

Human Ethology Bulletin

<http://evolution.anthro.univie.ac.at/ishe.html>

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MONTREAL TO HOST THREE CONFERENCES

The 16th Biennial Conference of the **International Society for Human Ethology** will be held in Montreal, Canada, Wednesday, August 7 through Saturday, August 10. This year, in a three-way cooperative effort, the **Across Species Comparisons and Psychopathology Society (ASCAP)** will be meeting in the same venue just before the ISHE meeting, and the **Association of Politics and the Life Sciences (APLS)** will be meeting in the same venue right afterward. The ASCAP Society will be meeting Tuesday, August 6, and the APLS society will be meeting August 11-15. For more information on these respective associations and their meetings contact Russell Gardner at rgj999@yahoo.com (ASCAP) or or David Goetz at dgoetze@hass.usu.edu (APLS). The ASCAP website can be found at <http://www.theascapsociety.org/ASCAP/ASCAP.html>, and the APLS website can be found at <http://198.110.216.3/apls/>

This year's ISHE conference program will include four plenary speakers addressing current research issues in primatology, as well as symposia, papers, and posters addressing numerous topics within the general domain of Human Ethology. Montreal was enthusiastically selected as the site for this year's conference because it is one of North America's most beautiful and entertaining cities, renowned for its gourmet dining and bustling nightlife. It is also a bilingual city of French and English heritage, with four major universities. Both French and English are spoken in the downtown area. Whatever your language of origin, plan now to secure airline tickets and take advantage of this stimulating intellectual and cultural venue. See pages inside for more details and conference and hotel registration.

LAST CALL FOR PAPERS

ISHE 2002

Montreal, August 7 - 10

The 16th biennial meeting of the International Society of Human Ethology will be held in Montreal from Aug 7 to Aug 10. Symposia, individual papers and poster proposals that address any aspect of research within Human Ethology are welcome. 100 word abstracts for all papers and posters (including symposium papers) should follow the following format: Line 1: authors' names, last name first. Line 2: institutional address(es). Line 3: e-mail address of first author. Line 4: title of presentation in capital letters. In addition, proposals for symposia should include a 250-word description of the symposium theme together with individual abstracts of the set of related papers (usually 3 or 4 papers plus discussant). Be sure to specify if you intend to make a powerpoint presentation. All proposals should be submitted to Frank Salter, and will be reviewed by Frank and Astrid Juette. **Submission by e-mail is preferred**, but hard copies on disk with the name of the operating system and word processing system will be accepted. **Deadline: April 1, 2002.**

Send proposals to:

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

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Book Reviewer Position Available

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

Transport to Downtown Montreal:

The Conference Hotel is readily accessible from both Dorval and Mirabel airports, and minutes from train and bus terminals. Once in downtown Montreal it is not necessary to use a car, everything is within walking distance and there is a modern Metro system.

Climate:

Montreal's climate in August is usually hot and humid, with high temperatures between 30 to 40 degrees Celsius, cooling off at night.

Social program:

We will select one of Montreal's fine restaurants for the conference banquet site and will also organize a walking tour through old Montreal and an optional bus trip to the old capital city of Quebec on Sunday.

Lodging: This year you must take responsibility for making your own hotel reservations from the following choices. First, we have reserved 50 rooms at the **Hotel Gouverneur Place Dupuis**, on a first come, first serve basis. The conference hotel is modern, spacious and centrally located with the interesting part of the city right out the front door. We have arranged that single /double rooms will be specially discounted for ISHE members at \$169CA or \$107US. See Page 4 for complete hotel information or call 1-888-910-1111 (www.gouverneur.com)

Second, we have also contacted the nearby dormitories of the **University of Quebec at Montreal** who offer very affordable rates and are only a few minutes walk from our conference hotel. See page 5 for complete reservation information, or you can visit their website at www.residences-uqam.qc.ca or call: 514-987-6669

Third, we have also contacted the dormitories of the **University of Montreal** who offer very affordable rates, but require a metro ride across town to metro stop Edouard-Montpetit. For more information you can visit their website at www.resid.umontreal.ca or call: 514-343-6111

For more information contact:

www.tourism-montreal.org
www.bonjourquebec.com

XVI Biennial Conference of the International Society of Human Ethology Montreal, August 7 to 10 2002

Registration Form

Registration Fee (Before April 1st)

Members: \$220US
Non-Members \$260US (includes one year membership)
Students \$150US

Registration Fee (After April 1st)

Members: \$250US
Non-Members \$290US (includes one year membership)
Students \$180US

Registration includes a welcome cocktail on Wednesday, and lunch and AM/PM coffee breaks at the Hotel on Thurs, Friday and Saturday.

Banquet Registration Fee (Optional): \$50US

Total Fee Due: Registration Fee _____
Banquet Fee (optional) _____

Total Amount Due _____

Personal data

Name (first, last) _____

Organization: _____

Mailing Address: _____

Credit Card Info: (if necessary)

Type of credit card _____ Credit card number _____

Expiration date _____ Signature _____

Please pay by check in US funds made out to ISHE or by credit card (VISA or Mastercard or Eurocard). Please send payment to Dori LeCroy, ISHE Treasurer, PO Box 418, Nyack, N.Y. 10960 USA (Dori LeCroy@aol.com)

See Next Page for Hotel Reservations



Hôtel Gouverneur Place Dupuis, Montréal

LOCATION	Situated in downtown Montréal, in the heart of the Latin Quarter, walking distance from the Old Montréal and close proximity to the Convention Center. The Hotel has direct access to the Metro and to the underground city, minutes away from all major attractions, restaurants, boutiques and theatres.
ACCOMODATION	352 total guest rooms including: 345 comfortable rooms: 198 (2 double beds) & 147 (1 king/queen) 7 luxurious suites Twelve floors reserved for non-smokers Four floors "Business Section" Two rooms specially adapted for the handicapped
CLASSIFICATION	4 Star Hotel (Hébergement Québec) - 3 Diamonds (AAA)
GUEST ROOM AMENITIES	In all rooms: coffee maker, hair dryer, color TV, cable, remote control, AM-FM clock radio, Pay Per View movies, voice mail, individual air conditioning and heating control. In all one bedded rooms: mini-bar. Business Section and Suites: two-line speakerphone with data port, voice mail, mini-bar, coffee maker, iron & ironing board, magnifying mirror, bathroom scale and bathrobes.
RESTAURANT/BAR	Restaurant Le Vignoble and Bistro-Bar du Quartier Latin
MEETING FACILITES	14 meeting rooms for group of 10 to 400 people Meeting packages available
SPORTS & RELAXATION	Indoor swimming pool – Sauna – Exercise Equipment
SHOPPING	Direct access to Place Dupuis Shopping Mall and to the underground city with miles of shops.
TRANSPORTATION	Dorval International Airport: 20 km or 20 minutes Montreal Bus Central Station: one block from the hotel Montreal Train Station: 5 km or 5 minutes (Bonaventure Station) Metro: Direct access to Berri-UQAM Station

