "Feelings as

Instincts", "Tense and Release", "Culture", "Formation of Categories". "The Mind", and "Humans and Other Species". The origin of these categories is not indicated. More specifically, there is no reference to scientific predecessors that used such categories. For example, there is no mention of the "ecological psychologists" Barker, Wright, Gump, and Schoggin, all of whom who have done extensive and intensive work observing and categorizing everyday behavior. When I pressed Wills in Salamanca on his predecessors, he hesitated and then said "I guess Thomas Kuhn, his idea of paradigms". This is an astounding answer. Most field researchers are aware of pre-existing category schemes and build on them or attempt to improve them. Wills seems not to be aware of the history of his approach. This makes me think he may have well gone into this massive undertaking as a pretty much blank slate.

As I delved into the book and found 110 photographs of humans caught engaging in a wide range of everyday behaviors ñ smiling, crying, laughing, positively interacting with a cat, hugging and throwing a temper tantrum ñit became clear that what Wills was doing was what any good ethologist does: observe behavior, document it, then try to categorize and comment on it. In the eight pages of what he calls "theory", Wills distinguishes between a "Traditional paradigm" and an "Alternative paradigm". The former is the paradigm that asserts that human behavior is based on reasoning and learning whereas animal behavior is based on instinct. Added to that is the assertion that humans are unique and infinitely malleable. Wills claims that the traditional program is misleading; humans are also biological beings and, hence, not infinitely malleable, and they hold no unique position in the universe. Nothing new here. The idea that humans are not unique has been around for a very long time as has the idea that humans, like animals have instincts. But such rudimentary theorizing does not diminish the value of this book. What is of value is the enormous volume of his empirical finding s.

Wills presents a record of 1,155 incidents ("independent units" or "case studies") of "specific behaviors" elicited in "response to feelings". These incidents, observed and recorded during interviews made between 1973 and the present on Prince Edward Island, are divided into four major categories: "Seeking positive reactions", "Avoiding embarrassment", "Avoiding criticism", and "Not hurting others", which are then broken down into various subcategories and sub-subcategories (approximately 187 by my loose count). This appears to be an excellent start toward a comprehensive human behavior taxonomy.

It should also be mentioned that Wills precedes each major category with a brief definition (and often an interpretation or tentative explanation) of the incidents covered. For example, when discussing the "tactics used in seeking positive reactions" [from others], he discusses briefly a wide range of behaviors such as, "taking center stage", "expressing interest", "joining a group effort", "acting upset", "being a nuisance", and "displaying achievements", then instantiates them with examples from real life.

But what does it all tell us? Most of the incidents are likely to appear commonplace for the vast majority of behavior scientists. Is cataloguing these familiar incidents necessary? I think so. Inventories of information, no matter how familiar, can have great scientific value because they can serve as benchmarks for comparisons with new information as well as provide grounds to formulate new hypotheses. For example, observations using Wills' categories can be used to compare populations living a hundred years from now with those he portrays in his volume.

And his future volumes? Wills has nearly completed several of them and hopes to publish them within the next few years. If you believe we already have an adequate picture of human behavior, then this book most likely will not appeal to you. But if you are not satisfied with what we now have, then you should take seriously what Wills is advocating. As he pleaded in Salamanca: "Do more field studies. They will lead to more complete, and hence more satisfactory, models of behavior. They may even bring about a new paradigm."

Reproduction in Context: Social and Environmental Influences on Reproduction

Edited by Kim Wallen and Jill E. Schneider, MIT Press, 2000. ISBN: 90262-23204-9, 520pp, US\$60.00 (cloth).

Reviewed by Linda Mealey, Psychology Department, College of St. Benedict, St. Joseph, MN, 56374 USA

This 15-chapter book presents cutting-edge, integrative summaries of what is, to me, one of the most interesting questions facing those who take a biosocial perspective: What are the causal feedback links from the physical and social environment that affect behavior, hormones, and gene expression? Most scientists take a reductionist, bottom-up approach, giving only lip service to the notion that situational contexts can significantly influence biology. The contributors to this text were chosen specifically because they use both the bottom-up approach and the top-down approach to identify causal (and reciprocal) inputs to behavior.

The book begins with an introductory chapter by one of the editors (Schneider) that serves as a long (helpful) preface to what follows. Next, three sections discuss (physical) environmental influences on reproduction in general (IA), in birds (IB), and in mammals (IC). To very briefly summarize what is in fact, a huge amount of technical material, ethologists might conceptualize the content presented in these chapters as an evolutionary life history analysis of cyclical behavior and the zeitgebers that modulate them. Especially thorough and useful chapters are by eco-reproduction guru Frank Bronson ("Puberty and Energy Reserves: A Walk on the Wild Side") and avian ecologist John Wingfield et al. ("Toward an Ecological Basis of Hormone-Behavior Interactions in the Reproduction of Birds").

Then sections IIA and IIB discuss social influences on reproduction. The division and order of presentation of these six chapters is less obvious than for Section I, but include editor

chapter on sexual desire cycles in rhesus monkeys, French & Schaffner's chapter on monogamous primates, a very long chapter on human pheromones by Martha McClintock, and then three chapters addressing the mechanisms of top-down feedback loops affecting reproductive physiology. The closing chapter by David Crews is not only a nice, relatively short summary of his (and others') well-known work on non-chromosomal mechanisms of sex determination, but an eloquent statement about the importance and relevance of top-down feedback for all of biology.

This is not a book one can just sit down and read. Neither is it the kind of book one can pull off the shelf to consult for a quick reference. The material presented requires significant time and depth of attention, and even then, no one could possibly keep all of this material in their head. With only one chapter specifically on humans, most readers of the HEB will probably not find the time investment this book requires to be worth their while. But for anyone specifically interested in the biosociology of reproduction, it is the definitive text, providing both a comprehensive and current overview of the relevant facts, as well as an extraordinarily refreshing, non-simplistic view of the philosophy of social biology. At over 500 pages and only \$60, it is an aberration in the old dictum "what you pay is what you get": this book gives far more for the money than most and, being both comprehensive and forward-looking, it will not be out of date for a long time.

Comments from a Reader:

Dr. Rosenwasser,

I was delighted to read your review of Gray, Psychology, 3rd, printed in the Human Ethology Bulletin, 16 (2), 2001. I am a retired psychobiology teacher from St. Lawrence University in Canton, NY, and used the first two editions with great glee. I loved them.

My reason for writing is your comments on students who said your course did not have enough "real psychology." Students frequently told me they signed up for a real psychology course, not a biology course. So I asked them how they knew anything about psychology and...

they did not! So I suggested that they had four options. Stay in my section and realize that humans are biological organisms and we are going to study them. Or, try to get into another section with another teacher. Or drop the course - I would be pleased to sign the necessary forms for them. Or take geology. I guess astronomy would also be good. But I refused to budge or to say the blame is mine if an uneducated undergraduate had the gall to inform me that they knew more about the subject that I had been studying and teaching since 1953 than I did. In other words, I support your position 100% and wish there were more like you in the field of academic psychology. I think more are getting there, but the realization of what the human organism is is taking a lot of time. Keep up the good work!!!

