# **Human Ethology Newsletter**

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#### Contents

#### Society matters

1

#### **Mini Communications**

Positive, Assortative Mating and the Human Hemochorial Placenta, by Wenda R.Trevathan / From an Ethologist's Journal, by William T.Bailey.

#### **Book Reviews**

The Inheralded Majority: Contemporary Women as Mothers, reviewed by William T.Bailey / Ostracism: A Social and Biological Phenomenon, reviewed by Glendon Schubert

# Current Literature and Films 9 Articles and Journals, Books and Chapters.

#### n u 4 n - 1

Vacancies and Announcements.

Unable to Forward.

#### **Newsletter Submissions**

Anything which might be of interest to ISHE members is welcome: society matters, suggestions for Forum topics, Mini Communications, Current literature and films, and material for the Bulletin Board such as announcements of meetings, sabbatical oportunities, employment opportunities, etc., should be sent to the Editor.

Suggestions for books to review, or reviews, should be sent to the nearest Book Review Editor dealing with the language concerned. A list of the book review editors is printed in the collumn inside the backpage.

Submissions in any legible format are acceptable as long as these are in English. Floppy disks containing Wordperfect files produced on an IBM-PC (compatible), or ASCII files can be processed as well and are in fact preferred, because they lower the production costs.

# **SOCIETY MATTERS**

# Questionnaire on Training Programs in Human Ethology

So far only 8 institutes have responded and returned the questionnaire form (see September issue). Surely, there must be more institutes involved in training programs in Human Ethology or in course work from an ethological perspective. It is only a small effort to fill out the form and return it to the editor. Please, do it now.

## **New Members**

Apparently a bit of public relations work and some advertisement through free copies of the Newsletter are no waste of money. The Society has over 350 members now. Keep up the good work. It must be possible to increase membership to 400. That would pull us out of the financial danger zone.

#### **FORUM**

The following two contributions are reactions to the forum discussion concerning the "Statement on Violence" in the June issue. The first reaction is part of a letter by Douglas Fry. The second reaction is the summary of a paper presented at the conference of "European Psychologists for Peace" in Helsinki, August 1986, which the author sent to me after reading the forum discussion in the June issue.

Dear Dr. Wrangham,

I write to you regarding your Forum article on the Statement on Violence in the *Human Ethology Newsletter*, June 1987.

First and least importantly, I should mention that one misspelling of my name (Frye) has lead to another (Freye). Also, I draw your attention to the fact that I am not a signatory of the Statement on Violence, and therefore it is inappropriate to refer to this document as "Freye (sic) et al." Please pardon what might seem trivial; I mention these points in an attempt to avert confusion regarding the Statement on Violence that might result from the proliferation of simple errors of citation.

Second, I am in wholehearted agreement with your points #

(a) — regarding the role of natural selection on aggression —

and (c) — "that it is easier to foster peace by understanding rather than ignoring the biological conditions that have favored violence and war" — (although I might quibble over your use of the word "favored"; I would prefer "permitted"). However, regarding your point # (b), first, I would like to know more precisely what you mean by "particularly extreme forms of aggression," and second (guessing you mean human warfare?, mass murder? and the like?) I draw your attention to the possibility that given human behavioral flexibility, such types of human behavior implied by the words "particularly extreme forms of aggression" may often not be adaptive in terms of enhancing inclusive fitness.

Overall, I think some of the points you raise are important and interesting ones, but at the same time, it seems to me that some misunderstandings seem to have taken place regarding the intent of the Statement on Violence. I find myself very much in agreement with Dr. Hinde's reply to your article, and I won't repeat my own similar thoughts here.

Sincerely, Douglas P. Fry, Ph.D. Research Associate

# Seeking for Political World Harmony. (Approaches that are likely to be effective and those likely to be ineffective)

by: L.F. Lowenstein, M.A., Dip Psych. Ph.D., Chief Examiner in Advanced Educational Psychology, College of Preceptors, London, and currently, Director, Allington Manor School, Fair Oak, Eastleigh, Hants. SO5 7DE, England.

## Introduction

#### Ideals and/or Realities

It must be said from the start that one man's reality may be another man's ideal. The reverse is equally true. What follows seeks to be realistic but may be, as already stated, idealistic to another man's thinking.

It is my view that world peace and harmony can only be achieved once mutual trust has been achieved between nations, religious or ethnic entities. Without such trust it is unlikely that man will ever be willing to reduce armaments either unilaterally or multi-laterally.

The phasing out and complete elimination of weapons and multi-national arsenals can be achieved when there is a feeling of security between nations. This leads us to the next vital step—how can such security be achieved? How can suspicions between nations be reduced if not altogether eliminated? To approach the answer to such questions, we may look at small groups and learn from these what constitutes the reduced suspicion and the capacity to live together in harmony.

# Control is Freedom

The requirements essentially are:

- 1. That there be some control over one's personal environment.
- 2. That one's personal environment and interactions come under some form of control by external forces which are acceptable to the individual and act as a compromise between total personal freedom and total personal oppression or subjugation. Man needs structure and control over himself as well as the freedom to express within that structure, his per-

sonal liberty and freedoms. Naturally it is vital that his own expressions do not come into direct conflict with the liberty and freedom of others in that structure.

As we are all aware there is free expression for good, positive and constructive forces as there are expressions of freedom for negative and destructive forces. Furthermore the needs of individuals vary in their desire to be controlled or to have control over their environment. There can therefore never be a perfect form of national or international structure or government that will please everyone totally. There can only be approximations towards one or other direction which may not satisfy everyone, but exists as a compromise and at least gives an opportunity for a solution to be reached.

The alternative to such structures is equally unpalatable. We are currently seeing an increase in international tension and actual outbreaks of violence and wars between certain powers or threats of such conflicts everywhere. Our current structure of the curbing of national interests or powers are severely lacking for it is unable to control these nations in conflict. It appears to everyone that our current 'international power' is standing impotently by providing suggestions and instructions which go unheeded. Nations are still taking 'the law into their own hands' something that would never be tolerated if it existed between individuals within a nation, or a society.

Why are we so comparatively liberal or passive in our acceptance of aggressive conflicts between nations while at the same time, not accepting it between individuals and groups within our own society or within a nation? The answer is not likely to surprise us. It is because while we have relative structure and control within a nation or society, we do not have anything similar between nations.