1415 St-Hubert Street, Montréal, Québec H2L 3Y9 Canada

Telephone: (514) 842-4881 Fax: (514) 842-1584

Toll Free Reservations Center: 1-888-910-1111

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For reservation complete the form, send by fax to (514) 987-0344

Date d'arrivée/Arrival: _____ Date de départ/Departure: _____

Nombre de personnes/How many people: _____

Nom du groupe/Name of the group: _____

Nom/Name _____

Adresse/Address: _____

Ville/City: _____ Code postal/Postal code: _____

Tél/Tel: (____) _____ Télécopieur/Fax: (____) _____

Type de chambres/Type of room

Table with 3 columns: STUDIO - \$53.00CA, MULTI-2 - \$95.00CA (47.50 person), MULTI-8 - \$296.00CA (37.00 person). Each column contains a description of the room type.

Carte de crédit/Credit card: # _____ Visa

Date d'expiration/Expiration date: _____ Master Card

Frais d'annulation: Individuelle: Un dépôt d'une nuit est exigible et non remboursable en cas d'annulation.
Groupe: Voir votre responsable de groupe.

Cancellation fees: Individual: One night deposit needed. Not reimbursed in case of cancellation
Group: See with the responsible of the group.

Heure d'arrivée/Check-in time: 16h00 Heure de départ/Check-out time: 12h00

Society News

ISHE to Receive Proceedings of the Estate of Former Member, Owen Aldis

In a few months, the final steps of a long process will be completed, at which time the International Society for Human Ethology will be the recipient of the net proceeds from sale of the estate of a former (now deceased) member, Dr. Owen Aldis. Given the size of the estate, there have been, and will be, some changes made to ISHE's Constitution and future activities. This announcement is to provide members with a background to the events that are in progress; more details will appear in the June Bulletin. At our August meeting in Montreal I will use my Presidential Address to raise some of the implications associated with this news, and much of the business meeting will be devoted to discussion of our future.

The story begins in February of last year, when ISHE was contacted by the representative of an anonymous person who hoped to make a bequest. We were informed that we were not, according to U.S. law, a tax-free organization of the sort that would allow us to receive the proceeds of the bequest without paying a substantial estate tax, and we were encouraged to file an application with the Internal Revenue Service for a change in status. I made that initial application on March 24 of 2001, and over the twelve months that followed, board members helped to provide me with the extensive documentation of ISHE's financial status and scientific and educational activities- as was required by the IRS.

As these efforts were underway, I was informed that the anonymous donor had died, and it was at that time that his name and the conditions of the bequest were first made known. Specifically, ISHE had been named as the sole beneficiary of the estate of Dr. Owen Aldis, a long-time, but recently inactive, member of ISHE.

Owen Aldis came from a prominent Chicago family. As a young man he attended Harvard University where he worked with famed

Behaviorist psychologist B.F. Skinner. Later he received a Law degree from Yale University, as well as Harvard Ph.D.s in Psychology and Economics. Apparently, the law and economics degrees were part of family tradition, but Owen Aldis' real love was psychology. In the 1960s he left Chicago and business, and moved to California to become an independent scholar. He went to many conferences where he met ethologists, including some of ISHE's earliest and most prominent members (see reminiscences below by Drs. Eibl-Eibesfeldt and Blurton-Jones). In 1975 Owen Aldis published a well-received ethological book, Play-Fighting (Academic Press), which is still held in many academic libraires.

Subsequent to publishing his book, however, Owen Aldis became, in the words of one of his three surviving sisters, "a recluse". He stopped attending conferences, and as far as is known, did no further research or publication. (Since all of Dr. Aldis' estate became ISHE property upon probate of his will, we were invited to examine his effects. To do so, ISHE asked for the assistance of Dr. Peter Corning, another ISHE member and independent scholar who lived somewhat nearby Dr. Aldis' Atherton, California residence. To our disappointment, Peter reported that there were no works-in-progress or literary collections of any practical value, and the few things that were usable were subsequently donated to local charities. Thank you again, Peter.)

In December of 2001, Dr. Aldis' residential property was sold at an extremely favorable price through the kindly efforts of Dr. Aldis' named executor. The proceeds have been invested into short-term certificates of deposit which will be transferred to ISHE after the remaining legal and financial arrangements have been completed. At that time, the ISHE treasury will grow by two orders of magnitude, from approximately \$10,000 to over \$1 million. Furthermore, I am pleased to be able to report that our application to the IRS has been favorably received, and that we have provisionally been given a 501(c)3 tax status (in effect from the time of the initial application on March 21 of 2001, to December 31, 2005). As a result, ISHE will not be required to pay an estate tax.

In relation to these proceedings, ISHE board members were required to amend the ISHE Constitution to clarify our tax-free status and to assure that if the organization were to dissolve, its assets would be transferred to a similar tax-free entity. This change was approved by the current ISHE officers last June. It will now be up to us to decide if, in the future, we wish to retain this particular tax status- with its specific constraints- or to become a taxable (but more flexible) private foundation. In the meantime we need to hire an accountant and financial advisor, set up a board of advisors, and issue a Call for Nominations for officer positions that are coming up for re-election. Most of these decisions will require membership input. Please try to attend the upcoming meeting in Montreal, or, if you cannot, forward your comments and suggestions to one of the officers for consideration. We have a busy and exciting time ahead of us!