John Ross, Ph.D.

St. Lawrence University jmross@northweb.com Fortunately retired!

A Trio of Friends in Zvenigorod (Photo courtesy of Linda Mealey)



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Society News

CALL FOR PAPERS ISHE 2002 Montreal, August 7 - 10

The 16th biennial meeting of the International Society of Human Ethology will be held in Montreal at the Hotel Gouverneur from Aug 7 to Aug 10. Symposia, individual papers and poster proposals that address any aspect of research within Human Ethology are welcome. 100 word abstracts for all papers and posters (including symposium papers) should follow the following format: Line 1: authors' names, last name first. Line 2: institutional address(es). Line 3: e-mail address of first author. Line 4: title of presentation in capital letters. In addition, proposals for symposia should include a 250word description of the symposium theme together with individual abstracts of the set of related papers (usually 3 or 4 papers plus discussant). Be sure to specify if you intend to make a powerpoint presentation.

All proposals should be submitted to Frank Salter, and will be reviewed by Frank and Astrid Juette. Submission by e-mail is preferred, but hard copies on disk with the name of the operating system, word processing program, and email address of author will also be accepted. Abstracts for all submissions have a deadline of April 1, 2002, but earlier submissions are urged.

Send proposals to:

Frank Salter, ISHE Secretary

(address in Officer's box at left)

Minutes, ISHE Board Meeting Moscow June 20, 2001

Present:

Linda Mealey (President) Peter LaFreniere (Bulletin editor) Frank Salter (Secretary) Johann van der Dennen (President elect) Astrid Juette (Membership Chair)

Topic: Membership Dues

LaFreniere proposed that membership dues would need to be raised as of 1 January 2002 in order to meet increased costs for Bulletin production and mailing. Proposed rate increases:

1 year	membership	from \$25 to \$40
3 year	membership	from \$60 to \$100
Students and retired		from \$10 to \$15

Topic: ISHE Website

It was also proposed that we need to make "Webmaster" a new officer position. Besides maintaing an informed and up-to-date website, the tasks of the webmaster would also include formulating a policy for links to websites and creating a new domain name: <u>www.ishe</u>.

It was decided that both proposals be put to a vote by general membership in the September 2001 Bulletin. (See Ballott below)

This was followed by an open meeting:

Topic: 2002 ISHE Congress

LaFreniere recommended a downtown hotel venue since Montreal was the preferred site but no ISHE member volunteered to host at their University. The theme proposed for plenary intersection between speakers was the primatalogy and human ethology. A number of potential speakers were suggested. A steering committee of Officers, Mealey, van der Dennen, and La Freniere was composed to handle plenary invites and other decisions related to conference budget and expenditure. A Program Committee of Officers, Frank Salter and Astrid Juette was also composed to take responsibility for evaluating and selecting symposium and poster submissions

and communicating the program to the Bulletin Editor.

Topic: Interviews for Bulletin

Members agreed that it would be desirable to continue this tradition. Percy Rhode volunteered to conduct an initial interview.

Topic: How to promote ISHE

Mealey: Members could advertise their membership on their e-mail signature. Eibl: Send invitation for papers/conference to HBES. Need to choose speakers for plenaries. LaFreniere: The secretary should form alliances with secretaries from other organizations. Jütte: Add 1 year membership to student prize. Salter: Should offer ESS members something of thematic interest.

Van der Dennen: Should send a letter to ex-ESS members urging them to join ISHE.

Ballot

A. Dues Increase Proposal

__YES, I vote in favor of the proposed increase

____NO, I vote against the proposed increase

B. Proposed Website Manager Position

YES, I vote in favor of creating this position with Karl Grammer as ISHE Webmaster

_ NO, I vote against creating this position

Ballots must be mailed or emailed to ISHE Secretary, Frank Salter by October 1, 2001.

Frank Salter, ISHE Secretary Max Planck Society Von-der-Tann-Str. 3 82346 Andechs Germany E-mail: salter@humanethologie.de Moscow Summer School- 2001.

Evolution, Behaviour and Society:

Human Ethology. Zvenigorod, 19-26 June 2001.

PROGRAM

20th June:

Eibl-Eibesfeldt I.(Center for Human Ethology, Andechs, Germany), "Ethological Concepts and their Implications to the Sciences of Man" (in two parts)

Tishkov V. (Institute of Ethnology and Anthropology, Moscow), "Violence and conflict in anthropological perspective".

Schiefenhoevel W. (Center for Human Ethology, Andechs, Germany), "Crosscultural Studies and Trends in Modern Obstetrics".

Salter F. (Center for Human Ethology, Andechs, Germany), "Social Technology Theory: Resolving the Nature-Nurture Debate in Sociology".

21st June:

Mealey L.(College of St.Benedict, US), "Evolution of Sex Differences: An Overview".

Mealey L. (College of St.Benedict, US), "Evolution and Psychopathology: An Overview".

Grammer K. (Institute of Urban Ethology, Vienna, Austria), "Darwinian aesthetics and human beauty: an n-dimensional feature approach".

Grammer K. (Insitute of Urban Ethology, Vienna, Austria), "E-motion: digital image analysis of human body movements". Suetterlin Christa, (Center for Human Ethology, Andechs, Germany), "What appeals is beautiful? Ethological aspects of art and aesthetics".

Artemova O. (Institute of Ethnology and Anthropology, Moscow Russia) Social stratification and gender roles in pre-industrial societies: cross-cultural perspective.

Sarich V. (University of California, US), " Evolution, Behaviour, and Society: the Significance of group differences"

Segal N. (California State University, Fullerton, US), "Twin Research Findings and Methods and their implications for Human Behavioral Development".

Thierry B. (CNRS & University of Strasbourg, Strasbourg, France), "How Evolutionary Processes May Have Shaped Primate Social Organizations: What Macaques Teach Us".

23rd June.

Gottfredson L. (University of Delaware, US), "Biological Basis of Differences in Intelligence".

Gottfredson L. (University of Delaware, US), "How Differences in Intelligence Shape a Society".

Charlesworth W. (University of Minnesota, Mineapolis, US),"Ethology of Human Development".

Charlesworth W. (University of Minnesota, Mineapolis, US), "Intelligent Behavior:Basic Concepts and Methods".

LaFreniere P. (University of Maine, Orono, US), "Socio-Emotional Development in Children: One Species, Many Cultures".

LaFreniere P. (University of Maine, Orono, US), "Universal Patterns of Socio-Emotional Development".











Clockwise starting at top left:

(a) Professors Eibl-Eibesfeldt, Charlesworth and Tishkov in conversation at Zvenigorod; (b) Inside the Kremlin walls; (c) Host Marina Butovskaya flanked by HEB Editor Peter LaFreniere and daughter, Polina; (d) her Monastery bell tower; (e) Audience at Moscow lectures; (f) Co: organizer Frank Salter surrounded by Russian students; (g) Russian girl awaiting her parents after a service; (h) New Jerusalem. Photos by LaFreniere

Moscow program continued:

25th June:

Bjorkqvist K. (Abo University, Finland), "Social intelligence, empathy and aggression".