There is no effective international police force which can and does control 'unruly' nations or groups of unruly nations. The importance of promoting international responsibility and control can not be over-emphasised as a way towards world peace and harmony. Also commitment is necessary towards and international body, be it a real world government or united nations with authority to solve problems including aggressive conflicts between nations. Only in this way can international security and harmony be achieved in the long term. In order to achieve this there must not merely be a decision making process which will be heeded, but the mechanics in how to solve problems clearly understood.

In this way nations who are likely to come into conflict or who are already in conflict may know what is likely to happen as a result of their aggression. It is likely, if this is known, that less and less conflict will occur throughout the world. When it does occur it is the responsibility of all the nations of the world to deal with it and it is not the business merely of the nations in conflict. This is because conflict between nations tends to have an effect on their neighbours and even those more distant. It is not dissimilar to watching one's neighbours fighting and not involving oneself if one is a good neighbour to both. The initial reaction of any good neighbour watching his own neighbours conflict is to seek to separate them. Following this, it is the object of solving the problem without violence being used.

Once nations in conflict have been separated and the conflict has, in all extended purposes ceased, overt efforts may be made to mediate between the warring factions.

There are many opinions as to the art of mediation between warring factions but certainly the first step must be that actual physical conflicts must cease. This is more easily done in the case of small nations although there are also difficulties even here, when the conflicts are between major nations such as between U.S.S.R. and the United States and it is necessary for the smaller nations to act as mediators. Their power will be enhanced by the fact that although individually they are smaller and hence weaker, in combination they are probably stronger and larger.

#### The art of mediation between warring factions

- 1. Placement or site of meeting. This should be a neutral place, with privacy and no distractions. It should be informal so that parties can speak candidly and with less restraint.
- 2. Arrangement within sight. The seating should be so that the parties sit closer together than the mediator who sits some distance away. They should face each other at a comfortable distance.
- Physical surroundings. These should indicate a minimal amount of distraction. The surroundings should be comfortable and the temperature correct with comfortable chairs and no or little distraction.
- 4. The timing of the meeting should be when there is likely to be less distraction for either party.
- 5. Willingness to compromise requires talking and not merely listening to another. This is in order to move toward the reconciliation. Each person should have time to present his own views. There should be only two disputing parties attending at a time with no observers present.
- 6. Duration. The duration of the meeting should be between 75 and 90 minutes at least. If less time is required then it should be discontinued. There should be a definite closing time arranged beforehand. The mediator must judge this sensitively.
- Interruptions. Should be kept to a minimum. No telephone calls or anyone coming to interrupt.
- 8. The mediator's role. The mediator convenes the gettogether and must be seen as totally neutral and posses some power and respect. Power may depend on expertise, reputation, personality, etc.
- 9. Preparation for meeting. It is important to speak to the individual factions before they get together. These discussions have two purposes:
- (a) To make each person tell his or her side of the story without interruption or criticism.
- (b) To inform each of the purpose of the coming mediation session and how the mediator intends to proceed, to optimise chances of success.
- 10. Follow-up to the meeting. It may be necessary for several meetings to take place in order to reach agreement. Remediation meetings should be held as often and as long as necessary to solve the problems that exist.

What to do in the case of those in conflict refusing to end conflict?

Perhaps the most pressing need at the present time is to know how to deal effectively with groups or nations in conflict who refuse to heed the advice or recommendation of the central body to end conflict and sit down and mediate their dispute. It must be said that such conflicts and physical violence are partly determined by the fact that there is unlikely to be a central power to intervene or stop such conflict. Nations therefore feel that they are at liberty to fight their own battles whatever the result may be. Each of course, hopes to win regardless of the casualties that may be involved on both sides.

The first request must be to ask them to stop fighting and return to their various geographical or political boundaries. The second will undoubtedly be to demand that they do this. The third will be that the united force of the world will threaten to

intervene physically through an international force should, by a certain time, both nations have failed to adhere to the requests of that power. The fourth will undoubtedly be an actual physical involvement by an international force which would set up a buffer zone between the two nations in conflict and retaliate by defending its buffer zone if either or any of the adversaries seek to break through that buffer area. The buffer area should be large enough for both countries to feel that they have been deprived of a certain amount of territory and jurisdiction over their territory. The fifth will be an appeal to seek to solve their problems without recourse to physical aggression. The methods outlined in the previous section could then be followed. Meetings must and should continue until a solution is found which is likely to end the conflict. The appeal must be to a combination of reason as well as emotion. It is undoubtedly the object of the mediator to seek to develop a relationship between the leaders of the two warring factions and one which would help them to prevent further conflict and blood-shed.

Finally it must be the purpose of the buffer force to remove itself as soon as the conflict has been solved and the two nations can live in relative harmony with one another once again.

# **MINI COMMUNICATIONS**

The objective of this section is short empirical or theoretical papers which inform and would benefit from the input of peers. If readers wish to comment, write directly to the author(s).

# Positive Assortative Mating and the Human Hemochorial Placenta

by: Wenda R. Trevathan, Department of Sociology and Anthropology, New Mexico State University, Las Cruces, New Mexico 88003.

Selection has consistently favored mating strategies that increase gene duplication in succeeding generations. One strategy that is apparently followed in a variety of taxa is positive assortative mating, i.e., the tendency for individuals to mate with others that share some of the same phenotypic (and, thus, at least in some cases, genotypic) characteristics. The result of positive assortative mating, as Thiessen and Gregg (1980) have suggested, is that the offspring that are produced are related to each parent by a factor above the expected 50%. This mating strategy would be favored up to the point at which similarity between mates is so great that inbreeding depression occurs, as is the case with incest. Thus, the optimal strategy is "to select a mate who is similar to family members, but one who is outside the family group" (Thiessen and Gregg, 1980:123).

Besides increasing relatedness to offspring, there is also evidence that positive assortative mating for such characteristics as anthropometric variables (Clark and Spuhler, 1959), intelligence (Spuhler, 1967), and education levels (Kiser, 1968) increases fertility in couples pursuing such a strategy. One explanation for the increased fertility of many such matings is the capacity for the mother to respond immunologically to fetal antigens unlike her own. As Goodman (1960) suggests, this capacity has become a major selective agent for all viviparous

animals. Clearly, selection will be stronger when the immunological systems of mother and fetus are more intimate. Thus, females of species in which maternal-fetal intimacy in pregnancy is great would be selected to choose mates whose phenotypes (and associated genotypes) are more like their own, and thus, less likely to evoke maternal isoimmunization if transmitted to offspring. A key to understanding this process is the mammalian placenta.