Linda Mealey, ISHE President, March 2002

My acquaintance with Owen Aldis dates back to the early seventies. We had a shared interest in play behavior, mine dating back to the 50s when I studied a hand-raised badger. He had read my research and was particularly interested in play fighting in man and animals. We discussed these subjects on several occasions. When his book *Play Fighting* (Academic Press, New York, London, 1975) came out he sent me a copy with his personal greetings. The book is a classic of human and primate ethology, helping to consolidate the field and stimulating much subsequent research. But it seems that he was, for reasons unknown to me, not active in keeping up contacts on his own. Perhaps he was shy, I simply do not know. Busy people can simply fail to maintain contacts, although we met occasionally at meetings and enjoyed discussing our studies on child behavior. In the last ten or fifteen years I didn't hear from him and thought that he had discontinued his interest. But as we have belatedly discovered, he kept a keen interest in human ethology and thought it worthwhile to support the field. I can only express gratitude, a sentiment I am sure is shared by all members of our Society. I regret that I didn't keep track of his further doings which might have provided him with emotional support.

I. Eibl-Eibesfeldt, Past ISHE-President

I remember Owen from brief meetings in London in the 1960s when he occasionally attended the animal behavior seminars that Desmond Morris ran at the London Zoo. Owen was an eager fresh convert to ethology from a background that was never quite clear to me but which included a heavy dose of operant conditioning, and some Economics. He was in the process of rejecting both, on the grounds that neither encompassed a realistic range of goals or motivations, there must be more to life than food and money. It was a time when several of us in Ethology were beginning to think about behavior of higher primates and humans. I was beginning to do observational studies on preschool children, Desmond Morris was walking about saying he had this idea for a book to be called *The Naked Ape*, and Jan van Hooff of Arnhem zoo was making frequent visits to the London Zoo to observe facial expressions of as many species of primates as possible. It was very encouraging for our timid explorations of ethology of "higher animals" to meet a convert from the hallowed ground of American Skinnerian psychology. Owen moved back to the USA quite soon and I lost touch with him and failed to renew contact when I moved to the USA in 1981. It is a shock to hear of his departure, but warmly touching to hear of his generosity to the society.

Nick Blurton-Jones
nickbj@ucla.edu

ISHE Conference Scholarships for Students

We are looking for a few students to assist in on-site registration and other coordination efforts during the upcoming ISHE conference. In return for approximately 10 hours of your time, registration costs for the conference (\$150.US) will be waived. Only students who are planning to arrive in Montreal, no later than Wednesday morning, August 7th are eligible to apply. Please apply by e-mail before May 1st to Peter LaFreniere at peterlaf@maine.edu. The first four students to apply will be awarded registration scholarships and contacted in early May for more details.

ISHE Membership

Beginning in January 2002, membership in the International Society for Human Ethology is \$40.00/yr or \$100.00 for 3 years. If you have recently renewed, but have not received back issues, you will be credited with a full calendar year of membership. Any back issues may be obtained by sending a check for \$5.00 to the Treasurer for each back issue requested. You may pay your renewal by cash, check or a memo authorizing the ISHE Treasurer to charge your VISA or Eurocard a specific amount plus your credit card number and expiration date. You may also renew by mailing the form on the back of this bulletin with your payment to:

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

DoriLeCroy@aol.com

HEB SEEKING FILM REVIEWERS

Over the years, many HEB readers have asked if we could provide reviews of films and videos that academics might be interested in using for teaching their human evolution/ethology classes. Our response has always been that we think this is a wonderful idea; however, we cannot request free review copies of videos and films as we can for books, so we must rely on the initiative and good will of our readers who have already seen or purchased a relevant film.

In an upcoming issue of the HEB, we will be providing the first of what we hope to be a long series of film reviews: Andy Thomson has volunteered to review the BBS series "The Dawn of Man". We are hoping that someone will also volunteer to review the just-aired PBS series "Evolution" (which featured several ISHE and HBES members and which has an active, associated website for teachers), and Roger Bingham's series "The Human Quest" which, while released in 1995, is still extremely worthwhile for teaching. There are even some very old "classics" (e.g. Dan Freedman's 1962 film "Constitutional and Environmental Interactions in Rearing Four Breeds of Dogs")

that can still be purchased or rented and which would be worth reviewing.

There must be many films that HEB readers use in their own classes and which would be useful for others-- if we only were aware! Please consider writing a film review-- not only for the benefit of other HEB readers, but for the many many students and potential future ethologists we want to reach. If you have an idea of a film you would like to review (or would like someone else to review), please contact Tom Alley, HEB Book Review Editor.

Announcements

Congratulations to **Karl Grammer, James Vaughn Kohl, Berhard Fink, and Michaela Atzmueller**, recipients of the Zdenek Klein Award for Human Ethology for 2001 in recognition of their systematic research on human pheromones.

The Jean-Marie Delwart 2001 Prize of \$10,000 for Ethology and Cultural Anthropology has been awarded to **Dr. Andrew Whiten**, Professor at St Andrews University, for his work in Primates Ethology and the question of their Cultural Emergence, especially in Chimpanzees.

The Prize was given to the Laureate at the occasion of the Annual Session of the Académie Royale des Sciences de Belgique on December 15th 2001.

Society for Evolutionary Analysis of Law

The 4th Annual Conference of the Society for Evolutionary Analysis of Law, originally scheduled for September, has been rescheduled as a function of the September tragedies. The new dates for the conference are April 19-20. As before, the conference will be co-hosted by Owen Jones and J.B. Ruhl at Florida State University in Tallahassee. Also as before, Steven Pinker will be the Keynote Banquet speaker. For more information, see the SEAL website at: www.sealsite.org

**SUBSCRIPTION TO HUMAN NATURE
FOR ISHE MEMBERS - 2002**

Special subscription offer. The publisher Aldine de Gruyter offers ISHE members a special reduced subscription rate to the journal Human Nature, edited by Jane Lancaster. The normal subscription rate is \$90 per year, but HBES members may subscribe for \$55 year. Note that subscriptions are for a full volume (one year), so when you subscribe you pay for all four issues of that year.