Bjorkqvist K. (Abo University, Finland), "Aggression in children: gender differences".

Butovskaya M. (Institute of Ethnology and Anthropology, Moscow, Russia), "Bio-social basis of peacemaking in humans".

Miele F. The U.S. media treatment of ethology and evolutionary psychology.

Rohde P. (Kassel University, Germany), "Reconstituted families: how they originate and why they are different".

Bojko E. (Russian State University for the Humanities, Moscow, Russia), "Birth ranks and maternal favouritism: Russians and Crimea Tatars Compared".

Jutte A. (Institute of Urban Ethology, Vienna, Austria), "Human pheromones - social and sexual cues".

Diakonov, I. (Russian State University for the Humanities, Moscow, Russia), "Structue of social identity and emotional profile of Moscow beggars".

Letter to the Editor

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ISHE President Linda Mealey's perceptive overview of the field and her thoughtful suggestions for the future of ISHE have prompted some admittedly more radical suggestions that, I hope, will at least be worth thinking about.

As Linda says, there has been very little penetration of the social sciences by what could broadly be called an interactional, "behavioral biology" or "biobehavioral" paradigm, despite over 30 years of effort by a dedicated small community of scholars, many of whom have taken risks with their careers. On the merits, an interactional approach is an "inevitable discipline" (as E.O. Wilson put it long ago), but it remains an elusive goal. Ethology has had relatively little acceptance in the U.S., though it has a better track record in Europe, while sociobiology and evolutionary psychology have proved to be highly contentious. Beyond that, evolutionary anthropology and the newer field of "bioeconomics" have made only limited progress in their parent disciplines. "Biopolitics" is, in fact, the oldest of the interdisciplinary "movements," but it remains isolated from the "mainstream" of its discipline to this day -- except perhaps in the public policy area, where biological "parameters" are inescapable.

Accordingly, a clear challenge for the coming decade(s) is to build broad acceptance for the fundamental soundness of an interactional paradigm. What is needed, perhaps, is a more focused collective effort to advance this objective and a "strategic plan" for how to achieve it. Moreover, it seems to me that no other existing organization would be better suited for carrying this flag and taking a leadership role in this effort. ISHE is international in its membership; it is biobehavioral in orientation; and it is less burdened by the "politics" and the dogmatism of other possible standard bearers.

What might this strategic plan entail? Here are just a few thoughts: (1) A concerted, collaborative effort to synthesize and articulate the case for developing an interactional, biobehavioral/biosocial science. One useful vehicle for this purpose might be an ISHE sponsored conference and edited volume designed to help "make the case." (2) Curriculum Tom Shellberg's success in development. teaching the "basics" (reported in the last newsletter) is a model for what might be possible everywhere in higher education, with obvious implications for the future viability of behavioral biology as a teaching and research "niche". (The scholars associated with biopolitics have also made some efforts along these lines over the years.) (3) More research self-consciously that is addressed to "interactional" demonstrating causation in animal and human behavior. (4) Efforts to become more inclusive, perhaps eventually with separate "sections" for bioeconomics, biopolitics, biosociology, bioanthropology, etc. (5) A namechange for the organization. Most likely this will be an unpopular idea, but if the future for ISHE is less about its past and the tradition of ethology and more about a broader mandate and purpose, the existing name could become a liability. In the business world, names are all about "packaging" (brand identification and marketing) and serve best when they are also descriptive. So, in this spirit, I would suggest for Ethology "International Society and Biobehavioral Science." I know, ISHE is easier to pronounce than "ISEBS". Still, it would be easier on the mouth than HBES. (I'm sure there are other alternatives as well -- maybe just Biobehavioral Science, though it may be hard to let go of the ethology label.)

Of course, we are all busy pursuing our own careers and agendas, but to the extent that we can make our personal objectives mesh with the larger, more concerted purpose of advancing a multidisciplinary biobehavioral science paradigm, it could become a win-win "game".

Reminder to ISHE Members:

Please take a minute to check your mailing label and renew now, if necessary, before dues increase. If you have recently renewed, but have not received back issues, you will be credited with a full calendar year of membership. Any back issues may be obtained by sending a check for \$5.00 to the Treasurer for each back issue requested. Membership in the International Society for Human Ethology is \$25.00/yr or \$60.00 for 3 years. You may pay by cash, check or a memo authorizing the ISHE Treasurer to charge your VISA or Eurocard a specific amount plus your credit card number and expiration date. You may also renew by mailing the form on the back of this bulletin with your payment to:

> Dori LeCroy ISHE Treasurer PO Box 418 Nyack, N.Y. 10960 USA

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Bulletin Submissions

All items of interest to ISHE members are welcome: Society Matters; articles; replies to articles; suggestions; announcements of meetings, journals or professional societies; etc. These sorts of submission should be sent to the editor. Book review inquiries should go to the book review All submissions should be in English, editor. and sent to the appropriate editor via e-mail, as an attachment in order to maintain formatting. If e-mail is impossible, hard copies will be accepted, as long as they are accompanied by the same text on diskette (preferably in Microsoft Word version 6.0 or earlier). Shorter reviews are desirable (less than 1000 words). Please include complete references for all publications cited. For book reviews, please include publisher's mailing address and the price of hardback and paperback editions.

Submissions are usually reviewed only by the editorial staff. However, some submissions are rejected. Political censorship is avoided, so as to foster free and creative exchange of ideas among scholars. The fact that material appears in the newsletter never implies the truth of those ideas, ISHE's endorsement of them, or support for any of them.

New Books

de Bonis, L., Koufos, G. D., & Andrews, P. (eds.). <u>Hominoid Evolution and Climatic Change in</u> <u>Europe: Vol. 2: Phylogeny of the Neogene</u> <u>Hominoid Primates of Eurasia</u>. Cambridge Univ. Press, 2001. ISBN 0521-660750

Boysson-Bardies, B. <u>How Language Comes to</u> <u>Children: From Birth to Two Years</u>. MIT Press, 2001. 274p. ISBN: 0262-541254

Evans, D. <u>Emotions: The Science of Sentiment.</u> Oxford ; New York : Oxford University Press, 2001.

Gisolfi, C.V., & F. Mora. <u>The hot brain:</u> <u>Survival, temperature, and the human body</u>. Bradford (MIT) Press, 2000. 288p. ISBN: 0262-071983

McElvaine, Robert S. <u>Eve's seed: biology, the</u> <u>sexes, and the course of history</u>, McGraw-Hill, 2001. 453p ISBN 007-135528-6

Oyama, S. Griffiths, P.E., & Gray, R. D. <u>Cycles</u> of contingency: <u>Developmental systems and</u> <u>evolution</u>. Bradford (MIT) Press, 2001. 484p. ISBN: 0262-150530

Panter-Brick, C., Layton, R. H., & Rowley-Conwy, P. (eds.). <u>Hunter-Gatherers: An</u> <u>Interdisciplinary Perspective</u>. Cambridge Univ. Press, 2001. ISBN 0521-776724

de Waal, F. <u>The Ape and the Sushi Master:</u> <u>Cultural Reflections of a Primatologist</u>. Basic Books, 2001, 256p. ISBN: 0465-041752

de Waal, F. (Ed.) <u>Tree of Origin: What primate</u> <u>behavior can tell us about human social</u> <u>evolution</u>, Cambridge, Mass. : Harvard University Press, 2001.