Mammalian placentas have been classified very generally according to their shape and structure. Four types will serve to illustrate the significance of the placenta in mate selection. The epitheliochorial placenta (characteristic of horses, pigs, and lemurs, for example) has six layers between the maternal and fetal systems; the syndesmochorial placenta (sheep, bison, cattle) has five layers; the endotheliochorial placenta (cat, dog) has four layers; and the hemochorial placenta (humans, rodents, rabbits) has three layers.

The fact that animals with epitheliochorial or syndesmochorial placentas can carry a pregnancy resulting from a heterospecific mating suggests that greater genetic differences are tolerated, or not detected, because of the thicker placental barrier. Mating between horses and donkeys, horses and zebras, cattle and bison, cattle and yak, yak and bison, and possibly, sheep and goats, are all known to have occurred, resulting in live, albeit usually sterile, offspring. Conceptions occur, but viable offspring are rare or unknown in heterospecific matings among rats, mice, hamsters, rabbits, guinea pigs, and haplorhine primates, all species with hemochorial placentas.

Selecting a mate from a species other than your own is an extreme example of negative assortative mating, a strategy that has little or no selective advantage. Not surprisingly, selection has favored the ability of animals to recognize members of their own species, and, with increasing intimacy between maternal and fetal systems associated with placental evolution, the ability to recognize as optimal mates, those with fewer antigenic differences.

Although there is no evidence for positive assortative mating for single gene traits (see Cavalli-Sforza and Bodmer, 1971), a useful illustration of fertility problems that arise because of maternal-fetal incompatibility is seen in the ABO blood group system. In an ABO incompatible pregnancy, the fetus has antigens that the mother lacks: for example, fetus type A or B, mother type O. This, of course, means that the father of the child also had the antigens that were potentially incompatible with those of the mother. Circulating in the systems of type O mothers are naturally-occurring antibodies to antigens A and B. Thus, it is possible for those antibodies to cross the placenta and destroy erythrocytes of the fetus, resulting in intrauterine anemia or problems at birth that would kill the fetus. Several studies of ABO-incompatible pregnancies have revealed a net deficiency as high as 25% of A children in father A-mother O matings (Waterhouse and Hogben, 1947; Cavilli-Sforza and Bodmer, 1971). Chung and Morton (1961) found that maternal-fetal incompatibility in their sample reduced fertility by 6.3% and caused elimination of 9.4% of incompatible zygotes. Gualtieri, Hicks and Mayo (1985) note that perinatal mortality due to incompatibility increases with birth order. Renuka Nair and Murty (1985) found higher incidences of neonatal jaundice, asphyxia, and neonatal mortality in incompatible mating, although the effects of incompatibility were reduced in the presence of inbreeding.

Another familiar example of maternal-fetal incompatibility occurs when the mother is Rh- and the fetus (and thus, the father) is Rh+. In a European-derived population, the expected

ly 9% in the absence of preventive therapy; it is estimated that 75% of these infants would have died in the past (Cavalli-Sforza and Bodmer, 1971).

Certainly, there is no evidence to indicate that mates are selected based on ABO or Rh blood type, but these examples suggest that there are other intrauterine deaths due to incompatibilities that have affected mating preferences of past and contemporary human populations.

In summary, because of the capacity of the maternal system to respond immunologically to fetal antigens different from her own, the human female must select a mate more like herself to increase likelihood of conception, normal gestation, and uneventful birth. Natural selection would favor ability to recognize genetic similarities using phenotypic cues such as stature, weight, eye color, hair color, and ethnicity, the result would be the tendency for positive assortative mating to be the norm in the human species.

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# From an Ethologist's Journal

by: William T. Bailey, Psychology Department, Tulane University, New Orleans, LA 70118 U.S.A.

This month I want to discuss certain aspects of "modern" living which may not be as up-to-date as they first seem. For instance, an interesting possibility suggested by historical and cross-cultural data is that paternal childrearing (other than resource provisioning and defense) during the past hundred years or so was particularly low — compared to human phyletic (long-range) history. It may be that fathers' childrearing has traced a U-shaped (or perhaps parabolic) function (see, Demos, 1983; Day & Mackey, 1986; Mackey, 1981, 1985). A similar, though perhaps not parallel, function has been used to describe

mothers' involvement in resource acquisition (i.e., labor force participation) (Davis, 1984; Pampel & Tanaka, 1986; Rossi, 1986; Ware, 1981). According to the functions, paternal childrearing decelerated more rapidly, and is accelerating more slowly, than maternal resource acquisition.

Similarly, one of the frequently discussed effects of industrialization is that "resource production/acquisition" is separated from the family, home. But these activities were only united in agriculture (broadly defined). Under those conditions people live on and in the farm; they acquire resources and consume them in the same place. In the environment of evolutionary adaptedness (EEA), hunting-gathering, these activities were/are separated. Separated sites of resources and living/consuming are the norm in hunter-gathering. Hunters go forth to hunt game, gatherers to gather plant material; then they return "home" to consume these. Hence, modern industrial resource acquisition/consumption patterns more closely approximate the distant past (EEA) than they do more recent (historical) times down on the farm. These activities can also be described by the U-shaped function discussed above.

I wish to thank all of you who offered to review books for the newsletter in response to my call in the last issue. Any one else who might be inclined to review is also encouraged to write to me.

Again, I want to mention our ability to communicate across time (zones) and space using BITNET. If you have access to BITNET drop me a note including your name, address, interests, etc. and your BITNET ID and address. So far two members of ISHE have contacted me on BITNET and I've started transmitting a newsletter there we call ETHONET. It can serve as a source of communicating ideas, data, notices, whatever. If you want to receive it, send to the address above.

Apparently I have been around for so long and written so much here that many of you have come to think of me as one of the "granted old men" of human ethology. Perhaps I am; I did get in on the ground floor so to speak. Be that as it may, it is also true that I am a graduate student and, finally, I am about to finish my Ph.D.! If your department, or one you know of, might want to hire a new professor who is a knowledgable ethologist, who studies contemporary fathers and families and tries to understand how they evolved and what their function is, I would very much appreciate your sending me any relevant job notices. Would also be interested in learning about any relevant post-docs.

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# **BOOK REVIEWS**

Ostracism: A Social and Biological Phenomenon. New York: Elsevier Science Publishing Co., 1986. Edited by Gruter and Masters.

# Reviewed by Glendon Schubert.

Department of Political Science, University of Hawaii at Manoa, Honolulu, HI 96822, USA.