Scope and mission. The journal Human Nature is dedicated to advancing the interdisciplinary study of human social behavior from an evolutionary perspective. It features overviews and statements of biosocial interpretation and research, and it focuses on the ways in which biological, social and environmental factors influence and are influenced by human behavior. It includes investigations of: biological, ecological and demographic conditions and consequences of human history; psychological and cognitive processes; cross-cultural, cross-species, and historical perspectives on human behavior; and the relevance of biosocial perspectives to scientific, social and policy issues. It also includes news briefs about relevant recent conferences and research reports.

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The New England Institute
Cognitive Science and Evolutionary Psychology

William D. Hamilton Memorial Lecture

Friday, May 10th 2002, 7:00 PM

'The Evolution and Biology of Self-Deception'

by **Robert L. Trivers**

The late William D. Hamilton has been described as 'one of the greatest evolutionary theorists since Darwin'. Hamilton died in 2000 as a result of complications from malaria, contracted in the Congo, where he was seeking to investigate the population of chimpanzees who donated HIV-1 to human beings, as well as the mode of transmission. A distinguished biologist and sociobiologist, Trivers was a friend of Hamilton, and is an NEI Fellow. Dr. Trivers has authored seminal theoretical papers social evolution, the evolution of deception and self deception, reciprocal altruism and parental investment theory that have had a huge impact on biological thinking, evolutionary psychology, evolutionary anthropology and ethics. He is the author of *Social Evolution* (Benjamin Cummings) and the forthcoming *Genes in Conflict* (Harvard University Press) with A. Burt.

Venue: University of New England, 716 Stevens Avenue, Portland, Maine
Telephone: 207-797-7688, ext. 4539 Fax (207)878-4897 Email: TheInstitute@une.edu *

Gesture: The Living Medium

First Congress of the International Society
for Gesture Studies

University of Texas at Austin, June 5 - 8, 2002
www.utexas.edu/coc/speech/gesture/

The conference *Gesture: The Living Medium* is intended to convene the "state of the art" in research and theory on gesticulation and to serve as a forum for a broad and lively interdisciplinary exchange of ideas, observations, and research findings. As inaugural

congress of the International Society for Gesture Studies, it will also lay the foundation for a more organized framework of international cooperation. While there will be a focus on articulating connections between social interaction, embodied knowledge, and symbol formation, we invite papers, panels, and other programs from all disciplines, including technology and the arts.

Registration:

Please register on-line on our web-site, if at all possible. Registration has begun and will continue until the time of the conference. Registration for accommodations begins in Spring 2002 (February or March); you will be notified when you can register for a room. If on-line submissions and registration are a problem for you, please send us all information (as requested on the web-site) by mail to:

Gesture Conference
Department of Communication Studies
CMA 7.114
The University of Texas at Austin
Austin, TX 78712-1089

Conference fees:

\$ 100.00 (early bird, until April 30, 2002)

\$ 120.00 (after April 30)

\$ 50.00 (early bird) for students (please send a copy of a document showing that you are currently enrolled as a student along with your payment) \$ 70.00 for students (after April 30)

Plenary speakers:

Geneviève Calbris (Semiotics, CNRS, Paris)
Hubert Dreyfus (Philosophy/Cognitive Science, UC Berkeley)
Merlin Donald (Psychology, Queens U., Kingston/Ontario)
Charles Goodwin (Communication/Applied Linguistics, UCLA)
Adam Kendon (Anthropology, Philadelphia)
Scott Liddell (Sign Language/Linguistics, Gallaudet University)
David McNeill (Psychology, U. of Chicago)
Richard Shiff (Art History, UT Austin)

Organizer and Program Chair: Jürgen Streeck
(Communication Studies, UT Austin)

For further information please visit us at
<http://www.utexas.edu/coc/speech/gesture/>
or contact us at: gestureconference@hotmail.com
or jstreeck@mail.utexas.edu

FILM REVIEW

Evolution: The Miniseries

Evolution. Distributed by WGBH Boston Video (P.O. Box 2284, South Burlington, VT, 05407-2284; 1-800-949-8670; **Error! Bookmark not defined.**), 2001. Various producers; running time: 8 hours on 4 DVD disks or 7 VHS tapes. ISBN 1-57807-856-3 [\$99.95].

Reviewed by Nicholas Nicaastro, Dept. of Psychology, Cornell University, 243 Uris Hall, Ithaca, NY, 14853. E-mail: nn12@cornell.edu.

Darwinian evolution is a story that deserves its own miniseries. This slick and ambitious program attempts to present a comprehensive view of what is indeed one of the most important—and most often misportrayed—contributions of modern thought. Sold as “a journey into where we’re from and where we’re going”, the series might equally be described as a journey into where evolutionary theory itself came from and where it is going. The task is inevitably enormous, yet the producers do a reasonable job of capturing the promise of current research. Unfortunately, the program skips a universe of historical and doctrinal issues that are essential to an understanding of the modern evolutionary synthesis. These omissions make Evolution far less than a definitive survey of its subject.

Narrated by actor Liam Neeson, the series stretches over eight hours. It opens with “Darwin’s Dangerous Idea,” a two hour amalgam of historical reenactments of Darwin’s life and commentaries on it by leading scientists and historians. The episode approaches a feature-length film in its dramatization of Darwin (played by Christopher Larkin) and his rivals, allies, and enemies (including Matthew Radford as Richard Owen, Andy Henderson as Thomas Huxley, and Anthony Carrick as Bishop Wilberforce). As documentary reenactments go, this one (written and directed by David Espar and Susan K. Lewis) isn’t bad: the performances are good, the dialog crackles with occasional wit, and the script does its expositional job

without lapsing too obviously into lecture format. The commentators, including Darwin biographer James Moore, Stephen Jay Gould, Kenneth Miller, and Daniel Dennett, do a fine job of putting the story into its proper Victorian historical and philosophical context, making abundantly clear just what was so dangerous about Darwin’s idea. One supposes that the larger purpose of reenacting (instead of just summarizing) Darwin’s life is to put a human face on what might seem, to some, to be a soulless affront to traditional understandings of the natural world.

