

# Human Ethology Newsletter

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## TWELFTH CONGRESS OF ISHE 3-7 AUGUST 1994 TORONTO, ONTARIO, CANADA

### Announcement

**VENUE:** Victoria University of the University of Toronto.

**CALL FOR PAPERS:** The program is being organized by Irwin Silverman, Linday Mealey, and Bill Charlesworth. Themes will be "Proximate Mechanisms" and "Cross-Cultural Studies." However, presentations in all areas of human ethology are welcome. Papers on similar topics will be grouped. Each talk will be scheduled for about 20 minutes, with an additional 10 minutes for questions. A slide projector and an overhead projector will be available; please make an advance request if you will need any other audio-visual equipment. Thumb tacks, staplers, and tape will be provided for mounting posters.

Abstracts should be in standard-size type, on 8.5 x 11 inch paper (21 x 28-29.5 cm), with a maximum of 250 words, not including the heading. The heading should comprise title, author(s), and affiliation(s) (with a mailing address), on separate lines. Note in the upper right hand corner of the page: (L) if you have a preference for lecture presentation, (P) if you prefer poster presentation, or (NP) for no preference. If you note a preference, indicate also by (Y) for "yes" and (N) for "no" whether or not you will be willing to present in your non-preferred format, if necessary. In the upper left

corner, please indicate any dates that you will be unable to present (note that the poster session is 3 August). Only one abstract may be submitted as senior author.

Include a copy of your abstract with your registration form. Send another copy by mail or fax to: Linda Mealey, Program Chair, Psychology Dept., College of St. Benedict, Collegetown, MN 56321 USA (fax 1-612-363-3202).

**ACCOMMODATIONS:** Dormitory rooms are available at \$60 per night, twin, and \$42 single, including breakfast (\$50 and \$35, respectively, for undergraduate students and persons 65 or older). All rates given in this **Announcement** are in Canadian funds, which are at about 75% of U.S. funds. To reserve space in the dormitory, use the brochure on Victoria University summer accommodation, enclosed.

Dormitory reservations must be received by 1 June for you to be assured a place. Allow two weeks for overseas air mail.

Alternative arrangements have been made at the **Journey's End Hotel**, 280 Bloor Street West, Toronto, Ontario, M5S 1V8, Canada (tel. 1-416-968-0010, fax 1-416-968-7765) for a rate of \$65 per night per room for two double or one queen-size bed(s), and at the **Park Plaza Hotel**, 4 Avenue Road, Toronto, Ontario, M5R 2E8, Canada (tel. 1-416-924-5471, fax 1-416-924-4933) for a rate of \$99 per night for two double or one king-size bed(s). The Journey's End is a comfortable hotel; the Park Plaza is a deluxe hotel. Both are less than a five-minute walk from the meeting rooms, and are air-conditioned, unlike the dormitory rooms. Contact the hotels directly. Identify yourself as a participant in the **ISHE Conference** when requesting the rate. Hotel reservations must be arranged before 1 May to assure space and rates.

**TRANSPORTATION:** From Pearson International Airport: The Airport Express bus leaves every 40 minutes from all terminals. Exit at the Yorkdale Subway Station. Take the subway south to the St. George stop for the hotels, and the Museum stop for the dormitory. The brochure map has directions from the Museum station. From the St. George stop, exit via St. George Street for the Journey's End, and Bedford Street for the Park Plaza.

Bus fare is \$6.50 (\$11.25 round trip). Subway fare is \$1.25. Alternatively, limousines or taxis will take you from the airport to the dormitory or hotels for approximately \$35.

From the downtown train and bus terminals: Take the University Subway north from both. Board at the Union Station stop from the train terminal, and at the Dundas Avenue stop from the bus terminal. Exit at the Museum stop for the dormitory and the St. George stop for hotels, and follow the directions above for each. Alternatively, taxis from either terminal will be about \$10.

By car: Exit on Spadina Avenue from the Gardiner Expressway. Drive north to Bloor Street and turn right. The Journey's End will appear shortly on your left. The Park Plaza will appear soon after, also on your left, on the northeast corner of Bloor and Avenue Road (see brochure map); turn left on Avenue Road for the entrance. For the dormitory, take the first right from Bloor Street after Avenue Road and follow the brochure map to the Margaret Addison Residence Reception.

**CONFERENCE FEES AND EVENTS:** The conference fee is \$300 (\$260 for students), due, with registration form and abstract (if any), by 15 May 1994. There will be a surcharge of \$45 for late registration.

The fee will include a wine and cheese reception on 3 August, a barbecue on 4 August, a banquet on 5 August, lunches on the four full days of the conference (3-6 August), all refreshments during the meetings, and the Book of Abstracts. Persons accompanying participants may pay individual fees for specific events (see Registration form, *infra*).

Fees may be paid by personal check from a Canadian or U.S. bank, with the latter

marked "pay in Canadian funds," or by International Money Order in Canadian funds from anywhere else. Checks should be payable to ISHE Conference. Full refunds will be given for cancellations before 1 July 1994. Thereafter, a \$100 deduction will be made.

Other events for the weekend of 6-7 August (e.g., a tour of Niagara Falls, dinner at the Royal Ontario Museum) are in planning.

Toronto offers many other attractions, so Congress participants may wish to extend their stay. Attractions include theatre (e.g., *Miss Saigon*, *Phantom of the Opera*), the Ontario Science Center, the University of Toronto Bookstore (which stocks some British books unavailable in the U.S.), and Blue Jays baseball (5-10 August).