#### Banishment as Biosocial Behavior

The editors introduce the volume by defining ostracism as the "process of rejection and exclusion" from human groups, which (they assert) can also be observed "in many other species." But the book reports very little other than anecdotal evidence, to support the latter claim as an empirical generalization.

What the book does show to be true of both humans and other animals is that sick, injured, and otherwise abnormally behaving individuals, plus strangers (whose behavior cannot be predicted on the basis of the reactor's experience) are typically shunned and/or attacked, because of fear of their oddness. The asserted evolutionary explanation is that such avoidance or elimination of atypical conspecifics enhances the survival and hence the fitness of the "normal" animals that comprise the discriminating group. This kind of primal social exclusion is what probably characterized gathering and hunting human bands (until about 14 thousand years ago or less) and it is the most universal kind observed in contemporary species of other animals. The social exclusion of pubescent individuals of either sex (but typically of males in simians) is a very different process of species-specific phylogeny in direct relation to the reproductive sociobiology of species' subgroups; and this kind of exclusion is bountifully described for diverse human cultures by both historians and social anthropologists. But it too has a direct and readily explicable biological base, in species genetic-environmental breeding practices (in other animals), and in environmental-cultural breeding and socio-economic-political practices (among humans). Comparative empirical analyses of other kinds of social exclusion, as between other animals and humans, are also possible. Here I just want to make the point that a symposium on ostracism as a biosocial empirical behavior could have been organized in such a way as to explore the available data, on a cross-species basis, with the objective of constructing theory based on empirically supported or disconfirmed hypotheses. But this book does not do that,

Even at the more transcendental level of speculative "theory" on which most of these chapters operate, the editors' thesis is never brought into a common focus; the book is replete with comments such as the editors' seeming approval (p. 2) of the finding, of various observers of simians, that shunning seems "to play an integral role in the maintenance of social order" — which is a *conservative* stance in terms of human political ideology. But this book is equally replete with affirma-

tions of the virtues of individual freedom of choice and of democratic decision-making (e.g., at page 245, the ultimate sentence of this book: "an evolutionary approach to a phenomenon like ostracism reminds us that vigilance and effort are necessary if one is to preserve a free and humane civilization"; and Kort's advocacy of civil liberties in counterpoint to ostracism). The problem is that the generally cruel, authoritarian, and inhumane behaviors of ostracism — however security-enhancing for the group — are not otherwise brought into direct confrontation with the platitudes about civilization and democracy except in the last two chapters, and by the same two political scientists just mentioned.

I.

The best of the primatological chapters is Jane Goodall's discussion of the observations of Gombe chimpanzees over a period of almost a quarter of a century; but except for Goodall, the biology discussed is almost completely irrelevant to the ostensible subject of this book. One has to conclude that, notwithstanding the editors' promises to the contrary, there is little in this book that provides any empirical evidence supporting the hypothesis that ostracism is a behavior found among any other animals than humans, except in regard to the social avoidance of odd individuals, the rejection of strange ones, and the ejection of sexually maturing ones (discussed supra). Goodall finds no evidence of group punishment ("as practiced in human groups") among chimpanzees; but she does suggest three types of social rejection. 1. (Male competition): Sometimes two or more males will gang up on a rival third male, and continue to drive him away by assault, thereby denying the isolated animal access to social interaction with other members of the group. 2. (Territoriality): strange adult females, including those with offspring, typically are physically attacked on sight by resident adult males and females alike. 3. (Abnormal behavior): sick and/or injured animals are sometimes avoided and become isolated from a group because their impairment, in combination with the avoidance behavior of the "normal" group members, peripheralizes the abnormals, thereby excluding them from normal social interaction and exposing them to greater additional environmental risk. Sufficiently persistent and/or lucky individuals sometimes overcome any of these three types of exclusion, because a countervailing process of social bonding, based primarily on familiarization, is a strong component of normal chimpanzee behavior, so that time itself tends to work continuously in favor of social integration: "the social bonding mechanisms of the chimpanzee are extraordinarily powerful and, in most cases, strongly counteract aggression patterns that might otherwise lead to a total rejection or exclusion" (p. 80).

Three chapters are authored by researchers of the UCLA Department of Psychiatry, who do experimental studies of nonhuman primates. Kling ablates monkeys in three specific brain regions, presuming linear causation (subject to environmental variance), between brain loci and species-specific behavior. McGuire and Raleigh write about drugging monkeys, not about ostracism; and their discussion (e.g., p. 43: of "officers" and "initiates" of "fraternities" in fact deals with groups of vervet monkeys whose serotonin levels were experimentally manipulated pharmacologically) is blatantly anthropomorphical, and as such is equally blatantly sexist (e.g., pp. 59-60). Indeed, their conclusion is that "certain types of social interaction" [among monkeys: that's what their data are about] contribute to "our" [presumably, humans'] "sanity" [in quotes, no doubt, because the authors are psychiatrists]. But they are to be commended for their frank admission that "there are very few well-controlled studies of humans that examine behaviors [of] ostracism" (p. 41) and that "adequate human data are not available" in regard

to the neurologically pathological changes that they associate with socially isolated monkeys (p. 47). It is the more strange, therefore, that in neither of their two chapters do these authors mention or cite the work on serotonin levels among human subjects in experimental research on political leadership, reported in a pair of recent articles in the leading professional journal of political science, by McGuire's chief (and only) political science disciple (Madsen, 1985, 1986).

Lancaster's chapter also is replete with anthropomorphism, and it relies upon very strained definitions of "ostracism" in her attempt to demonstrate its relevance to the nominal topic of the symposium.

De Waal's chapter describes as "ostracism" the killing of a chimpanzee locked up in a cage. He also notes, with what I think is misdirected satisfaction, the belated reporting of that event (and cf. his self-serving footnote on p. 101, in which he states that the initial public mention of that death of an adult male chimpanzee [who was — incredibly — left in an unmonitored [even by video] cage with two others who killed him during the night] came "only" three years and ten months after the event. De Waal neglects to mention that the zoo director who permitted this belated disclosure is the brother of the Waal's thesis director, who made the announcement of it, in Nairobi and in my presence.)

At that same Nairobi meeting, de Waal described as "suicide" the subsequent death by drowning of one of the two survivors of the cage assault, who tried but failed to jump across a moat covered with thin Spring ice. He might as well have added: "out of remorse over guilt for his sins, which lay heavy on his soul." I thought (Schubert, 1986:652-655) and think that describing the normal coalitional behavior of chimpanzees as "ostracism"; and describing the unsuccessful efforts of another chimpanzee — who did escape out of his cage onto the only available land, and tried to keep on running but made the mistake in judgment of overestimating his broad-jumping abilities — as "suicide"; these are nonsense attributions.