Watson, L. <u>Jacobson's Organ: And the</u> <u>Remarkable Nature of Smell.</u> W. W. Norton, 2000. ISBN: 0393-049086 [under review]

Whitehouse, H. (ed.). <u>The Debated Mind:</u> <u>Evolutionary Psychology versus Ethnography</u>. Berg Pub., 224p. ISBN: 1859734324

CURRENT LITERATURE

September 2001

Compiled by Johan van der Dennen

Anderson, J.R. (2001) Self and others in nonhuman primates: A question of perspective. Psychologia, 44, 1, 3-16 (Univ. Stirling, Dept. Psychol., Stirling FK9 4LA, Scotland)

Anderson, R.C., Nguyen-Jahiel, K., McNurlen, B., Archodidou, A., Kim, S.Y., Reznitskaya, A., Tillmanns, M. & Gilbert, L. (2001) The snowball phenomenon: Spread of ways of talking and ways of thinking across groups of children. Cognition and Instruction, 19, 1, 1-46 (Univ. Illinois, Ctr. Study Reading, 51 Gerty Dr, Champaign, IL 61820, USA)

Ashby, F.G. & Ell, S.W. (2001) The neurobiology of human category learning. Trends in Cognitive Sciences, 5, 5, 204-210 (Univ. Calif. Santa Barbara, Dept. Psychol., Santa Barbara, CA 93106, USA)

Bachand, L.L. & Caron, S.L. (2001) Ties that bind: A qualitative study of happy long-term marriages. Contemporary Family Therapy, 23, 1, 105-121 (Caron, S.L: IDC, Framingham, MA, USA)

Barrash, J., Tranel, D. & Anderson, S.W. (2000) Acquired personality disturbances associated with bilateral damage to the ventromedial prefrontal region. Developmental Neuropsychology, 18, 3, 355-381 (Univ. Iowa, Coll. Med., 200 Hawkins Dr, Iowa City, IA 52242, USA)

Barrett, L.F., Lane, R.D., Sechrest, L. & Schwartz, G.E. (2000) Sex differences in emotional awareness. Personality and Social Psychology Bulletin, 26, 9, 1027-1035 (Boston Coll., Dept. Psychol., Chestnut Hill, MA 02167, USA)

Bartrip, J., Morton, J. & de Schonen, S. (2001) Responses to mother's face in 3-week to 5-monthold infants. British Journal of Developmental Psychology, 19, Part 2, 219-232 (Morton, J.: Inst. Cognit. Neurosci., 17 Queen Sq, London WC1N 3AR, England)

Batki, A., Baron-Cohen, S., Wheelwright, S., Connellan, J. & Ahluwalia, J. (2000) Is there an innate gaze module? Evidence from human neonates (Baron-Cohen, S.: Univ. Cambridge, Dept. Expt. Psychol., Downing St, Cambridge CB2 3EB, England)

Braza, F. & San Jose, C. (2001) Influence of maternal reproductive characteristics on the body traits of preschool children. Social Behavior and Personality, 29, 5, 417-426 (Estacion Biologica de Donana, CSIC, Avda. Ma. Luisa s/n, Pabellon del Peru, 41013 Sevilla, Spain)

Braza, F., Carreras, M.R., San-Jose, C., Munoz, J.M. & Braza, P. (2000) Effects of siblings on preschool children's behavioral flexibility [in Spanish] Revista Mexicana de Psicologia, 17, 2, 181-190 (see above)

Beran, M.J. (2001) Do chimpanzees have expectations about reward presentation following correct performance on computerized cognitive testing? Psychological Record, 51, 2, 173-183 (Georgia State Univ., Language Res. Ctr., 3401 Panthersville Rd, Decatur, GA 30034, USA)

Bereczkei, T. (2001) Maternal trade-off in treating high-risk children. Evolution and Human Behavior, 22, 3, 197-212 (Univ. Pecs, Dept. Gen. Psychol., Ifjusag U 6, H-7624 Pecs, Hungary)

Bossong, B. (2001) Gender and age differences in inheritance patterns - Why men leave more to their spouses and women more to their children: An experimental analysis. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 2, 107-122 (Univ. Koblenz Landau, Fachbereich Psychol., Fort 7, D-76829 Landau, Germany)

Brody, J.F. (2001) Evolutionary recasting: ADHD, mania, and variants. Journal of Affective Disorders, 65, 2, 197-215 (1262 West Bridge St., Spring City, PA 19475, USA)

Browne, K.R. (2001) Women at war: An evolutionary perspective. Buffalo Law Review, 49, 1, 51-247 (Wayne State Univ., Sch. Law, Detroit, MI 48202, USA) Bullers, S. & Prescott, C.A. (2001) An exploration of the independent contributions of genetics, shared environment, specific environment, and adult roles and statuses on perceived control. Sociological Inquiry, 71, 2, 145-163 (Univ. N Carolina, Wilmington, NC 28401, USA)

Bushnell, I.W.R. (2001) Mother's face recognition in newborn infants: Learning and memory. Infant and Child Development, 10, 1-2, 67-74 (Univ. Glasgow, Dept. Psychol., 58 Hillhead St, Glasgow G12 8QB, Lanark, Scotland)

Buss, D.M., Shackelford, T.K., Kirkpatrick, L.A. & Larsen, R.J. (2001) A half century of mate preferences: The cultural evolution of values. Journal of Marriage and the Family, 63, 2, 491-503 (Univ. Texas, Dept. Psychol., Austin, TX 78712, USA)

Cartmill, M. (2000) Animal consciousness: Some philosophical, methodological, and evolutionary problems. American Zoologist, 40, 6, 835-846 (Duke Univ., Med. Ctr., Box 3170, Durham, NC 27710, USA)

Charman, T., Baron-Cohen, S., Swettenham, J., Baird, G. Cox, A. & Drew, A. (2000) Testing joint attention, imitation, and play as infancy precursors to language and theory of mind. Cognitive Development, 15, 4, 481-498 (Univ. Coll. London, Inst. Child Hlth., 30 Guilford St, London WC1N 1EH, England)

Clarke-Stewart, K.A., Goossens, F.A. & Allhusen, V.D. (2001) Measuring infant-mother attachment: Is the strange situation enough? Social Development, 10, 2, 143-169 (Univ. Calif. Irvine, Irvine, CA 92697, USA)

Cohen, L.B. & Cashon, C.H. (2001) Do 7-monthold infants process independent features or facial configurations? Infant and Child Development, 10, 1-2, 83-92 (Univ. Texas, Dept. Psychol., Mezes Hall 330, Austin, TX 78712, USA)