**THE PROGRAM:** Registration will begin the evening of 2 August. Poster presentations will be part of the wine and cheese reception the evening of 3 August. The daily program will include four featured speakers:

3 August: Outgoing ISHE President Irenaus Eibl-Eibesfeldt will open the meeting with an overview of the field, entitled "Human Ethology: Its Distinctive Contributions, Past and Future."

4 August: Michael T. McGuire, editor-in-chief of *Ethology and Sociobiology*, will summarize his recent research in a presentation on "Environmental Contingencies and Physiological Change." A discussion period will follow.

5 August: ISHE Secretary Karl Grammer will discuss his current research project, "An Evolutionary Theory of Misapprehension: Body Talk between Strangers of the Opposite Sex." A discussion will follow.

6 August: The new ISHE President, Bill Charlesworth, will give his inaugural address on the topic "Human Ethology: A Good Idea for the Behavioral Sciences and Society."

In addition, Nancy Segal, ISHE Membership Chair, will conduct a symposium on methodology in human ethological research.

## Registration Form--1994 ISHE Conference

Name \_\_\_\_\_

Address \_\_\_\_\_

Institutional Affiliation \_\_\_\_\_

Phone: A.M. \_\_\_\_\_ P. M. \_\_\_\_\_

E-mail \_\_\_\_\_ Fax \_\_\_\_\_

Date of arrival \_\_\_\_\_ Departure \_\_\_\_\_

Residence in Toronto \_\_\_\_\_

Fees enclosed:

Registration (\$300; \$260 student) =	\$ _____
Guest(s) reception (\$15 x _____ guests) =	\$ _____
barbecue (\$25 x _____ guests) =	\$ _____
banquet (\$45 x _____ guests) =	\$ _____
lunches (\$15 per meal x _____ meals) =	\$ _____
Total enclosed	\$ _____ (Canadian funds)

Abstract: enclosed \_\_\_\_\_ (A copy must be sent to Linda Mealey, Program Chair, using the address or fax given in the Announcement on page 1. Questions about the program may also be directed to Linda by E-mail at LMEALEY@csbsju.edu or by phone at 1-612-363-3135.

**YOU MAY USE PERSONAL CHECKS FROM CANADIAN OR U.S. BANKS WITH THE LATTER MARKED, "PAY IN CANADIAN FUNDS." INTERNATIONAL MONEY ORDERS IN CANADIAN FUNDS ARE REQUIRED FROM ANYWHERE ELSE. CHECK OR MONEY ORDER SHOULD BE PAYABLE TO "ISHE CONFERENCE."**

**SEND REGISTRATION FORM, PAYMENT, AND ONE COPY OF ABSTRACT TO: IRWIN SILVERMAN, PSYCHOLOGY DEPT., YORK UNIVERSITY, 4700 KEELE STREET, NORTH YORK, ONTARIO, CANADA, M3J 1P3, TO ARRIVE BEFORE 15 MAY.**

**FOR QUESTIONS, IRWIN'S PHONE IS 1-416-736-5122 OR 1-416-690-4981; FAX IS 1-416-736-5814L E-MAIL IS ISILV@VM1.YORKU.CA**

**YOU WILL RECEIVE CONFIRMATION OF YOUR REGISTRATION AND A PROGRAM OUTLINE PRIOR TO 1 JULY.**

# SOCIETY NEWS

## MEMBERSHIP DIRECTORY

Everyone who has renewed his or her membership to ISHE for 1994 will be listed in the Membership Directory soon to be prepared. If you have not yet paid your dues, please complete the form on the last page. If your dues are paid up, please complete the form on the second-last page (or a photocopy thereof). If you do not complete this form, the same information will be used that appeared in the last directory. If you do not pay your dues promptly, your name will be excluded from the directory. The last calendar year through which you are paid is mentioned on your address label.

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## TREASURER'S REPORT

Herman Dienske, assisted by Nancy Segal, prepared this financial report for 1992 and 1993; all figures are in US dollars. He recommends that membership dues not be raised at this time because we have maintained quite fair reserves. As can be seen from these figures, the expense of the newsletter has stayed at less than \$3000 per year despite an increase in length to 20 pages. Income has stayed about the same too, judging by the constancy of the number of paid members, which has been about 320 for the past several years.

<b>Income 1992</b>	
Balance 1 Jan 92	NL 3253 US 164
Interest	NL 61
Dues	NL 1878 US 2281
Wayne State donation	US 500
<b>Total income</b>	<b>8 1 3 7</b>
(a)	

<b>Expenses 1992</b>	
Newsletter	Mar 698 June 692 Sept 540 Dec 598

Conference attendance, editor	1000
<b>Total expenses</b>	<b>3 5 2 8</b>
(b)	
<b>Balance 31 Dec 1992</b>	<b>5 6 0 9</b>
(a-b)	
<b>Income 1993</b>	
Balance 1 Jan 1993	NL 3353 US 2256
Interest	NL 50
Dues (until 18 Nov)	NL 689 US 1772
Transfer from NL to US	1839
<b>Total income</b>	<b>9 9 5 9</b>
(c)	
<b>Expenses 1993</b>	
Newsletter	Mar 631 June 665 Sept 588 Dec 629
Conference attendance, editor	400
Newsletter promotion	35
Transfer from NL to US	1839
<b>Total expenses</b>	<b>4 7 8 7</b>
(d)	
Balance 18 Nov 1993	NL 4092
30 Sept 1993	US 1080
<b>Total balance</b>	<b>5 1 7 2</b> (c-d)

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## CRIMEAN CONFERENCE

By Detlev W. Plooj, Director Emeritus, Max Planck Institute for Psychiatry, Kraepelinstrasse 2, 8000 München, Germany

In June 1993 I attended an international conference on "The Biological Roots of Human Behaviour" in the Crimea. The meeting focused on the evolution and ethology of normal and pathological behavior.