Still, the episode overindulges its humanizing intentions. Do we really need, for instance, to witness Darwin’s grief over his dead daughter Annie to understand the evolution of the camera eye? Educators constrained by a 50- or 75-minute class period might likewise wonder why precious class time should be expended on Darwin’s courtship technique, or his brother Erasmus’ drinking habits. Too talky to be a good movie, emotive enough to distract from its own biological discourse, the episode has the feel of an ungainly, failed experiment.

The other six one-hour installments tell their stories in more straightforward documentary style. Each focuses on some broad theme, such as evolution through deep time (“Great Transformations”), the nature and role of extinction (“Extinction!”), co-evolution and the “Red Queen” syndrome (“The Evolutionary Arms Race”), the origins of sex (“Why Sex?”), the evolution of human cognition (“The Mind’s Big Bang”), and the struggle with creationism (“What About God?”). All of these are lavishly produced, well populated with appropriate authorities (E.O. Wilson, Stephen Pinker, Geoffrey Miller, Robin Dunbar, Andrew Whiten, Meredith Small, et al.) and are more or less accurate. One may quibble, of course. For instance, “The Mind’s Big Bang” seems to minimize the intense controversy over whether the archaeological record really does show an “explosion” of cultural behavior associated strictly with modern humans in Europe around 40,000 years ago. “What About God?” covers the creationist movement in the United States with real sensitivity to the angst of Indiana teenagers, but fails to reflect the fact that billions of faithful Moslems, Buddhists, Hindus and yes,

even Christians in the rest of the world have no argument with Darwin.

For any discussion of evolution destined for American public television, the creationist challenge is indeed "the elephant in the room." To their credit, the producers confront the elephant head on. "Great Transformations" features an urgent rejoinder to those who contend that the paleontological record contains little evidence for macroevolution, or species "turning into" other species. Covering largely the same ground as Carl Zimmer's 1999 book, *At the Water's Edge*, the program vividly shows how a formerly mysterious event, such as the advent of whales, can rapidly become a textbook example of macroevolution. The elegant work of Dan-Erik Nilsson on the evolution of eyes, which is featured in "Darwin's Dangerous Idea," neatly disposes of the question of how selection can produce something as "perfect" as an eye. "The Evolutionary Arms Race" describes how microorganisms evolve in response to antibiotics—a case of selection that is not only abundantly obvious, but a matter of life and death.

The implicit debate with creationism may be one reason why the series fails to broach the development of evolutionary theory since 1859. There may have been some imperative, conscious or unconscious, to make the evolutionary edifice as seamless as possible. In fact, the modern synthesis did not spring full-blown from Darwin's brow. The lack of a mechanism to pass on the outcomes of natural selection was a serious problem that did not begin to be solved until the rediscovery of Gregor Mendel's insights into heredity years later. Even then, the work that forged our modern understanding of evolution, the integration of natural selection with genetics, ecology, and paleontology, was not complete until the mid-twentieth century. Yet none of names associated with the culmination of Darwinism, such as Theodosius Dobzhansky, Ernst Mayr, and George Gaylord Simpson, are mentioned in the entire eight hours of *Evolution*. Nor do we hear of "punctuated equilibrium" or "selfish genes," though Stephen Jay Gould and Richard Dawkins both appear in the series. Nor, for that matter, do we hear anything of notable predecessors to Darwin, such as Jean Baptiste Lamarck. (Alfred Russel Wallace is mentioned once.) *Evolution* makes it seem as if the one thing

that hasn't evolved in a world of evolved creatures is the theory of evolution itself.

None of these flaws are fatal. Teachers of high school or undergraduate biology will find much to stimulate discussion here. The DVD version also lists links to useful material on the Web that to some degree compensates for the series' lacunae. Over all, the producers have opted to sacrifice grandeur for topicality. At its earnest best, *Evolution* wants to show that its subject is always growing, becoming ever more deeply relevant not only to grasping our collective past, but to the decisions that will fashion our future.

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BOOK REVIEWS

The Triumph of Sociobiology

By John Alcock, Oxford University Press, 2001; 257 pp. ISBN 019-514383-3 [Hdbk, \$27.50]

Reviewed by William Charlesworth, Box 18, Stockholm WI, 54769

Would you believe it? Just when the term "sociobiology" has virtually disappeared from the science vocabulary of North Americans, and 26 years after E.O. Wilson (1975) gave the term its grand entrance in his *Sociobiology: The New Synthesis*, it reappears. The attempt to drop the term has a number of well-known reasons. For one, it was felt by many as simply invalid to extrapolate the "new synthesis" to human behavior since Wilson initially based his thesis on research with insects. Further, Wilson was seen as recklessly extending evolutionary explanations to account for such complex behavior as parental care, kin behavior, and altruism. In general, his move was seen as too speculative (in some ways it was) and as empirically unsubstantiated (for many species it actually was not). And finally, the ideological

reason: sociobiology was viewed with great alarm in some circles as a new form of genetic determinism, one that attributed such politically-sensitive phenomena as gender differences and parent-offspring relations to genes and natural selection. Environmentalists, especially, were appalled by what they perceived as re-emergence of "social Darwinism".

Of interest to ethologists, the term "ethology" during roughly this same period also became unacceptable for some professionals in North America; unacceptable less for its strong biological orientation (it was always accused of that) but more for the fact that it was seen as no longer generative of new concepts or research (e.g., Milner, 1990). That human ethology per se has been forced to weather this negative evaluation is insightfully discussed by Linda Mealey (2000) in her Salamanca ISHE Presidential Address. One major objective manifestation of the rejection of the terms "sociobiology" and "ethology" in the U.S. at least was the decision to change the name of the well-established journal *Ethology and Sociobiology* to *Evolution and Human Behavior*.