Cook, E.H. (2001) Genetics of autism. Child and Adolescent Psychiatric Clinics of North America, 10, 2, 333-350 (Univ. Chicago, Dept. Psychiat., MC 3077, 5841 S Maryland Ave, Chicago, IL 60637, USA)

Corning, P.A. (2001) 'Devolution' as an opportunity to test the 'synergism hypothesis'

and a cybernetic theory of political systems. Systems Research and Behavioral Science, 18, 1-24 (Institute for the Study of Complex Systems, 119 Bryant Street, Suite 212, Palo Alto, CA 94301, USA)

Danthiir, V., Roberts, R.D., Pallier, G. & Stankov, L. (2001) What the nose knows -Olfaction and cognitive abilities. Intelligence, 29, 4, 337-361 (Roberts, R.D.: Univ. Sydney, Dept. Psychol., Sydney, NSW 2006, Australia)

Davidson, R.J. (2001) The neural circuitry of emotion and affective style: prefrontal cortex and amygdala contributions. Social Science Information sur les sciences sociales, 40, 1, 11-37 (Univ. Wisconsin, Dept. Psychol., 1202 W Johnson St, Madison, WI 53706, USA)

De Vos, H., Smaniotto, R. & Elsas, D.A. (2001) Reciprocal altruism under conditions of partner selection. Rationality and Society, 13, 2, 139-183 (Univ. Groningen, Dept. Sociol., ICS, Grote Rozenstraat 31, 9712 TG Groningen, the Netherlands)

Del Rosario Carreras de Alba, M., Braza Lloret, P. & Braza Lloret, F. (2001) Agonistic behaviour and social adjustment in preschool children [in Spanish]. Psicothema, 13, 2, 258-262 (Facultad de Ciencias de la Educacion, Universidad de Cadiz, 11519 Cadiz, Spain)

Didow, S.M. & Eckerman, C.O. (2001) Toddler peers: From nonverbal coordinated action to verbal discourse. Social Development, 10, 2, 170-188 (Duke Univ., Dept. Psychol., Durham, NC 27708, USA)

Domitrovich, C.E. & Bierman, K.L. (2001) Parenting practices and child social adjustment: Multiple pathways of influence. Merrill Palmer Quarterly Journal of Developmental Psychology, 47, 2, 235-263 (Penn State Univ., Prevent. Res. Ctr., 109 S Henderson Bldg, University Pk, PA 16801, USA)

Elgar, K. & Campbell, R. (2001) The development of face-identification skills: What lies behind the face module? Infant and Child Development, 10, 1-2, 25-30 (Univ. Coll. London, Behav. Sci. Unit, 30 Guilford St, London WC1N 1EH, England) Euler, H.A., Hoier, S. & Rohde, P.A. (2001) Relationship-specific closeness of intergenerational family ties: Findings from evolutionary psychology and implications for models of cultural transmission. Journal of Cross-Cultural Psychology, 32, 2, 147-158 (Univ. Kassel, Fachbereich Psychol 3, Holland Str 36-38, D-34127 Kassel, Germany)

Fehr, B. & Broughton, R. (2001) Gender and personality differences in conceptions of love: An interpersonal theory analysis. Personal Relationships, 8, 2, 115-136 (Univ. Winnipeg, Dept. Psychol., Winnipeg, MB R3B 2E9, Canada)

Fouts, H.N., Hewlett, B.S. & Lamb, M.E. (2001) Weaning and the nature of early childhood interactions among Bofi foragers in Central Africa. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 1, 27-46 (Washington State Univ., Dept. Anthropol., Pullman, WA 99164, USA)

Galati, D., Miceli, R. & Sini, B. (2001) Judging and coding facial expression of emotions in congenitally blind children. International Journal of Behavioral Development, 25, 3, 268-278 (Univ. Turin, Dept. Psychol., I-10123 Turin, Italy)

Geary, D.C. & Bjorklund, D.F. (2000) Evolutionary developmental psychology. Child Development, 71, 1, 57-65 (Univ. Missouri, Dept. Psychol., 210 McAlester Hall, Columbia, MO 65211, USA)

Gomez-Jarabo, G. & Alonso-Fernandez, F. (2001) Psychobiologic considerations on alimentary addictions [in Spanish]. Salud Mental, 24, 2, 16-24 (Univ. Autonoma Madrid, Fac. Psicol., Campus Univ. Cantoblanco, Carretera Colmenar Km 15, E-28049 Madrid, Spain)

Greeff, A.P. & Malherbe, H.L (2001) Intimacy and marital satisfaction in spouses. Journal of Sex and Marital Therapy, 27, 3, 247-257 (Univ. Stellenbosch, Dept. Psychol., ZA-7600 Stellenbosch, South Africa)

Greene, R.W., Biederman, J., Faraone, S.V., Monuteaux, M.C., Mick, E., DuPre, E.P., Fine, C.S. & Goring, J.C. (2001) Social impairment in girls with ADHD: Patterns, gender comparisons, and correlates. Journal of the American Academy of Child and Adolescent Psychiatry, 40, 6, 704-710 (Massachusetts Gen. Hosp., Clin. & Res. Program Pediat. Psychopharmacol., ACC-725, Boston, MA 02114, USA)

Grigorenko, E.L. (2001) Developmental dyslexia: An update on genes, brains, and environments. Journal of Child Psychology and Psychiatry and Allied Disciplines, 42, 1, 91-125 (Yale Univ., Dept. Psychol., POB 208205, New Haven, CT 06520, USA)

Halpern, D.F. & Tan, U. (2001) Stereotypes and steroids: Using a psychobiosocial model to understand cognitive sex differences. Brain and Cognition, 45, 3, 392-414 (Calif. State Univ. San Bernardino, Dept. Psychol., 5500 Univ Pkwy, San Bernardino, CA 92407, USA)

Henrich, J. & Gil-White, F.J. (2001) The evolution of prestige - Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. Evolution and Human Behavior, 22, 3, 165-196 (Univ. Michigan, Sch. Business, 701 Tappan Dr, D3276, Ann Arbor, MI 48109, USA)

Herpertz, S. & Schweiger, U. (2001) Psychobiological aspects of anorexia nervosa [in German]. Zeitschrift fuer psychosomatische Medizin und Psychotherapie, 47, 2, 179-204 (Rhein Kliniken, Klin. Psychotherapie & Psychosomatik, Virchowstr 174, D-45147 Essen, Germany)

Hicks, T.V. & Leitenberg, H. (2001) Sexual fantasies about one's partner versus someone else: Gender differences in incidence and frequency. Journal of Sex Research, 38, 1, 43-50 (Leitenberg, H.: Univ. Vermont, Dept. Psychol., Burlington, VT 05405, USA)

Hill, K., Boesch, C., Goodall, J., Pusey, A., Williams, J. & Wrangham, R. (2001) Mortality rates among wild chimpanzees. Journal of Human Evolution, 40, 5, 437-450 (Univ. New Mexico, Dept. Anthropol., Albuquerque, NM 87131, USA)