The meetings took place in the open air in the breathtaking countryside, creating a delightful atmosphere. There were an abstracts book in English and a skillful interpreter who pitched in when necessary.

Included were 32 presentations delivered by psychiatrists, psychologists, clinical neurophysiologists, anthropologists and biologists from the Crimea, Moscow, St. Petersburg and Latvia. Among the topics discussed from an ethological perspective were: nonverbal behavior, mother-infant interactions, agonistic behavior in various diseases, transitions from instinctive behavior to habit disorders, and deviations in sexual behavior. Some authors also addressed the question of how ethology may be useful in psychotherapy.

The Crimean group presented original work and inspiring concepts within the framework of evolutionary and ethological psychobiology and psychopathology. The participants were rewarded by the content of the presentations, the intellectual spirit of the meeting, the beauty of the Black Sea area, and the warm hospitality of the organizers, Victor Samohvalov, Vitally Egorov and their colleagues. The next Crimean Conference will be held 26-30, 1994 (see December HEN).

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## London Conference on Evolution and the Human Sciences

By Frans Roes, Lauriergracht 127<sup>II</sup>, 1016 RK  
Amsterdam, The Netherlands

This conference, held from 24th to 26th June 1993, was organised by the London School of Economics and the Times Higher Education Supplement. Financial assistance came from several other organisations, including the Home Office and Toyota. Student volunteers served coffee and seemed happy to make everything run smoothly. The conference was completely sold out. There were some 30 speakers in plenary sessions, among them several 'evolutionary celebrities', about the same number of contributors to the poster

session, and again roughly the same number of speakers in parallel symposia.

To give a more detailed account of my impressions, I would need the total space of some three to four Human Ethology Newsletters. As Glenn Weisfeld kindly declined this offer, I will concentrate on the beginning and the end of the conference.

The first speakers were Martin Daly and Margo Wilson. I expected a sinister-looking couple, all dressed in black, and quite aware of life's seriousness. Instead, the word 'charming' might be the right word to describe them. During the lecture, they playfully teased one another, and the presentation was very professional and easy-going. Their subject, homicide, might be one of the most convincing and accessible chapters of sociobiology. It draws anyone's attention, and offers the possibility of constantly switching between theory and empirical findings.

I stayed in a student hotel, and early in the morning, while eating fried fish, tomatoes and beans, I could join heated philosophical discussions about humans, consciousness, and evolution-- a nice way to enjoy your breakfast.

To me, the subject of the Saturday morning conference session ("Darwinian medicine") was completely new and very interesting. I saw George Williams, grand old man of evolutionary theory who resembles Abraham Lincoln, and witnessed how Paul Ewald threatened the first rows of the audience with a sneeze, while speaking about the evolution of virulence. During a parallel symposium, Alex Walter told the listeners that he had found the Westermarck Effect in Morocco, and that this effect turned out to be stronger for women than for men, as was earlier predicted by, among others, van den Berghe.

Someone told me that concluding discussions are always disappointing, and the closure of this conference could not disprove this proposition. The old issue of individual versus group selection was reiterated, as though no conclusion has ever been reached on this. If I am well informed, modern evolutionary biologists reject the idea that natural selection operates through group selection. Of course, it should always be possible to attack this position, but why at the very end of the confe-

rence, when everybody is tired and wants to go home? And why not a written attack on those who specialized in this subject, like Alexander, Hamilton, Trivers or Williams?

Then someone in the balcony delivered an endless statement about the subtle but apparently very important differences between 'evolutionary psychology' and Darwinian anthropology'. (Europeans hardly know that two such kinds of sociobiology exist). It reminded me of the time when I studied sociology. Marxist fractions would give long statements, insisting that Marxists belonging to all other fractions were in reality not Marxist at all.

Given the title of the conference, I expected something else as a conclusion. Let me suggest some broad issues that might have been addressed at this time. In The Netherlands, for instance, I believe there is not a single sociology teacher who thinks evolutionarily. But when I look at my old sociology books, they seem hopelessly outdated *because of* the advances sociobiology has made. Yet evolutionary theory is ignored by sociologists. This is remarkable, considering the exceptional tolerance sociologists have with regard to the scientific standards of their own theories. No matter how naive these theories are, anything goes. Yet sociobiology is taboo. Why do the human sciences generally reject Darwinism? Do sociobiologists perhaps present their ideas and findings in the wrong way? Or is it simply a matter of time before their ideas will be known more widely?

Though the concluding discussion did not help me to answer these kinds of questions, as a whole I liked this conference very much. London is almost ideally situated between Europe and America, so why not have such a conference again?

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## GRUTER INSTITUTE PUBLICATIONS

The Gruter Institute for Law and Behavioral Research has produced the following publications:

### Newsletter Submissions

Anything that might be of interest to ISHE members is 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 appropriate book review editor (the British editor covers English-language books published in Europe). Submission should be in English, on paper and, if possible, on diskette. 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.

No material in the newsletter is selected by critical peer review and thus material is presented only to foster free and creative exchange of (even outrageous) ideas between 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 policy implications that might be inferred from them.

Masters, R. D. *Beyond Relativism: Science and Human Values*. University Press of New England, 23 S. Main St., Hanover, NH 03755 USA.

Masters, R. D., and Gruter, M. (Eds.). *The Sense of Justice: An Inquiry into the Biological Foundations of Law* (1992). Sage Publications, Newbury Park, CA, USA.