John Alcock, an eminent researcher highly respected for his animal research and the widely read author of *Animal Behavior: An Evolutionary Approach* (1975), resurrects the term "sociobiology" and provides a well-articulated rebuttal of its most vocal critics. In plain language he tells us why sociobiology's approach to social behavior is (and will continue to be) triumphant. The big question is whether or not Alcock is justified in taking this position. Alcock defines sociobiology in terms of its practitioners who "try to answer one basic question: What role did natural selection play in shaping the evolution of this society or that social behavior?" (p.10). This is an ultimate question, one that deals with reproduction and its population consequences within the time frame of environmental conditions that render some traits adaptive and others not. The proximate question, in contrast, is: "How does the internal machinery of life work to produce particular results?" (p.12) The proximate question covers the whole range of here-and-now factors - external stimulus, motivational, cognitive, emotional - that impact daily behavior and influence adaptation. The

distinction between the two questions is exemplified by Wilson (1975) in the distinction between cellular biology and population biology. The former includes subdisciplines such as neurophysiology (that ask proximate questions) and the latter includes sociobiology and behavioral ecology (that ask ultimate questions).

Alas, according to this scheme, ethology and physiological psychology are destined to be "cannibalized" by both sides. Wilson's cannibalization metaphor did not unexpectedly make a positive impression on ethologists. Eibl-Eibesfeldt, for example, has made it clear on many occasions that ethology could hardly be reduced to such status since ethological research provides the empirical foundation for much, if not all, sociobiological theorizing. Actually, Alcock supports Eibl's point with his repeated reference to ethological observations that support sociobiological hypothesis generation and testing. So does Wilson (1975) himself in Chapter 2 where he praises those indefatigable, hardworking ethologists engaged in time consuming field observation, the sine qua non method that allows many important sociobiological hypotheses to be tested.

Alcock also comes up with an important and oft-ignored historical nuance. In a section labeled "Sociobiology before Wilson" (pp. 16-19), he stresses that many researchers to whom Wilson is deeply indebted dealt with the role of selection on social evolution starting with Darwin and emerging in full force in the work of George Williams, David Lack, Robert L. Trivers, Richard D. Alexander and Jerram Brown. But despite this debt, Wilson, according to Alcock, deserves credit for synthesizing virtually the whole biological corpus of studies on social behavior. Wilson also gets sympathy for taking the verbal and physical abuse for doing so. Alcock begins the present volume by mentioning Wilson's first major speech introducing his synthesis to the scientific community. "On 15, February 1978, a young woman carefully poured a pitcher of ice water onto the head of Edward O. Wilson while he sat waiting to address an audience at the annual meeting of the American Association for the Advancement of Science." (p.3) The pouring was followed by chanting "Wilson, you're all wet." Controversial ideas can make a martyr out of even an entomologist.

Apparently to avoid the potential for internecine warfare between sociobiology and other behavior sub-disciplines, Alcock makes it clear repeatedly that working on ultimate problems is not superior to working on proximate problems. Both approaches clearly complement each other. Alcock also stresses that sociobiology does not imply that there are genes for social behavior. Ergo, opponents can not claim sociobiology adheres to genetic determinism. Environmental factors always play a significant role in the emergence of phenotypes: gene/environment interaction is a given. Who today would believe otherwise? However, Alcock is not very convincing when he stresses the point that sociobiologists are not genetic determinists. If genes do not tether social behaviors to past adaptations, what does? Genes have causal efficacy and in his respect are determinative (even if very indirectly) of certain phenotypes. To be more precise, co-determinative with the environment, but determinative enough on their own (putting it awkwardly) not to be disregarded. Evolution is historical material causation. If this were not the case, evolution would not be possible. So let's move on.

What then do sociobiologists do that is novel and needs to be recognized as the wave of the future? Alcock responds to this question with a convincing answer: the sociobiological framework makes it possible to formulate novel, plausible, and testable (stress on testable) hypotheses about social behavior. In short, sociobiology can meet the requirements of any good science; its reasoning and methods can be sufficiently transparent to be critically evaluated by anyone. If critics do not like sociobiologists' speculations that is their own problem. Speculations drive science and scientists are adept at trying to demolish them, especially when they conflict with their own ideas.

Alcock strengthens his argument in such chapters as "What have Sociobiologists Discovered?" and "Sociobiology and Human Culture". Apropos the latter, he nicely explains how behavioral flexibility and learning mechanisms fit into an evolutionary framework. He also challenges skeptics who think sociobiology has no relevance for real-world humans. In his chapter "The Practical Applications of Sociobiology", he notes the positive value that comes from

understanding both cooperation and conflict and the different reproductive strategies of men and women from the sociobiological perspective.

His chapter "The Problem with Cultural Determinism" is a good critique of pure cultural arguments. It also provides interesting hypotheses for those attempting to account for the marked decrease in many current women's willingness to produce surviving offspring; a trend that seems to undercut the evolutionary argument that most widespread, reproductively relevant behaviors maximize fitness. In all this, Alcock keeps emphasizing that sociobiologists have no easy task. The complexity of the problems they frequently face usually involve phenotypes that are products of multiple interacting determinants. In such cases, formulating competing testable hypotheses is far from easy. In a perfect world, critics have no credible strategy other than to challenge the methods sociobiologists use to do their research. That many of the most virulent scientific critics of sociobiology ignore methods and focus on content is a bad sign. It means that attempts to pursue the truth are no longer acceptable unless they pass certain ideological (rather than methodological) litmus tests. Society, of course, needs ethical and economical litmus tests to judge research applications. However, society as well as science benefits most by an informed and impartial examination of research methods as well as of research subject matter. This is one of Alcock's main messages and it is a good one. Now if only the critics of sociobiology will read this book with an open mind.

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***Law and Evolutionary Psychology:
Selected Essays in Honor of
Margaret Gruter
on Her 80th Birthday***

By Lawrence A. Frolik, Editor with Wolfgang Fikentscher & Gerti Dieker. Gruter Institute for Law & Behavioral Research, 158 Goya Rd., Portola Valley, CA 94028. 1999. 369 pp. ISBN 0-9669673-1-3. Paper. \$29.

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Many people, including scholars, do not see any connection between law and evolutionary biology. This book shows how evolutionary ideas should be taken into account when understanding legal issues. As such, it makes an important contribution to a more complete understanding of law. The book contains many outstanding chapters. I will discuss some of them.