The remaining "physiological-ethological" chapter, by Alexander, is strictly definitional and devoid of empirical data; his method here is Socratic, not Darwinian. His main example seems to be the argument that the evolution of social grooming behavior resulted in "ostracism" as the consequence of overgrooming (i.e., tickling behavior, among primates), which leads to laughter, which isn't necessarily the expression of joy, which may be intended to and in fact may cause status degradation, which may result in alienation/isolation of declasse monkeys or apes — their "ostracism", as he calls it, because "Ostracism is a topic of almost unbelievably broad significance. I see it as varying from such extremes as shunning, excommunication, and designation of 'outlaw' to the most subtle forms of status shifting through implied or real, partial or complete exclusion from temporary or even momentary and casual groupings of social interactants."

II.

The best of the chapters on human ostracism is by Boehm; but beyond that the pickings are slim in the latter half of the book. I shall discuss primarily Boehm's anthropological analysis of clan feuding in Monegnegro, plus the chapters by two of the political scientists (Berner-Barry; and Masters); the other half dozen chapters will get only the short shrift that they require.

Boehm presents a straightforward professional ethnographic analysis of ritual murder among the displaced Turks whose traditional organization is as tribes segmented into patriarchal clans. He defines social disapproval (pp. 159-160) as behaviors ranging from (1st) voice tone to (20th) execution

in an ordinal scale on which several of the last seven ranks seem most relevant to the book's theme: (13th) physical avoidance; (14th) denial of all social intercourse; (17th) temporary exclusion from the group; (18th) permanent banishment; and (19th) declaring a person ritually dead. Boehm's subject, however, is (20th) execution; and his conclusions make it clear that in focusing on that he considers himself to be dealing with the most extreme form of *ostracism*, which he characterizes as "a human universal as a means of social control."

Boehm's attempts to relate his ethnography to "a biological perspective" and to "behavioral genetics" (p. 169) are not very persuasive: assuming Boehm is correct that his Montenegrin clansmen do believe that "criminal behavior is genetically inherited" — so what? Does their beliefs about genetics make their behavior "biologically" motivated? I do not doubt for a second the importance of the psychobiological neural limbic system substrates emphasized by the editors (p. 1) as critically involved in all human attitudes; but that doesn't make beliefs about genetics any different than beliefs about pixies. Patently Boehm is speaking as a cultural anthropologist in describing Montenegrin ideology; and all of the evidence that he cites is cultural, not biological. Even — or perhaps better said, especially — human beliefs about biology, are themselves cultural. If Dr. Kling (supra) had worked with human instead of monkey subjects then he might be in a position to make neurological statements about the effects of ablation on human attitudes. But surely neither Boehm nor his Montenegrin subjects can do so.

Barner-Barry reports on her observations of the shunning of a barely four-year-old bully by others in a group of four-to-six year-old pre-school children. Methodologically her work is much closer to the studies of chimpanzee behavior discussed by Goodall; and it is implicitly based on evolutionary theory. But: (1) She overgeneralizes (her subtitle is "Children's Tacit Use of Peer Ostracism to Control Aggressive Behavior") from the one "case study" that she presents. (2) Her development of the case was adventitious rather than experimental, and (3) Her description of her own behavior in relation to that of her subjects belies her self-perception of objectivity and neutrality (e.g., p. 138, "Rob managed [sic] to get involved," and "My comment was, 'Rob tends to try to be a bully when protected'"; p. 139, para. 3: "it was clear that the other children wanted nothing to do with Rob"; p. 142, para. 3: "'I haven't seen Rob bullying anyone today . . . . The group sanctions appear to have taken effect," plus hearsay evidence noted by the observer about Rob's "bitchy" and "unsmiling" mother.) These remarks indicate that as a well-educated, trained, and experienced adult, Barner-Barry had insight into what was going to happen long before any of her four-to-six year-old subjects did. That in turn makes it appear as though she quickly identified (for herself) a cognitive schema that guided her in choosing how to write the notes that were preserved for her own subsequent use in a post hoc search for field observations on ostracism. But if one takes Piagetian theory seriously, then it is apparent that these four-tosix year-olds were all too young to be themselves cognitively capable or experiencing the moral cognitions attributed to them by Barner-Barry's analysis of their behavior.

To be sure, Barner-Barry took pains to move quickly to posit the premise that ostracism does not need to be based on either moral judgment or a collective decision: "It can be the spontaneous outgrowth of a number of sufficiently similar individual decisions by group members" — and we surely can concede that this presumption should be made for Goodall's chimpanzees. And again, at the very end of her chapter Barner-Barry concludes that "It was as though the children were [individual-ly?] weighing Roh's positive or neutral behaviors against his

disruptive behaviors and deciding whether to avoid or exclude him on the basis of the direction in which the balance tipped." However, her very next sentence is: "Human beings make such judgments all the time." Oh, yes, but human beings of what age? Clearly middle-aged women can make such judgments; but five-year-olds? And a bevy of them individually? It is more probable that the decision about Rob's ostracization was made by the observer's projection rather than by the aggregated individual soul-searching of her subjects.

The other chapters in Part II, and all except one of those in Part III, are easier to summarize. Gruter proffers an anecdotal summary of a county trial-court decision on Amish shunning, which is relevant (as exemplary) but irrelevant to either biological causes or general behavioral theory. Mahdri's discussion of feuding among aboriginal tribes on the Afghan/Pakistan border is anecdotal ethnography, entirely legalistically cultural in its conceptualization, and unscientific in its approach. Of most interest, perhaps, is his empirical assertion that Pathan clans are quick to protect themselves by ejecting trouble-making members, to avert feuds — which Montenegrins appear to do only as a last resort. Anawalt, Bruch, and Weisberger each writes a legalistic and irrelevant (to this book's theme) analysis of a legal question: on defamation, child custody, and marital-property control, respectively. Bruch, for example, concedes (p. 192) that she defines ostracism "loosely" as "exclusion due to social disapproval," reflecting "not any specialized training or knowledge in psychology, sociology, or the behavioral sciences." [Whether parental or surrogate parental access to children - clearly a matter of social approval as well as disapproval is best described as ostracism, she does not even discuss.] Weisberger writes on sexual economic equality, and her critique of economic patriarchy is one that I personally applaud — but what has it to do with ostracism? She genuflects in the direction of evolutionary theory, by referring to sexual dimorphism; but she ends up with the weak assertion that exclusions from property, based on law, may be deemed "one form of social ostracism." The suggestion is certainly not a compelling one.