Gruter, M., and Bohannon, P. (Eds.), *Law, Biology and Culture*, 2nd edition (1992). McGraw-Hill Primis. Needs Reviewer.

Masters, R. D. (Ed.). *Biology, Law and Human Social Behavior: An Interdisciplinary Reader* (1992). McGraw-Hill Primis.

Masters, R. D., and McGuire, M. T. (Eds.). *The Neurotransmitter Revolution* (1993). Southern Illinois University Press, Carbondale, IL. Needs Reviewer.

McGuire, M. T. (Ed.). *Human Nature and the New Europe* (1993). Westview Press, Boulder, CO, USA. Needs Reviewer.

Gruter, M. *Law and the Mind: Biological Origins of Human Behavior* (1991). Sage Publications, Newbury Park, CA, USA.

Smith, B., and Danilenko, G. (Eds.). *Law and Democracy in the New Russia* (1993). The Brookings Institution Press, Washington, DC, USA.

McGuire, M. T. (Ed.). *Der Faktor Mensch im neuen Europa* (1993). Luchterhand Verlag, Kriftel, Germany. Needs Reviewer.

McGuire, M. T., and Rehbindler, M. (Eds.). *Biology, Law and the Environment*. In Schriftenreihe zur Rechtssoziologie und Rechtstatsachenforschung, Band 73 (1993) Duncker & Humblot Verlag, Berlin, Germany.

Gruter, M. *Rechtsverhalten - Biologische Grundlagen mit Beispielen aus dem Familien- und Umweltrecht* (1993) Verlag Dr. Otto Schmidt, Köln, Germany.

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## PARENTS' PREFERENCES FOR THEIR OFFSPRING'S SEX: THE INFLUENCE OF PATRI- OR MATRILocalISM

By Frans Roes, Lauriergracht 127<sup>II</sup>, 1016 RK Amsterdam, The Netherlands

The sex ratio is the number of males in a population per hundred females. Darwin himself noticed that in most species at birth the sex ratio is about 100:100; that is, approximately as many males as females are born. However, he was unable to explain this phenomenon.

Sir Ronald Fisher solved the problem in 1930, as Trivers puts it, with one stroke. Suppose there are ten times as many females as males. A female producing a son will then have ten times as many grandchildren as a female producing a daughter. This means that the genetical instruction: "produce males" will spread rapidly through the population, and after some time there will even be more males than females. But then selection will start operating in the opposite direction, because reproductive success will now best be served by

producing daughters, etc. Eventually the sex ratio will stabilize at around 100:100.

There are, however, several exceptions. In a species where it costs the parent(s) twice as much to produce a son as a daughter, twice as many females are produced, so the total investment in the two sexes remains equal. Parental investment is all the energy spent by parents to produce and rear offspring.

In polygynous species, where the variance in male reproductive success is greatest, parents are expected to be 'choosier' with regard to investment in sons: "The expected strategy is to start more males and save only those most likely to be successful" (Alexander 1979: 33).

The human species seems to fit this pattern well: Humans are often classified as a mildly polygynous species, and indeed, more males than females are conceived, and the mortality of males is higher than that of females, starting even before birth. The human sex ratio *in utero* drops from about 120:100 to about 106:100.

As total investment in both sexes is supposed to be equal (and independent of the breeding system--monogamy, polygyny or other), the cost of the males that die during the period of parental investment contributes to the cost of the males that survive to the end of parental investment. Human males that survive to the end of parental investment may for that reason be more 'expensive' for parents to produce than females at the same stage.

One would therefore expect most human populations to have a female-biased sex ratio at the end of parental investment. But what is the end of parental investment in humans? Parental care may sometimes continue until offspring have themselves completed their reproductive lives, at least in terms of actual production of offspring.

Does the human sex ratio vary at all across populations and, if so, why? Trivers draws attention to the possible influence of residency patterns. In his 1985 book, he suggests (pp. 295f) that in patrilocal, patrilineal societies, males may be 'cheaper' to produce than females, while in matrilocal, matrilineal

societies the reverse may be the case.

In a patrilocal society males remain in their natal group after marriage, and therefore they can make a return investment. For instance, they can defend and help their parents and other kin, who will have greater reproductive success. This return investment of the son reduces the cost for the parents to produce a male. But in the same patrilocal society, females leave their natal group after marriage, so they can no longer support their parents and other kin. This makes it expensive for parents to produce daughters in a patrilocal society.

In matrilocal societies it is the other way around; females may be 'cheaper' for their parents to produce than males. Trivers gives some examples supporting this idea, and he finally remarks that "so far as I know, no one has attempted to demonstrate carefully a correlation between residency patterns and the primary sex ratio in human populations".

Although I have no data on primary sex ratios, I found support for the idea that parents *prefer* offspring of the sex that remains in the natal group:

Data from the *Standard Sample* were analysed with the help of SPSS. The *Standard Sample* comprises 186 mainly non-Western societies, with data on over a thousand variables. The societies are mostly pre-industrial, and chosen to represent the known cultural types of the world from among the societies in the *Ethnographic Atlas* (Murdock and White, 1986).

Five variables were chosen as the independent variables, i.e., as variables that indicate whether the bride or groom leaves the natal group. These were: Marital Residence (patrilocal or matrilocal), Descent (patrilineal or matrilineal), Transfer of Residence after First Year, Relative Distance Moved by Bride and Groom, and Rule of Descent. When cross-tabulated with each other, all correlate very significantly ( $p < .0001$ ), which is no surprise.