Robert Trivers tells us how he developed his concept of reciprocal altruism in "How I Wrote The Evolution of Reciprocal Altruism" He looked at the social psychology literature, and concluded that the concept of altruism was inadequately understood. With the evolved, highly developed brain of humans, it makes sense that we would be altruistic with each other: my altruism to you makes you want to be altruistic to me. In this way, we both increase our chances for survival. This appears in some animals too where they may warn each other about predators. He also points out that after he mastered the technical language of social psychology, and then came up with his reciprocal altruism concept that advanced understanding of altruism, social psychologists continued to think as before, neglecting to take reciprocal altruism into account. Fields can be rigid.

An outstanding chapter that presents new, research-based ideas is "No Language but a Cry" by Kathleen Wermke. She deals with infants' cries, and how the mother recognizes and responds to them. Crying, she says, is important

to infant-mother attachment and lets the mother know of the child's needs. Many mothers can recognize different kinds of cries by their infant. This appears to be instinctive, although one could argue that it is learned. Some cries are unpleasant to the human ear, and indicate a great need by an infant. Paradoxically, these loud or high pitched, or otherwise unpleasant cries may tend to invoke violence by the mother, due to their unpleasantness. Wermke says that parents should learn the trigger function of biological signals from the infant. If they did, they might be more alert to the needs of the child, and less likely to engage in violence against the child. Wermke dislikes age-related norms of infant and child behavior, because they fail to take into account normal regressions by the child, thus making parents think their child is behaving inappropriately or that their parenting is flawed. Wermke says that mothers are pre-programmed in how to handle infants, but many things can go wrong, as when the crying infants stresses the mother, and she reacts with indifference or violence.

Another excellent chapter is "Law, Biology, Sex, and Politics" by Kingsley R. Browne. [See review of Browne's 1999 book in this issue of HEB - ed.] He shows that there are many real sex differences between men and women, but some feminists and others, motivated at least in part by a desire for equality between the sexes, deny these differences, and often attack those who mention them. The idea that some people could be different due to biology is threatening to many (Eisenman, 1996; Wilson, 1992). Browne points out three broad areas where he believes research shows innate sex differences: temperament, cognition, and reproduction. It is certainly worth doing research to see to what extent sex differences in these and other areas are genetic, environmental, or, as is typically the case, some combination of genetics and environment. But, it is politically incorrect to report sex differences (Eisenman, 1996; Wilson, 1992), and Browne and others who do so are often attacked. That is a sad sign of the times, and all those in evolutionary fields have the burden of having to establish their ideas at a time when there is a bias for nurture over nature in an attempt to promote egalitarianism. In law, the best we can have is equality before the law; not an equality where everything has to come out equal or else is deemed to be unlawful discrimination.

Hagen Hof writes about "Rules of Respect." Hof says that law demands respect, which includes respect for the law, but also involves respect of one person for another. Respect for other people would seem to provide an evolutionary advantage, allowing us to live in harmony with others. At the same time, egotistic motivation also seems to be evolutionarily advantageous in getting what we want. There can also be historical and cultural reasons for egotistic motivation. Nisbett (1993) has shown how, in the southern United States, white Southerners have a high murder rate, likely to be due to a history of a code of honor, and also a high murder rate for those herding in the hill regions. Regarding honor, violations of honor were expected to be met with swift aggression. Herders, unlike farmers, must protect their herds, or their livelihood could be easily and quickly destroyed. Thus, swift, hostile reactions to threats were called for. Part of respect, according to Hof, is a hands-off policy, in which we do not interfere with others, including animals, nature, humans, etc. Rules of respect can help people get what they want, with the exception of egotistical needs that would hurt others. Rules of respect aim to restrict egotism. As I see it, the problem here is meeting human needs. Is not restricting what we call their egotistical needs a violation of some human needs, as in the case of the Southern herder? After all, egotistical needs are still needs. Perhaps it is a matter of balance, where, ideally, we could give up some of our egotistical needs to live in harmony with others, and thereby fulfill many of our other needs, through interpersonal help.

This is an important book, about exciting, relatively new ideas. It deals with many different aspects of law, evolution, and biology. There is certainly a need for law to be infused with an understanding of what biology and evolution have to offer. The book makes an important contribution in that direction. That is its strength. The weakness is that the chapters show no cohesion. They are basically separate, interesting chapters, but have little or nothing to do with one another. The chapters can be read in any order the reader wishes. But, they are well worth reading.

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The Dangerous Passion: Why Jealousy Is as Necessary as Love and Sex

By David M. Buss. Free Press (1230 Avenue of the Americas, New York, NY, 10020), 2000, 258p., ISBN 0684-85081-8 [Hdbk, \$25]

Reviewed by M. L. Fisher, York University, Dept. of Psychology, 4700 Keele St. Toronto, Ontario, M3J 1P3. E-mail: mlfisher@yorku.ca

In *The Dangerous Passion*, David Buss examines jealousy resulting from infidelity, and discusses the evolutionary foundations of this complex emotion. Buss states that his book "illuminates the dark side of sexual treachery, the mysterious puzzle of romantic love, and the central role of jealousy in our intimate relationships" (p. 2). *The Dangerous Passion* holds true to this claim, using data from contemporary research performed by himself and others. Additionally, fans of Buss' *Evolution of Desire* (1994) may enjoy the theoretical development and refinement of earlier work that is evident in *The Dangerous Passion*.

The Dangerous Passion is well written and insightful. It is primarily directed towards the general population rather than academics, which may leave some readers disappointed if they expected a meatier read. However, all readers will be exposed to contemporary infidelity research and a good overview of findings on interpersonal relationships in

general. Furthermore, Buss includes fascinating case-study accounts and anecdotes as exemplars of his arguments and theories. If nothing else, the book would be an interesting read simply due to these enlightening and entertaining examples. The book's first chapter draws the reader in with an example of mate killing due to jealousy and humorous tales that are used to show how jealousy is an evolved adaptation. Chapters 2 through 4 describe sex differences in jealousy, with a discussion of male-female co-evolution in a game of deception and detection, as evidenced by various case studies and relevant research. Chapter 5 is primarily devoted to violence resulting from jealousy, deriving support from several cross-cultural investigations. Chapter 6 is a discussion of the types of relationship that result in one person committing infidelity, along with the types of personality that tend to commit this act. Chapter 7 is an investigation of why women have affairs, their strategies to keep a mate, and studies on 'trading-up' (hypergyny) by women when they select a partner for an affair. Chapter 8 pertains to the strategies used by people to cope with infidelity, and why therapeutic efforts to eradicate jealousy are misguided. The final chapter examines the importance of jealousy for passion and love.