Immerman, R.S. & Mackey, W.C. (1998) Cultural evolution and gender asymmetry in tertiary education: The Tragedy of the Commons revisited. International Review of Modern Sociology, 28, 93-111 (W.C. Mackey: Dept. of Soc. & Behav. Sciences, Univ. Arkansas at Monticello, Monticello, AR 71655, USA)

Jang, K.L., Vernon, P.A. & Livesley, W.J. (2001) Behavioural-genetic perspectives on personality function. Canadian Journal of Psychiatry - Revue canadienne de psychiatrie, 46, 3, 234-244 (Univ. British Columbia, Dept. Psychiat., 2255 Wesbrook Mall, Vancouver, BC V6T 2A1, Canada)

Jensen-Campbell, L.A. & Graziano, W.G. (2000) Beyond the school yard: Relationships as moderators of daily interpersonal conflict. Personality and Social Psychology Bulletin, 26, 8, 923-935 (Florida Atlantic Univ., Dept. Psychol., 2912 Coll Ave, Davie, FL 33314, USA)

Kahana-Kalman, R. & Walker-Andrews, A.S. (2001) The role of person familiarity in young infants' perception of emotional expressions. Child Development, 72, 2, 352-369 (Yeshiva Univ. Albert Einstein Coll. Med., Childrens Hosp., 1300 Morris Pk Ave, Bronx, NY 10461, USA)

Kanazawa, S. & Still, M.C. (2000) Parental investment as a game of chicken. Politics and the Life Sciences, 19, 1, 17-26 (Indiana Univ. Penn., Indiana, PA 15705, USA)

Kelly, S. & Dunbar, R.I.M. (2001) Who dares, wins - Heroism versus altruism in women's mate choice. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 2, 89-105 (Dunbar, R.I.M.: Univ. Liverpool, Sch. Biol. Sci., Nicholson Bldg, Liverpool L69 3GS, Merseyside, England)

Kendler, K.S., Gardner, C.O., Neale, M.C. & Prescott, C.A. (2001) Genetic risk factors for major depression in men and women: Similar or different heritabilities and same or partly distinct genes? Psychological Medicine, 31, 4, 605-616 (Box 980126, Richmond, VA 23298, USA)

Kirchengast, S & Huber, J. (2001) Fat distribution patterns in young amenorrheic females. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 2, 123-140 (Univ. Vienna, Inst. Anthropol., Althanstr 14, A-1090 Vienna, Austria) Klein, R.G. (2001) Southern Africa and modern human origins. Journal of Anthropological Research, 57, 1, 1-16 (Stanford Univ., Program Human Biol., Bldg 80, Inner Quad, Stanford, CA 94305, USA)

Klimesch, W. (2001) From cognitive to biological psychology: Psychology as an interdisciplinary approach [in German]. Zeitschrift fuer Psychologie, 209, 1, 17-33 (Salzburg Univ., Inst. Psychol., Hellbrunnerstr 34, A-5020 Salzburg, Austria)

Klump, K.L., Kaye, W.H. & Strober, M. (2001) The evolving genetic foundations of eating disorders. Psychiatric Clinics of North America, 24, 2, 215-225 (Kaye, W.H.: Western Psychiat. Inst. & Clin., 3811 OHara St, Suite E-724, Pittsburgh, PA 15213, USA)

Korchmaros, J.D. & Kenny, D.A. (2001) Emotional closeness as a mediator of the effect of genetic relatedness on altruism. Psychological Science, 12, 3, 262-265 (Univ. Connecticut, Dept. Psychol., 406 Babbidge Rd, U-1020, Storrs, CT 06269, USA)

Koren-Karie, N. (2000) Attachment representations in adulthood: Relations with parental behaviors. Israel Journal of Psychiatry and Related Sciences, 37, 3, 178-189 (Univ. Haifa, Sch. Social Work, IL-31905 Haifa, Israel)

Kuntsi, J. & Stevenson, J. (2001) Psychological mechanisms in hyperactivity: II The role of genetic factors. Journal of Child Psychology and Psychiatry and Allied Disciplines, 42, 2, 211-219 (Univ. Coll. London, Behav. Sci. Unit, 30 Guilford St, London WC1N 1EH, England)

Landis, D. & O'Shea, W.A. (2000) Cross-cultural aspects of passionate love - An individual differences analysis. Journal of Cross-Cultural Psychology, 31, 6, 752-777 (Univ. Mississippi, Ctr. Appl. Res. & Evaluat., 301 Leavell Hall, University, MS 38677, USA)

Launer, J. (2001) Whatever happened to biology? Reconnecting family therapy with its evolutionary origins. Journal of Family Therapy, 23, 2, 155-170 (Tavistock Clin., 120 Belsize Lane, London NW3 5BA, England) Lauritsen, M.B. & Ewald, H. (2001) The genetics of autism. Acta Psychiatrica Scandinavica, 103, 6, 411-427 (Univ. Aarhus, Psychiat. Hosp. Aarhus, DK-8240 Risskov, Denmark)

Leff, P., Romo-Parra, H., Medecigo, M., Gutierrez, R. & Anton, B. (2001) Synaptic plasticity: Understanding the neurobiological mechanisms of learning and memory. Part I. Salud Mental, 24, 2, 43-49 (Inst. Nacl. Psiquiatria Ramon de la Fuente, Lab. Neurobiol. Mol. & Neurquim Adicc., Calzada Mexico Xochimilco 101, San Lorenzo Huilpul, Mexico City 14370, DF, Mexico)

Lupton, D. (2000) 'A love/hate relationship': the ideals and experiences of first-time mothers. Journal of Sociology, 36, 1, 50-63 (Charles Sturt Univ., Bathurst, NSW 2795, Australia)

Maestripieri, D. (2001) Biological bases of maternal attachment. Current Directions in Psychological Science, 10, 3, 79-83 (Univ. Chicago, Comm. Human Dev., 5730 S Woodlawn Ave, Chicago, IL 60637, USA)

McDade, T.W. (2001) Parent-offspring conflict and the cultural ecology of breast-feeding. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 1, 9-25 (Northwestern Univ., Dept. Anthropol., 1810 Hinman Ave, Evanston, IL 60208, USA)

McGrew, W.C., Marchant, L.F.; Scott, S.E. & Tutin, C.E.G. (2001) Intergroup differences in a social custom of wild chimpanzees: The grooming hand-clasp of the Mahale Mountains. Current Anthropology, 42, 1, 148-153 (Miami Univ., Dept. Sociol., Gerontol. & Anthropol., Oxford, OH 45056, USA)

Mendoza, S.P. & Ruys, J.D. (2001) The beginning of an alternative view of the neurobiology of emotion. Social Science Information sur les sciences sociales, 40, 1, 39-60 (Univ. Calif. Davis, Dept. Psychol., 1 Shields Ave, Davis, CA 95616, USA)