The dependent variable is Stated Preference for Children of One Sex. When cross-tabulated with the independent variables, all relations were found to be significant in the expected direction. The levels of significance

range from  $p < .01$  to  $p < .0003$ . However, statistical convention prescribes that the expected frequencies may only be less than 5 in 20% of the cells. In my cross-tabulations, the expected frequencies were mostly below 5 in 50% of the cells, but the E.F. was never below 1, which is considered to be the absolute minimum.

These data suggest that where the bride leaves her natal group, there indeed a preference for sons. Where the groom leaves, daughters are preferred.

On small islands, the sex ratio at birth seems to be close to 100:100. This also seems logical: Neither bride nor groom can disperse widely, so males are not 'cheaper' to produce than females as they are in patrilocal societies.

Several researchers have suggested that the widespread neglect and infanticide of daughters may reflect adaptive sex allocation in the context of the Trivers-Willard (1973) hypothesis. With the greater variance of male reproductive success in mind, this hypothesis states that rich parents invest in sons, while poor parents prefer daughters. However, in a theoretical article, Anderson and Crawford (1993) question if this hypothesis is a sufficient explanation for female infanticide.

Perhaps female infanticide results from several forces simultaneously operating in the same direction:

(a) Parents in (some segment of) some society prefer sons because of sex allocation in the context of the Trivers-Willard hypothesis.

(b) Parents prefer sons because at marriage a dowry has to be paid. (Gaulin and Boster [1990] found very strong support for their idea that dowry results from competition among women for attractive men in monogamous, stratified societies.) However, in the *Standard Sample* I found no significant relation between marriage payments (brideprice or dowry) and parental preference for offspring of one sex.

(c) Parents prefer sons because their society is patrilocal, and sons therefore are more 'profitable' than daughters in terms of inclusive fitness--see above. As most human societies are patrilocal (for an evolutionary



explanation, see van den Berghe, 1983:98), this might explain both the common male-biased sex ratio at birth and the widespread occurrence of female infanticide.

If these forces simultaneously operate in the opposite direction, one would expect male infanticide. For the time being, however, this is only speculative.

#### References

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Watson, J. S.(1992). On artificially selecting for the sex ratio. *Ethology and Sociobiology*, 13 : 1-2.

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## BOOK REVIEWS

### *The Sexual Brain*

By Simon LeVay. The MIT Press, 55 Hayward St., Cambridge, MA 02142 USA, and London, England. 1993, \$22.50 (hdbk.).

Reviewed by Linda Mealey, Dept. of Psychology, St. John's University, Collegeville, MN 56321 USA.

In his December review of this book, David Hays invited commentary from other readers with a more specialized background. As the North American Book Review Editor and a great fan of this little book, I would like not only to second David's favorable review but also to suggest that in six years this may be considered one of the top ten biology-related books of the nineties.

In fewer than 150 pages, LeVay summarizes our current knowledge of the biological bases of sexual behavior, and somehow manages to do so in a way that is both accessible to the educated lay reader and yet exciting for the expert. When I read the first two chapters ("Genes, Environment, and Sex" and "The Evolution of Sex and Sexual Behavior"), I thought LeVay might fall into the trap that many authors do when they write in a field somewhat outside their expertise--tediously rehashing some well-worn ideas as if they were their own, brand new insights. Refreshingly, this did not happen. After providing a brief genetic and evolutionary (ultimate) context, LeVay jumps right into cutting-edge research on the neurophysiological and neurochemical mechanisms of sexuality.

LeVay cites studies from both the human and the nonhuman literature, but always with an eye for understanding human sex and sex differences. The book, not surprisingly, culminates in speculations derived from his own recent, widely publicized findings, that in homosexual males, one of the hypothalamic nuclei involved in the regulation of male sexual behavior (one that is typically sexually dimorphic in size) resembles that of heterosexual females. He also discusses the fascinating and controversial work of Gunter Dörner on the role of prenatal

stress in influencing sexual orientation, and the research of Michael Bailey, James Weinrich, John Money, and many others.

That LeVay does so much in so few words makes this book a "must read" for anyone interested in human sexuality. It is also short enough to use as supplementary reading in a sexuality or biopsychology course, and includes a finely distilled glossary and a bibliography. Get down to your local bookstore and get yourself a copy!

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### *Theories of Rape: Inquiries into the Causes of Sexual Aggression*

By Lee Ellis. New York: Hemisphere Publishing Corp., 1989 (\$37.50 hdbk.).

Reviewed by Vern L. Bullough, SUNY Professor Emeritus, 17434 Mayall St., Northridge, CA 91325 USA.

Why do men rape? Ellis examines different ways of explaining the causes of rape, grouping them under three conflicting theories: feminist, social learning, and evolutionary. The feminist theory holds rape to be the result of long and deep-rooted social traditions in which males have dominated nearly all important political and economic activity. Rape thus becomes a male response to the social inequity between the sexes. The social learning theory differs from the feminist in that it emphasizes how sexuality and violence (especially toward women) can become fused, leading to favorable attitudes toward violence. The evolutionary theory holds that there are rape promoting genes contributing substantially to the persistence of such behavior.

Each of these theories is then examined by subjecting them to a series of hypotheses, testing their strengths and weaknesses. From this, Ellis concludes that none of the theories clearly surpasses the others in predicting all that is known about rape. Each theory contributes significantly to the understanding of this phenomenon.

He then argues for a fourth theory, which he calls the synthesized theory. This incorporates elements of the three others, but relies mainly on the evolutionary one. He concludes that (1) two drives are involved, the sex drive and a drive to possess and control; (2) the actual techniques involved in committing rape are largely learned, although males have different propensities for learning them; (3) males have been favored by natural selection for readily learning methods of procuring multiple sex partners, these methods ranging from deception to force; and (4) various tendencies to rape result from exposing the brain to various high regimens of androgens.