Political scientist Kort accepts banishment as one literal meaning of ostracism, and then devotes his chapter to an attempt to identify it figuratively with the denial of civil liberties. To help in this endeavor he presents a parabolic curve that suggests to him the hypothesis "that the survival of a political regime is a nonlinear function of the extent or 'volume' of ostracism." Or, more crudely put, the less civil liberty (which is the more ostracism, in this specially defined sense) the shorter the survival prospects of the regime. Again, I personally applaud this clever semantic for turning the tables on social order, by putting ostracism to work for political change (and see Schubert, 1988); but as the reviewer here, I am dubious that it contributes much to whatever attempts otherwise are made in this book to develop a biosocial theory of ostracism.

#### III.

The last chapter in the book is by its co-editor, political scientist Roger Masters, who begins with the assertion (p. 231) that "Ostracism can be viewed as a coercive or involuntary rupture of social bonds." I reiterate: that is much too broad, in the absence of further defining parameters beyond the question of "voluntariness" (on which this chapter focuses). Surely "social bonds" are involuntarily ruptured by: (1) birth, either through abortion or at term; (2) weaning, from the perspective of either the infant or the mother; (3) adolescence; (4) accidental death, at any age; (5) death from disease, at any age; (6) death from old age; etc. The list is endless; so is the scope of the concept, as defined by Masters.

The reason for Macter's energific definition is to set up his

invocation of Hirschman's (1974) theory of involuntary "exist", which proffers an excellent preface to Libertarian political theory. Masters uses exist theory as a metaphor for (1) classical-economics free-market human behavior; and (2) sociobiological (as distinguished from social biological) theory of genetic competition as the grundnorm of animal social behavior which is Smithian-Ricardian-Marxist free-market behavior once removed (and see Schubert, 1981a:193). My problem with Masters' analysis is not his invocation of the economic premises of Reaganomic public policy; chacun à son goût. What I question are the liberties that he takes with empirical knowledge about animal (including hominid) social behavior. He proclaims, for example (p. 237), that "Prior to the emergence of the state, exit is always an option" — and I think that that is demonstrably false, empirically; nor does his caveat "albeit sometimes [sic] a dangerous one" let him off the hook. He says: always an option, and sometimes dangerous; I say sometimes an option, always dangerous.

I have seen the Australian film Walkabout half a dozen times; adolescent manhood rituals sometimes are positively reinforcing for those who perform them, so it is by no means clear that they should be described as always involuntary. And neither now nor six nor ten nor thirty thousand years ago were there other than human animals in Australia capable of predating on solitary Aboriginals. (Poisonous snakes and insects were and are threats but not predators.) But on the African savannah, or in Eurasia, or even in North America prior to the "Pleistocene overkill" (or whatever the causes may have been) 14 to 15 thousand years ago (and see Schubert, 1988), there were many large and dangerous predators of solitary human strangers; and it is contrary to the overwhelming weight of the evidence not to assert that an human expelled from his or her group was not always put at great risk of survival. Indeed, I would argue the opposite position to Masters': that ejected human individuals had a much better chance of survival after what he calls "the state" emerged in the Golden Crescent five to six thousand years ago, because agriculture and/or pastoralism had so denaturalized the locale that it was much less habitable for the land megafauna (mostly felids and canids and ursids [elsewhere] and ungulates that predate on humans. The hominid adaptation has always been a social one; and that includes (still) homo sapiens. One of the first things I learned about ethology is that a solitary baboon is a dead baboon.

Masters concludes with the confession (p. 242n.) that several of his "colleagues at the Second Monterey Dunes Symposium had strong reservations to [his] implication that some cultural or political patterns are 'natural' and others 'unnatural.'" Even though Masters rests his own case directly on the very best scholastic authority (i.e., Aristotle's *Ethics*, V.vii), I want to be counted among those iconoclasts of the Dunes who find no direct genetic base, sociobiological or otherwise, for human culture.

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# **CURRENT LITERATURE AND FILMS**

Material for this section of the newsletter should be sent directly to the editor. A sentence or two of summary would increase the value to readers.

# **Articles and Journals**

- Academic Computing. A fairly new journal, in its second year now. Deals with the topic in its title. It is FREE to faculty and staff of academic institutions who use computers in their work or teaching. For subscription information write: Academic Computing, Publications, Inc., 200 West Virginia, McKinney, Texas 75096, U.S.A.
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- Dr. Eugeniusz Košmicki, from Poznan, Poland, announces the completion of his thesis "Ethological and Sociobiological Extensions of the Biological Theory of Evolution; A Theoretical Study". A summary and table of contents in English is available. Dr. Košmicki's address is: u1. Bulgarska 80A m.8, 60-321, Poznan 38, Poland.
- Krahn, G. (1987). Factors influencing the reliability and validity of observation data. (Chapter in *Family Interaction and Psychopathology*, Ed. T. Jacob, New York: Plenum Publishing Co., pp. 297-328).
- Liebowitz, M.R. (1963). *The chemistry of love*. Boston: Little, Brown and Co.

- Radnitzky, G. & Bartley, W.W. (1987). Evolutionary epistemology, theory of rationality, and the sociology of knowledge. Peru, Illinois: Open Court Publ. Co. (Philosophy of Biology versus philosophy of Physics. Contributors: Sir Karl Popper, Donald T. Campbell, W.W. Bartley III, Gunter Wachtershauser, Gerhard Vollmer, John F. Post, J.W.N. Watkins, Gerard Radnitzky, Peter Munz, and Antony Flew).
- Radnitzky, G. & Bernholz, P. (1987). Economic Imperialism. The economic method applied outside the field of Economics. New York: Paragon House Publishers. (The central idea is that the basic concepts of economics supply and demand, the assumption of rational behavior, scarcity of available resources, competing ends, etc. can be used not only to forecast financial trends but to explain the behavior of living systems as well).
- Richards, Robert J. (1987). Darwin and the Emergence of Evolutionary Theories of Mind and Behavior. Chicago, IL: University of Chicago Press.
- Sluckin, W., & Herbert, M. (1987). *Parental Behaviour*. New York: Basil Blackwell. (A cross-species review of parenting).
- Sørensen, G. (1987). Animal experiments indicating behavioural pathologies as high cost strategy of survival. In: P. Checkland & I. Kiss (Eds.), Problems of Constancy and Change. The complementarity of systems approaches to complexity. Hungary: International Society for General Systems Research. (Keywords: voles, lethal milieu-effects, defense, behavioural pathology, survival, systems approach).
- Dr. R. Srinivasa Rao, From Tirupati, India, announces the publication of his books: "Fundamentals of the Science of Sociobiology" (U.S.\$ 2.50 plus postage), and "The Science of Human Consciousness: Parts I & II" (U.S.\$ 5.00 plus postage). Please send your orders along with the cheque or draft to: Dr. R. Srinivasa Rao, Professor of Education, Sri Venkateswara University, Tirupati-5175502, Andhra Pradesh, India.