Metzger, M.M. (2001) Which transformations of stimuli are the most disruptive to facial recognition? Perceptual and Motor Skills, 92, 2, 517-526 (Penn State Univ., Shenago Campus, 147 Shenago Ave, Sharon, PA 16146, USA) Morton, J.B. & Trehub, S.E. (2001) Children's understanding of emotion in speech. Child Development, 72, 3, 834-843 (Trehub, S.E.: Univ. Toronto, Dept. Psychol., Mississauga, ON L5L 1C6, Canada)

Naegele, J.R. & Lombroso, P.J. (2001) Genetics of central nervous system developmental disorders. Child and Adolescent Psychiatric Clinics of North America, 10, 2, 225-239 (Lombroso, P.J.: Yale Univ., Sch. Med., Room I-270, 230 S Frontage Rd, New Haven, CT 06520, USA)

Nelson, C.A. (2001) The development and neural bases of face recognition. Infant and Child Development, 10, 1-2, 3-18 (Univ. Minnesota, Inst. Child Dev., 51 E River Rd, Minneapolis, MN 55455, USA)

Neto, F., Mullet, E., Deschamps, J.C., Barros, J., Benvindo, R., Camino, L., Falconi, A., Kagibanga, V. & Machado, M. (2000) Crosscultural variations in attitudes toward love. Journal of Cross-Cultural Psychology, 31, 5, 626-635 (Mullet, E.: Quefes 17 Bis; F-31830 Plaisance Du Touch; France)

Nixon, C.L. & Watson, A.C. (2001) Family experiences and early emotion understanding. Merrill Palmer Quarterly Journal of Developmental Psychology, 47, 2, 300-322 (Watson, A.C.: Illinois Wesleyan Univ., Dept. Psychol., POB 2900, Bloomington, IL 61702, USA)

Pascalis, O., Demont, E., de Haan, M. & Campbell, R. (2001) Recognition of faces of different species: A developmental study between 5 and 8 years of age. Infant and Child Development, 10, 1-2, 39-45 (Univ. Sheffield, Dept. Psychol., Sheffield S10 2TP, S Yorkshire, England)

Peccei, J.S. (2001) Menopause: Adaptation or epiphenomenon? Evolutionary Anthropology, 10, 2, 43-57 (Univ. Calif. Los Angeles, Dept. Anthropol., Box 951553, Los Angeles, CA 90095, USA)

Peccei, J.S. (2001) A critique of the grandmother hypotheses: Old and new. American Journal of Human Biology, 13, 4, 434-452 (see above)

Peterson, C.C. (2000) Kindred spirits - Influences of siblings' perspectives on theory of mind.

Cognitive Development, 15, 4, 435-455 (Univ. Queensland, Sch. Psychol., Brisbane, Qld 4072, Australia)

Piko, B. (2001) Gender differences and similarities in adolescents' ways of coping. Psychological Record, 51, 2, 223-235 (Univ. Szeged, Albert Szent Gyorgyi Med. & Pharmaceut. Ctr., Szentharomsag U 5, H-6722 Szeged, Hungary)

Plomin, R. (2001) Genetic factors contributing to learning and language delays and disabilities. Child and Adolescent Psychiatric Clinics of North America, 10, 2, 259-277 (Univ. London Kings Coll., Inst. Psychiat., 111 Denmark Hill, London SE5 8AF, England)

Plomin, R., Asbury, K. & Dunn, J. (2001) Why are children in the same family so different? Nonshared environment a decade later. Canadian Journal of Psychiatry - Revue canadienne de psychiatrie, 46, 3, 225-233 (see above)

Povinelli, D.J. & Dunphy-Lelii, S. (2001) Do chimpanzees seek explanations? Preliminary comparative investigations. Canadian Journal of Experimental Psychology - Revue canadienne de psychologie experimentale, 55, 2, 185-193 (Univ. Louisiana Lafayette, Cognit. Evolut. Grp., 4401 W Admiral Doyle Dr, New Iberia, LA 70560, USA)

Reis, V.A. & Zaidel, D.W. (2001) Functional asymmetry in the human face: Perception of health in the left and right sides of the face. Laterality, 6, 3, 225-231 (Zaidel, D.W.: Univ. Calif. Los Angeles, Dept. Psychol., Box 951563, Los Angeles, CA 90095, USA)

Relethford, J.H. (2001) Absence of regional affinities of neandertal DNA with living humans does not reject multiregional evolution. American Journal of Physical Anthropology, 115, 1, 95-98 (SUNY Coll. Oneonta, Dept. Anthropol., Oneonta, NY 13820, USA)

Rose, S. (2001) Moving on from old dichotomies: beyond nature-nurture towards a lifeline perspective. British Journal of Psychiatry, 178, Suppl. 40, S3-S7 (Open Univ., Brain & Behav. Res. Grp., Milton Keynes MK7 6AA, Bucks, England) Russ, S.W. & Kaugars, A.S. (200) Emotion in children's play and creative problem solving. Creativity Research Journal, 13, 2, 211-219 (Case Western Reserve Univ., Dept. Psychol., Cleveland, OH 44106, USA)

Ryan, M.J., Phelps, S.M. & Rand, A.S. (2001) How evolutionary history shapes recognition mechanisms. Trends in Cognitive Sciences, 5, 4, 143-148 (Univ. Texas, Sect. Integrat. Biol. C0930, Austin, TX 78712, USA)

Sabini, J.; Garvey, B. & Hall, A.L. (2001) Shame and embarrassment revisited. Personality and Social Psychology Bulletin, 27, 1, 104-117 (Univ. Penn., Dept. Psychol., 3815 Walnut St, Philadelphia, PA 19104, USA)

Salekin, R.T., Rogers, R. & Machin, D. (2001) Psychopathy in youth: Pursuing diagnostic clarity. Journal of Youth and Adolescence, 30, 2, 173-195 (Univ. Alabama, Dept. Psychol., POB 870348, Tuscaloosa, AL 35487, USA)

Sanchez-Martin, J.R.; Fano, E.; Ahedo, L.; Cardas, J.; Brain, P.F. & Azpiroz, A. (2000). Relating testosterone levels and free play social behavior in male and female preschool children. Psychoneuroendocrinology, 25, 8, 773-783 (Univ. Pais Vasco, Area de Psicobiologia, Fac. Psicologia, Avda. Tolosa, 70, 20018 San Sebastian, Spain)

Sanchez-Martin, J.R.; Cardas, J.; Ahedo, L.; Fano, E.; Echebarria, A.; Azpiroz, A. (2001). Social behavior, cortisol, and sIgA levels in preschool children. Journal of Psychosomatic Research, 50, 4, 221-227 (see above)

Saucier, D.M. & Elias, L.J. (2001) Lateral and sex differences in manual gesture during conversation. Laterality, 6, 3, 239-245 (Elias, L.J.: Univ. Saskatchewan, Dept. Psychol., 9 Campus Dr, Saskatoon, SK S7N 5A5, Canada)

Scherer, K.R., Banse, R. & Wallbott, H.G. (2001) Emotion inferences from vocal expression correlate across languages and cultures. Journal of Cross-Cultural Psychology, 32, 1, 76-92 (Univ. Geneva, Dept. Psychol., 40 Bd Pont d'Arve, CH-1205 Geneva, Switzerland)