The key to his argument is the assumption that genetic factors help control the degree to which the brain is exposed to androgens, and that such hormonal exposure produces variations in the tendency to commit rape. He concludes by arguing that even if his synthesized theory is ultimately found somewhat defective, it should contribute to a better understanding of rape.

One of the most valuable aspects of the book, whether one accepts or rejects the theories presented, is the 60-page bibliography of recent works on the subject of rape. There is also a helpful index.

**Editor's Note:** Dr. Bullough is currently affiliated with California State University in Northridge.

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### *Father-Child Relations: Cultural and Biological Contexts*

Edited by Barry S. Hewlett. Aldine de Gruyter, 200 Saw Mill River Rd., Hawthorne, NY 10532 USA (1992) (\$59.95 hdbk.).

Reviewed by Wade C. Mackey, 9713 Saigon Dr., El Paso, TX 79925 USA.

This book is a collection of well-focused ethnographies of father-child interactions in 21 distinct communities plus a survey of primate paternal behavior. The goal of the book is "to elucidate both the diversities and commonalities in the father's role" (p. xiii). The book is divided into two sections: (I) the

father's role is examined in evolutionary or biosocial frameworks, and (II) the father's role is analyzed in symbolic and cultural contexts.

The second section is good. Complementing Lamb's (1987) work, the various contributors detail how various cultures sculpt father-child expectations and interactions. Anyone, at any level, who is interested in the subject of fatherhood would be well advised, indeed, to read these eight chapters.

Twelve of the 16 chapters of the book include empirical data that the reader can use to evaluate the author's conclusions as well as to formulate and test alternative hypotheses. A wide swath of the human experience is represented: foragers, horticulturists, agricultural and non-agricultural villagers, and urbanites. The ethnographers visited the four corners of our globe: Paraguay, Venezuela, the Caribbean, Amazonia, Oceania, Australia, Kenya, the US, Belize, Nepal, Andaman Island, Malaysia, the Philippines, and China.

A recurring theme across the disparate cultures is the systematic funneling of adult men to their children. Not only are his food and other resources shared with his children, but also his time and affection. A strong point of this ethnography is the analyzed linkages between the form and character of father-child sharing in a particular case and the local subsistence technique and ecology. Accordingly, this collection is a welcome addition to the literature on the still-underreported father figure.

The first section of the book, which attempts to view fatherhood from an evolutionary perspective, is not as enlightening. However, an effort to address questions of human phylogeny is especially relevant to us ethologists.

Despite the editor's avowal to the contrary, there is virtually no integration of presented theories and data with evolutionary theory. Fifteen of the 16 chapters are clearly ethnographies without any relation to Darwinism. A purely *tabula rasa* anthropological/sociological paradigm could account for every cultural pattern that the authors have profiled.

Accounting for cross-cultural consistencies is another matter. It is difficult to attribute behavioral consistencies across cultures to different cultural bases, i.e., a constant cannot be explained by a variable. In his introduction, Hewlett writes: "[in all parts of the world) fathers provide less direct caregiving than mothers...fathers are expected to provide at least some economic support for their children, and fathers are expected to support the mother economically and/or emotionally" (p. xii). These themes are never again mentioned, much less examined with regard to *why* they would exist at all. Why do men invariably nurture and play with their young, albeit generally less than women? Why do men share food and other resources with their children? Ethological approaches to such issues are not discussed.

The first chapter, dealing with nonhuman primates (Smuts and Gubernick), surmises that men's care and protection of their young may represent more a mating and courtship activity than a parental one. The authors are resurrecting Harlow's (1971:63f) thesis (based on the rhesus macaque) that the man-child relationship is a derivative of the woman-child bond and the man-woman bond, i.e., women like children and men like women, hence men are found around children. The rest of Hewlett's book, however, clearly negates this surmise.

Another evolutionary explanation for men's parental care likewise is not mentioned. Male canids--wolves, coyotes, African hunting dogs, foxes, jackals--play with their young and share food with them. As hunting became a key element in human evolution, convergent evolution with the canids seems a reasonable hypothesis to account for our own paternal care (King, 1980; Thompson, 1978 inter alia).

Thus, the term "biosocial" in the title is misleading, especially for newcomers to ethology who are trying to grasp what Darwin was about and who the human ethologists may be. Tinbergen's quartet of explanatory levels would have been a useful addendum to the book's first section.

Finally, a plea to Aldine de Gruyter: statistical analysis is not a mere overlay to the behavioral sciences. Quantitative analysis helps separate rhetoric from science. The series

tends to be somewhat cavalier with its statistics, e.g., "significance" does not come in degrees; hence "highly significant" (p. 42) is meaningless, and  $p < .10$  is not an acceptable level of significance (pp. 72, 100). Pearson's  $r$  can only pick up linear relationships, not curvilinear ones (p. 102). Anything less than 50% cannot be a majority (p. 144). And what is meant by "These differences are small and insignificant, but they could bias the results" (p. 120)?

In sum, this book is a most welcome addition to "fathering," but largely ignores *Homo's* evolutionary heritage and deals too casually with quantitative analysis.

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## Human Universals

By Donald E. Brown Temple University Press, Broad and Oxford Streets, Philadelphia, PA 19122 USA, 1991, \$34.95 (hdbk.).