# **BULLETIN BOARD**

# Vacancies

#### Faculty vacancies anticipated.

A faculty vacancy at the assistant professor level in developmental psychology, and possibly a second "research generalist" position, are anticipated at Eastern Kentucky University for fall 1988. the University is located near Lexington and the outdoor recreational opportunities of the Cumberlands. A strong committment to teaching is necessary, but the environment is supportive of research, and colleagues are engaged and productive.

Formal announcement of the position(s) will be made in the APA *Monitor*, but letters of inquiry can be sent to Bob Adams, Chair, Department of Psychology, EKU, Richmond, Kentucky, 40475, USA.

# Postdoctoral Traineeships in Ethology

The Graduate Program in Ethology at the University of Tennessee announces NIH traineeships starting September 1, 1988. Trainees are expected to establish a research program in human or nonhuman ethology focusing on communication (development, genetics, or physiology). A list of faculty, current research interests, and application guidelines are available upon request. Direct inquiries to: Dr. Richard Saudargas, Ethology Selection Committee, Department of Psychology, University of Tennessee, Knoxville, TN 37996.

Application deadline: March 1, 1988.

# Research Fellowship in Evolution and Psychiatry

The University of Michigan, Department of Psychiatry

The Evolution and Psychiatry Project in The University of Michigan Department of Psychiatry offers a Research Fellowship to being July 1, 1987. This unique Program offers an opportunity to conduct research that applies recent advances in evolutionary theory to problems of human psychopathology. It is associated with The University of Michigan Evolution and Human Behavior Program, a University-wide interdisciplinary research group. The position offers clinical experience with anxiety disorders, but research can be in any area. Board eligible or certified psychiatrists are welcome to apply. Please send a C.V. and a brief letter that outlines your background and special areas of interest to:

Randolph M. Nesse, M.D., Evolution and Psychiatry Project, Department of Psychiatry, C440 Med Inn Building, University of Michigan Medical Center 1500 E. Medical Center Dr. Ann Arbor, MI 48109-0840, USA.

# **Announcements**

The 36th Annual Nebraska Symposium on Motivation on Socioemotional Development will be held on March 10 & 11, 1988, in Lincoln, Nebraska. Contact: Dr. Ross A. Thompson, Dept. of Psychology, University of Nebraska, Lincoln, NE 68588-0308. (phone: [402] 472-3721).

The International Conference on Infant Studies will be held in Washington, D.C, April 21-24, 1988. Contact: Nathan Fox, Department of Human Development, College of Education, University of Maryland, College Park, Maryland 20742 (301) 454-2717.

The Midwest Sociological Society will meet March 23-26, 1988, in Minneapolis, on "Relationship Between Parents and Adolescents." Paper deadline: November 15, 1987. Contact: Steve Carlton-Ford, Institute of Child Development, 51 East River Road, University of Minnesota, Minneapolis, MN 55455-0345.

The Society for Behavioral Pediatrics will hold its 6th annual meeting in Washington, DC on May 1-2, 1988 in conjunction with the SPR/APS/APA meetings. Abstracts deadline: december 15, 1987. Contact: Noreen Spota, SBP Business Administrator, 241 East Gravers Lane, Philadelphia, PA 19118, (215) 248-9168.

The eighteenth annual Symposium of the Jean Piaget Society will be held in Philadelphia on June 2-4, 1988. Research and conceptual papers, symposia, workshops, and discussions pertaining to Piagetian theory and application are solicited by November 20, 1987. Contact: Susan L. Golbeck, Graduate

School of Education, Rutgers University, 10 Seminary Place, New Brunswick, NJ 08903.

The Southwestern Society for Research in Human Development will hold its biennial meeting on March 17-19, 1988, in New Orleans. Submission deadline: October 15, 1987. Submission information: Roger D. Cox, Western TEACCH Center, 50 South French Broad Avenue, Suite 238, Asheville, NC 28801. Meeting information: Jeffrey J. Lockman, Department of Psychology, Tulane University, New Orleans, LA 70118, (504) 865-5882.

The Society for Research on Adolescence second biennial meetings will be held in Old Town Alexandria, Virginia March 25-27, 1988. Submission deadline: December 1, 1987, to: E. Mavis Hetherington, Chair, SRA Program Committee, Dept. of Psychology, 102 Gilmer Hall, University of Virginia, Charlottesvelle, VA 22903-2477, (804) 924-3374. Meeting information: Dan Keating, chair, SRA Local Arrangements, Department of Psychology, University of Maryland — Baltimore, Catonsville, MD 21228, (301) 455-2567. The fourth World Congress on Infant Psychiatry and Allied Disciplines will be held in Venice, Italy, March 12-16, 1989. Contact: WAIPAD Secretary-General, Joy D. Osofsky, Department of Pediatrics, Louisiana State University Medical Center, 1542 Tulane Avenue, New Orleans, LA 70112.

The Pacific Rim towards Regional WAIPAD Congress on Infant Psychiatry will be held April 3-6, 1988, in Honolulu, Hawaii, with the theme "Transcultural studies in infancy." Contact Justin D. Call, Division of Child and Adolescent Psychiatry, UCI Medical Center, 101 City Drive South, Orange CA 92668, (714) 634-6023.

The tenth biennial Conference on Human Development will meet March 17-19, 1988 in Charleston, SC. Contact: Patricia or Scott Miller, Dept. of Psychology, University of Florida, Gainesville, FL 32611.

The Australian Council for Educational Research will hold a Seminar on Intelligence August 24-26, 1988, in Melbourne, Australia, on intelligence and its improvement. Submission deadline: December 31, 1987. Contact: Helga A.H. Rowe, Chief Research Officer, Australian Council for Educational Research, P.O. Box 210, Hawthorn, Vic. 3122, Australia.