Schmeck, K. & Poustka, F. (2001) Temperament and disruptive behavior disorders. Psychopathology, 34, 3, 159-163 (Univ. Frankfurt, Dept. Child & Adolescent Psychiat., Deutschordenstr 50, D-60528 Frankfurt, Germany)

Schmitt, D.P., Couden, A. & Baker, M. (2001) The effects of sex and temporal context on feelings of romantic desire: An experimental evaluation of sexual strategies theory. Personality and Social Psychology Bulletin, 27, 7, 833-847 (Bradley Univ., Dept. Psychol., Peoria, IL 61625, USA)

Schwarzer, G. & Korell, M. (2001) Face processing in early childhood [in German]. Zeitschrift fuer Entwicklungspsychologie und Paedagogische Psychologie, 33, 2, 78-90 (Max Planck Gesell., Friedrich Miescher Lab., Spemannstr 34, D-72076 Tuebingen, Germany)

Sellen, D.W. (2001) Of what use is an evolutionary anthropology of weaning? Human Nature: An Interdisciplinary Biosocial Perspective, 12, 1, 1-7 (Emory Univ., Dept. Anthropol., Atlanta, GA 30322, USA)

Sellen, D.W. & Smay, D.B. (2001) Relationship between subsistence and age at weaning in 'preindustrial' societies. Human Nature: An Interdisciplinary Biosocial Perspective, 12, 1, 47-87 (see above)

Sherman, P.W. & Hash, G.A. (2001) Why vegetable recipes are not very spicy. Evolution and Human Behavior, 22, 3, 147-163 (Cornell Univ., Dept. Neurobiol. & Behav., Ithaca, NY 14853, USA)

Shipman, K.L. & Zeman, J. (2001) Socialization of children's emotion regulation in mother-child dyads: A developmental psychopathology perspective. Development and Psychopathology, 13, 2, 317-336 (Univ. Georgia, Dept. Psychol., Athens, GA 30602, USA)

Simion, F., Cassia, V.M., Turati, C. & Valenza, E. (2001) The origins of face perception: Specific versus non-specific mechanisms. Infant and Child Development, 10, 1-2, 59-65 (Univ. Padua, Dipartimento Psicol. Sviluppo & Socializzaz., Via Venezia 8, I-35131 Padua, Italy)

Simonoff, E. (2001) Gene-environment interplay in oppositional defiant and conduct disorder.

Child and Adolescent Psychiatric Clinics of North America, 10, 2, 351-374 (Munro Ctr., Dept. Child & Adolescent Psychiat., London SE1 3SS, England)

Slater, A. & Quinn, P.C. (2001) Face recognition in the newborn infant. Infant and Child Development, 10, 1-2, 21-24 (Univ. Exeter, Sch. Psychol., Exeter EX4 4QG, Devon, England)

Smith, R.B., Davidson, J. & Ball, P. (2001) Agerelated variations and sex differences in gender cleavage during middle childhood. Personal Relationships, 8, 2, 153-165 (Univ. Tasmania, Sch. Psychol., GPO Box 252-30, Hobart, Tas 7001, Australia)

Stevens, D., Charman, T. & Blair, R.J.R. (2001) Recognition of emotion in facial expressions and vocal tones in children with psychopathic tendencies. Journal of Genetic Psychology, 162, 2, 201-211 (Blair, R.J.R.: Univ. Coll. London, Inst. Cognit. Neurosci., London WC1H 0HT, England)

Stifter, C.A. & Corey, J.M. (2001) Vagal regulation and observed social behavior in infancy. Social Development, 10, 2, 189-201 (Penn State Univ., Dept. Human Dev. & Family Studies, 105 White Bldg, University Pk, PA 16802, USA)

Sydsjo, G., Wadsby, M. & Svedin, C.G. (2001) Psychosocial risk mothers: early mother-child interaction and behavioural disturbances in children at 8 years of age. Journal of Reproductive and Infant Psychology, 19, 2, 135-145 (Linkoping Univ. Hosp., Dept. Obstet. & Gynaecol., S-58185 Linkoping, Sweden)

Tan, U. & Tan, M. (2001) Testosterone and graspreflex differences in human neonates. Laterality, 6, 2, 181-192 (BlackSea Tech. Univ., Fac. Med., Trabzon, Turkey)

Toda, M. (2001) The history of human society as moulded by emotion: past, present and future. Social Science Information sur les sciences sociales, 40, 1, 153-176 (Chukyo Univ., Sch. Comp. & Cognit. Sci., 101 Tokodachi, Toyota 4700393, Japan)

Tomasello, M. (2001) Cultural transmission - A view from chimpanzees and human infants. Journal of Cross-Cultural Psychology, 32, 2, 135-

Tovee, M.J. & Cornelissen, P.L. (2001) Female and male perceptions of female physical attractiveness in front-view and profile. British Journal of Psychology, 92, Part 2, 391-402 (Univ. Newcastle, Dept. Psychol., Ridley Bldg, Newcastle Upon Tyne NE1 7RU, Tyne & Wear, England)

Van Honk, J., Tuiten, A., de Haan, E., van den Hout, M. & Stam, H. (2001) Attentional biases for angry faces: Relationships to trait anger and anxiety. Cognition and Emotion, 15, 3, 279-297 (Univ. Utrecht, Psychol. Lab., Heidelberglaan 2, NL-3584 CS Utrecht, Netherlands)

VanLaningham, J., Johnson, D.R. & Amato, P. (2001) Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. Social Forces, 79, 4, 1313-1341 (Univ. Nebraska, Dept. Sociol., Lincoln, NE 68588, USA)

Voyer, D., Nolan, C. & Voyer, S. (2000) The relation between experience and spatial performance in men and women. Sex Roles, 43, 11-12, 891-915 (Univ. New Brunswick, Dept. Psychol., Bag Serv 45444, Fredericton, NB E3B 6E4, Canada)

Waddell, J., Pepler, D. & Moore, T. (2001) Observations of sibling interactions in violent families. Journal of Community Psychology, 29, 3, 241-258 (Ryerson Polytech. Univ., Sch. Nursing, 350 Victoria St, Toronto, ON M5B 2K3, Canada)

Wild, B., Erb, M. & Bartels, M. (2001) Are emotions contagious? Evoked emotions while viewing emotionally expressive faces: quality, quantity, time course and gender differences. Psychiatry Research, 102, 2, 109-124 (Univ. Tuebingen, Dept. Psychiat., Oslanderstr 24, D-72076 Tuebingen, Germany)

Zalsman, G., Frisch, A., Bromberg, M., Gelernter, J., Michaelovsky, E., Campino, A., Erlich, Z., Tyano, S., Apter, A. & Weizman, A. (2001) Family-based association study of serotonin transporter promoter in suicidal adolescents: No association with suicidality but possible role in violence traits. American Journal of Medical Genetics, 105, 3, 239-245.