Reviewed by John Money and William P. Wang, Dept. of Psychiatry and Behavioral Sciences, The Johns Hopkins Hospital and University, Baltimore, MD 21205 USA

In early 20th century American anthropology the nature versus nurture debate became defined as the biology versus culture-pattern debate. For many cultural anthropologists, biology became a dirty word. As a junior anthropologist, Donald E. Brown confesses, he was a cultural relativist. Later,

partly by losing a bet to his colleague Donald Symons and partly by the publication of several books refuting long-accepted cultural anthropological works, Brown became convinced of the error of his ways. That led eventually to the writing of this book. What brought about his conversion was the concept of universals, namely that there are some features of "humanity and human affairs" that are manifest in all cultures and across all times.

The concept of universals opens the door from anthropology into biology, which is anathema to anthropologists of the social constructionist persuasion that is currently in vogue as today's version of cultural relativism. Even the most rabid social constructionists do not deny, however, some phylogenetically determined universals, for example that human beings in all societies have heads that have mouths through which they talk and eat, orifices through which they urinate and defecate, and in the case of women, an orifice through which they menstruate and give birth, and so on. Culture defines the circumstances of time, place, and person for the performance of these universals.

The book begins with a refutation of such noted cultural anthropologists of the twentieth century as Margaret Mead, Benjamin Whorf, and Bronislaw Malinowski. These pillars of cultural relativism have been challenged and, on some counts, refuted by later anthropological scholars. Other scholars have published studies of color perception (Brent Berlin and Paul Kay) and facial expressions (Paul Ekman) that favor not cultural relativism but cultural universals. Brown cites their findings also.

In Chapter 2, "Conceptualizing, Defining, and Demonstrating Universals," Brown explains what he means by universals. Biological universals, *per se*, are rejected in favor of biology on which cultural elaborations are superimposed. Nonetheless, the chapter gives an uneven rather than a lucid explanation of what constitutes a universal. The explanation might have greatly benefited from the ethological concepts of releaser stimulus, recognition response, and released action pattern, all three of which are phylogenetically prescribed, *i.e.*, they belong to us as members of our species, not as members of a specific cultural group (Money, 1993: 27).

Brown might also have considered universals not as universals of behavior, or of the culture pattern, but as universal exigencies — but he does not refer to Money's exigency theory (1986). Nonetheless, Chapter 3 skillfully outlines the history of the study of universals. This chapter, noteworthy for its mention of the early progenitors of the study of universals, Franz Boas, A.L. Kroeber, and Clark Wissler, is recommended to sociobiologists and ethologists who wish to broaden their understanding of anthropology as a means of gaining insight into their own discipline.

Chapter 4, "Explaining Universals," focuses on the question of what makes a universal. Brown enumerates eleven possible explanatory theories. He gives support predominantly to evolutionary theory but with the proviso that pitfalls abound. One pitfall is the tendency in social science to apply selection and adaptation to the group rather than the individual. Other credible theories include diffusion, cultural recognition of biology, logical extension of biology, and archoses.

Of these, the concept of archoses as developed by Weston LaBarre is perhaps the most intriguing. Archoses are ancient misperceptions about human biology which, through successive generations, become fixed and widely, if not universally, accepted. For example, the misperception that the spinal fluid, the brain, and semen are or comprise life-giving substances leads to various behaviors such as semen-conserving and headhunting. At present, archoses are theoretically of interest but lacking in sufficient supportive empirical data. At the end of the chapter, Brown concludes that no explanation of universals is particularly satisfying and that more attention needs to be given to matching the theoretical basis of universals with ethnographic data.

Chapter 5, beginning with Edward Westermarck and continuing to the present day, serves as a useful compendium and history of research on the sources, both biological and cultural, of incest avoidance and the human incest taboo. This chapter supplements the examples in Chapter One of cultural relativism and its refutation.

Chapter 6, "The Universal People," (UP) is a description of fictitious people who manifest features of behavior, thought,

language, emotion, culture and society common to all humans. It draws on the work of George Murdock, Lionel Tiger, Robin Fox, and Charles Hockett, all of whom have compiled lists of universals and theorized on the subject.

A recent special issue of *Science* (1993), focusing on careers in science, has one section titled "Anthropology: Nature-Culture Battleground." It describes the state of current anthropology as being still fractured into the cultural and the biological factions. Neither side is familiar with or trusting of the methodology of the other, and neither side seems able to reconcile with the other.

Brown's work aims at, but does not fully achieve a reconciliation. Whereas it appropriates data from cultural anthropology in support of biologically-based anthropological theory, at the same time it does not totally refute cultural relativism. It establishes a hierarchy of what is fundamental about all humans and places "human nature and, hence, the human mind" at the pinnacle. To prevent the divided branches of anthropology from going their separate ways, Brown postulates a biology of human universals applicable to the study of cultural anthropology and human nature. In its eagerness to establish the relevance of biological universals, this book comes close to short-changing the specifics of authentic cultural relativism without necessarily satisfying the adherents of biological determinism.

The goal of integrating biological and cultural anthropology, nature and nurture, deserves continuing scholarly attention. Their integration will enrich not only anthropology but also human ethology and sociobiology by attempting to resolve the adversarialism of nature versus nurture. This book records the intellectual odyssey of Brown's personal search for just such a resolution. It will be of interest to all who are likewise challenged.