ISSBD sponsors the 5th Australian Developmental Conference, "Directions in Developmental Studies," August 25-27, 1988, in Sydney, Australia before the International Congress of Psychology convention August 28-Sept. 3, 1988. Submission deadline: November 31, 1987. Contact: Jacqueline Goodnow, Behavioral Sciences, Macquarie University, Sydney, N.S.W. 2109, Australia, (02) 805.8066. For information about the International Congress: Narita Bishop, International Convention Management Services, G.P.O. Box 2609, Sydney, N.S.W. 2001, Australia, (02) 241.1478 or 27.6940.

A sample copy of the Autism Research Review International, a newsletter on biomedical and psychoeducational research on autistic children and adults, is available from: Autism Research Review International, Institute for Child Behavior Research, 4182 Adams Ave., San Diego, CA 92116.

The Family Violence Research Group is an interdisciplinary forum established in 1986 at the University of Leicester. For information: Kevin Browne, Department of Psychology, University of Leicester, University Road, Leicester LE 17RH, Great Britain, (5033) 522158 or 522481.

12th Congress of the International Primatological Society, at Brasilia, Brasil. July 24-29, 1988. For information contact Prof. Milton Thiago, Dept. Biologia Celular, University of Brasilia, Brasilia DF 70910, Brasil.

The Biological and Politics Research Committee of the

International Political Science Association will hold three panel sessions at the forthcoming IPSA XIV World Congress, August 28-September 1, 1988, at Washington D.C., U.S.A. One of the sessions will be on the topic "Globalization and Gender: the Biological Evidence". Individuals interested in participating in that session should communicate with Prof. Glendon Schubert, Dept. of Political Science, University of Hawaii at Manoa, Honolulu, HI 96822, U.S.A. the other two sessions will deal with research currently underway or recently completed, and not previously reported elsewhere. Those interested in serving as papergiver or discussant should communicate with Prof. Albert Somit, 256 Lesar Law Building, Southern Illinois University, Carbondale, IL 62901, U.S.A.

Sixth Congress of the European Anthropological Association, at the Eötvös Lorand University, Budapest, Hungary. September 5-8, 1988. Objective of the congress is "European Populations in Past, Present and Future". For information contact the Congress Secretariat: Prof. O. Eiben, Dept. of Anthropology ELTE, Puskin utca 3, Budapest, Hungary H-1088.

Annual ESS meeting in Oslo, Norway, on the general theme of "The Sociobiology of Sex differences". September 9-11, 1988. Local organizer will be Prof. Weiert Velle, Institutt for Fysiologi, Postboks 8146 DEP, 0033 Oslo 1, Norway, Please note that the dates fixed are still tentative.

The British Psychological Society has met in London, December 17 & 18, 1987. Part of the program was a symposium on "Ethological contributions to psychology". This symposium was convened by John Archer, and Robert Hinde was both chairman and discussant. Papers were delivered by T. Roper (The psychology and ethology of animal learning), J. Archer (Ethology and Developmental Psychology), J. Richer (Ethology and disturbed behaviour in children) and J. Macintosh (Ethology and Psychiatry).

# Unable to Forward

Newsletters of the following members were returned to sender, although they paid their membership dues recently. Would anyone who knows any of them be so kind to contact them and advise them to send me their new address.

Grenn Allen, 4601 N. Park Ave #1704, Chevy Chase, MARYLAND 20815, U.S.A.

Greg Moran, University of Western Ontario, London, ONTARIO, CANADA.

Karen E.Y. Burrell, Lanterman State Hospital, P.O.Box 100, Pomona, CALIFORNIA 91769, U.S.A.

#### Membership Renewals

If the date on your mailing label is earlier than the current year, it is time to renew your membership. Renewal notices are not sent for economic reasons. No more than two warnings are given on the mailing label. Thereafter you are removed from the membership list.

Please, report any errors, changes of address, etc. to the editor.

#### **Book Review Editors**

William T. Bailey, American Dept. of Psychology, Tulane Un., New Orleans, Louisiana 70118, U.S.A.

Ian Vine, English Interdisciplinary Human Studies, Un. of Bradford, Bradford BD7 1DP, England.

Eduardo Gudynas and Fernando G. Costa, Spanish/Portuguese c/o ASMER's Regional Office, Casilla Correo 13125, Montevideo, Uruguay.

Jean- Claude Rouchouse, French Association ADRET, 15, Rue Blanchard, 92260 Fontenay aux Roses, France.

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# INTERNATIONAL SOCIETY FOR HUMAN ETHOLOGY

#### Membership and Newsletter

The ISHE was formed with the goal of promoting ethological perspectives on the study of human behavior. It encourages empirical research that addresses the questions of individual development, environmental, ecological and social processes which elicit and support certain behavior patterns, the function and significance of behavior, and comparative and evolutionary problems. The Society has elected officers and a number of committees, publishes a quarterly Newsletter, collates an annual selection of human ethology abstracts, and meets annually, either independently or in conjunction with the Animal Behavior Society, the International Primatological Society or another major society.

#### YES, I WANT TO BECOME A MEMBER OF THE INTERNATIONAL SOCIETY FOR HUMAN ETHOLOGY

Name	Institute
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Please, send this registration form to:

International Society for Human Ethology, Frans X. Plooij, Paedological Institute of the City of Amsterdam, IJsbaanpad 9, 1076 CV Amsterdam, The Netherlands.

Annual Membership Dues are \$10.00 U.S. (students \$5.00), including a subscription to the quarterly *Human Ethology Newsletter*. Preferably you pay once every three years at the reduced rate of \$25.00. You may also wish to recommend that your library subscribe. The library rate is \$20.00 per year or \$50.00 for three years.

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Dr. J.R. Feierman, Membership Chair, ISHE, Presbyterian Behavioral Medicine Center

1325 Wyoming Blvd, N.E., Albuquerque, NEW MEXICO 87110, U.S.A.

All other payments should be directed to the:

Treasurer International Society for Human Ethology Dr. Herman Dienske, Primate Center, TNO, P.O. Box 5815, 2280 HV Rijswijk, The Netherlands, preferably in the form of an International Money Order in the Dutch currency: Dfl. 25,00 per year and Dfl. 60,00 for three years, or to this bank: Algemene Bank Nederland, Breestraat 81, Leiden, the Netherlands. Account number: 56.64.00.561. The Post Giro number of this bank is: 9013.