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## ANNOUNCEMENTS

### *Gruter Institute Faculty Seminars*

The second annual Faculty Seminar on Biological Perspectives in the Social Sciences will take place at Dartmouth College 13-19 August 1994. Visiting lecturers will represent diverse fields in the biological and social sciences. Directed by ISHE members Roger D. Masters and Michael T. McGuire, the seminar is limited to 40 participants. The preliminary schedule includes Robert Trivers, Miguel Marin-Padilla, Lionel Tiger, Helen Fisher, Robert Frank, E. Donald Elliott, and Edward Berger. Some grants to cover expenses are available to faculty and graduate students. For applications and information, contact Ms. Kimberly Watson, Nelson A. Rockefeller Center for the Social Sciences, 6082 Rockefeller Hall, Dartmouth College, Hanover, NH 03755-3514 USA, tel. 1-603-646-3874, fax 1-603-646-1329.

The third faculty seminar on Applications of Biology in the Study of Law will take place at Squaw Valley, California 15-20 June 1994, co-sponsored by the University of Washington Law School. William Rodgers, Jr. will direct it. Faculty will include Robert Cooter, Frans de Waal, E. Donald , Robert Frank, Gordon Getty, Roger Masters, Michael McGuire, Gordon Orians, Lionel Tiger, and Robert Trivers. For an application, contact Gerti Dieker, Gruter Institute, 158 Goya Rd., Portola Valley, CA 94028 USA, tel. 1-415-854-1191, fax 1-415-854-1192.

### *Delwart Foundation Award*

The 1993 award in Chemical Communication was won by Martine Perret and Alain Schilling (CNRSS Brunoy-France) for their studies of chemical signals in the social behavior of the lemur *Microcebus murinus*.

The \$10,000 prize of the Jean-Marie Delwart Foundation in Human Ethology and Cultural Anthropology for 1994 will be announced in December. The prize will be awarded for a study, either planned or in progress, dealing with a European society considered in its ethical dimension apart from any ideological consideration. Submissions are due 1 July. For information, contact Raphaëlle Hollander, Fondation Jean-Marie Delwart, Château de Pellenberg, B-3212 Pellenberg, Belgium.

### *International Primatological Society*

The 16th Congress of the International Primatological Society will be held in Madison, Wisconsin, USA in 1996, hosted by the Harlow Primate Research Center there. For information, contact the Director of the Center, Dr. John Hearn.

### *HBES E-mail Address*

Gene Mesher has started an E-mail address for the Human Behavior and Evolution Society. The correct address is gmesher@ccit.arizona.edu, according to the *ASCAP Newsletter*; a slightly different one was given in the last *Human Ethology Newsletter*. Gene reportedly is willing to put anyone on the list, HBES member or not; write to him and see.

### *HUMEVO*

Another list is HUMEVO, prepared by the International Institute for Human Evolutionary Research. The list address is humevo@gwuvm.bitnet. For information, contact ciboaz@weitzmann.weitzmann.ac.il (Noel Boaz).

### ***Biological Anthropology Institute***

A State-of-the-Science Summer Institute in Biological Anthropology will be held 6-11 June 1994 in Virginia. Contact: IHER, GWU, 20101 Academic Way, Ashburn, VA 22011 USA, tel., 1-703-729-8350, fax 1-703-729-8351, e-mail IHER@GWUVM.

### **ISRA**

The International Society for Research on Aggression will hold its 11th meeting in Delray Beach, Florida 6-19 July 1994. Contact Prof. Deborah Richardson, Dept. of Psychology, Florida Atlantic University, Boca Raton, FL 33431 USA, e-mail [deborah@soc.psy.fau.edu](mailto:deborah@soc.psy.fau.edu).

### ***Ethology and Sociobiology***

This journal has a new Associate Editor, Martin Daly. There are no current plans to change the name of the journal, or to replace Michael McGuire as Editor-in-Chief.

### ***Biosociality of the Perinatal Period***

A colloquium on "Conception, naissance et petite enfance, aspects biosociaux" will take place 21-24 September 1994 in Marrakech, Morocco. Contact Prof. Emile Crognier, C.N.R.S., U.R. 221, Pavillon de Lanfant, 346 route des Alpes, 13100 Aix-en-Provence, France, tel. 33-42-23-57-94, fax 33-42-21-13-31.

### ***European Anthropological Association***

The tenth congress of the EAA is scheduled for 19-22 August 1996 in Brussels, Belgium. Contact Prof. C. Suzanne and Dr. R. Hauspie, Free University of Brussels, Lab. Anthropogenetics, Pleinlaan 2, 1050 Bruxelles, Belgium, tel. 32-2-641-34-26, fax 32-2-641-33-89, e-mail [rhauspie@vnet3.vub.ac.be](mailto:rhauspie@vnet3.vub.ac.be). For information on the 1994 congress, see Sept. HEN.

### ***Our Man in Washington***

ISHE member Brian Gladue, Dept. of Psychology, North Dakota State University, has been appointed the first Senior Scientist by the American Psychological Association. His term extends through 1995. Brian, who directs his university's Program in Human Sexuality, will develop contacts with scientists at funding agencies, and then work with the agencies and APA staff to create science policy projects. Another role is facilitating contacts between APA and academic psychologists. One of this current projects is to facilitate preparation of a review paper to be submitted to a major journal on the current state and applied potential of human ethological research. He envisions such an article to be useful for gaining more financial support of ethological research.

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## **CURRENT LITERATURE**

### **March 1994**

**Interested in possibly reviewing one of the books below or some other suitable book? Please contact the appropriate book review editor (see Editorial Staff box).**

Abell, T. D. (1994). Methodological challenges in the study of fetal growth. *Human Nature*, 5, 23-67. (Dept. of Anthropology, Univ. of Oklahoma, Norman, OK 73019 USA)

Adler, N. F. R. (1993). *International Handbook on Gender Roles*. Greenwood Publishing, 88 Post Rd. West, Westport, CT 06881 USA, \$95 (hdbk.).

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