The main tenet of Buss' theory is that jealousy is an adaptation that has played an important role in coping with reproductive threats, motivating us to "ward off rivals with verbal threats and cold primate stares. It drives us to keep partners from straying with tactics such as escalating vigilance or showering a partner with affection" (pp. 5-6). Further, Buss proposes that jealousy is a double-edged emotion. The negative side of jealousy is that it "corrodes marriages, undermines self-esteem, triggers battering, and leads to the ultimate crime of murder" (p. 7). On the positive side, "the centrality of jealousy is human love" (p. 14), that likely continues to help us today to cope with a host of real reproductive threats.

A continuous theme throughout the book is the concept of sex differences in jealousy resulting from infidelity. Buss attempts to show that males, in an effort to secure paternity confidence, are more distressed by sexual infidelity to the extent that they will stalk, batter or kill their mates. In contrast, females, in an effort to secure

paternal resource investment and protection, are more distressed by emotional infidelity to the extent that they will intentionally provoke jealousy and derogate competitors. These differences stem from human evolutionary history, in which a cuckolded male risks investing resources, time, and effort into a child that is not his genetic offspring, and in which a female risks losing her partner's commitment, resources, and protection to a rival female and her offspring.

Although the majority of the arguments presented in *The Dangerous Passion* are supported, there are several instances where the reader is left asking questions. For example, after extensive discussions of why males have a tendency to physically harm their mates, Buss presents data showing that males sometimes deny the fact that their partner is committing acts of infidelity (p. 195). This seems greatly discordant with the arguments and theories that Buss presents, so some explanation is expected but none is provided.

A second problem with this book is that some of the theories seem unsubstantiated and far-fetched. For example, in a discussion of spousal homicide by males, Buss proposes that males have "evolved a mate-killing module, a psychological mechanism whose function is not threat or deterrence, but rather the literal death of a mate" (p. 122). He offers support for this module by way of three arguments. First, in a polygynous situation, a man may benefit by killing a wife who has committed infidelity in order to prevent other wives from defecting. Second, he may kill her in order to salvage lost honor due to a wife's defection. Third, a man may kill his wife in order to kill a possible developing offspring that is not genetically his own. It remains unclear why these three arguments specifically support an evolved module, rather than an alternative explanation. In fact, 'Error Management Theory' (Haselton, DeKay & Buss, 1998; mentioned on p. 76) seems to be a better explanation for mate homicide, but Buss ignores this possibility. In error management theory, "evolution by selection will favor the inference that leads to the less costly error in order to avoid the more costly error" (p. 76). According to this theory, Buss' three arguments may be better explained by the rationale that it may be more adaptive to kill a

mate rather than to ignore, or treat lightly, acts of infidelity. If true, this may support Wilson and Daly's (1988; 1993) "slip-up" hypothesis to which Buss is in opposition. As reviewed by Buss, the slip-up hypothesis is that "spousal homicide is not adaptive. Men use violence to control women and to prevent them from leaving. In order to make threats credible, actual violence has to be used. Sometimes the violence gets out of hand and results in a dead spouse" (p. 121).

One last observation worthy of note is that there is an apparent bias towards male jealousy. For example, in a discussion that addresses the co-evolutionary spiral of deception and detection (p. 45), the focus of the section is on how males evolved to become better deceivers and females better deception detectors. The reverse is not discussed leaving the reader to presume that females seldom attempt to deceive their mates. This is highly unlikely, given the consequences females face when a mate discovers her tryst.

In general, *The Dangerous Passion* is an interesting read and a good overview of jealousy research conducted over the past decade. Using an evolutionary framework, Buss provides a comprehensive view, albeit sometimes lacking technical depth, of a complex and largely ignored emotion. While there are places in which the reader is left needing more detail, this book should be considered as a good starting point for an exploration of interpersonal relationships.

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The Primary Triangle: A Developmental Systems View of Mothers, Fathers, and Infants

By E. Fivaz-Depeursinge and A. Corboz-Warnery. New York: Basic Books (10 E. 53rd St., NY, NY, 10022-5299). 1999, 208 pages, US\$45 (cloth). ISBN 0-465-09582-8.

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As you begin reading this review, please think of a triangle: not a static geometric triangle drawn on paper, but a dynamic interactive triangle unfolding within a human family. What connotation comes to mind? A healthy, functioning family unit, characterized by harmonious interplay? Or a problematic, perhaps even destructive pattern in which two individuals exclude a third, or collude to bring a third into their own ongoing conflict? University of Lausanne Professors Fivaz-Depeursinge and Corboz-Warnery, authors of *The Primary Triangle*, suspect you will think only of the latter. In hopes of changing the tendency to link triangles with troubled psychodynamics, they work in this book toward a theory in which triangulation is allowed a developmental, normative foundation.

The mother-infant dyad is still at the heart of most studies of the family. Therapists and scholars trained in systems theory may broaden their view to encompass the whole family, but that family often is still perceived and treated as a series of dyads. Fivaz-Depeursinge and Corboz-Warnery advocate instead a leap to a triadic gestalt in which direct interaction among three persons is studied as it unfolds.

Admittedly (see p. x), to study triangles in this way is a daunting task, given the degree of nonverbal interaction that simultaneously unfolds in them. But using an evaluative situation called the Lausanne Triadic Play (LTP) scenario, these two researchers have created a formalized way to study the development of the 'primary triangle' of baby, father and mother in

the baby's first year. Focusing on the youngest infants, before the onset of intersubjectivity and referential communication, is a departure (and a welcome one) from routine practice.

Here's how the LTP scenario works. Parents and infant arrive in a research room; the parents place the infant in a seat, which itself is placed on a table. The baby faces the parents such that the family constitutes an equilateral triangle. The LTP then unfolds (according to previous instructions to the parents) in four parts: the first 'two plus one' configuration, in which one parent and the baby play together with the other parent on the periphery; the second two plus one configuration, in which the previously peripheral parent now becomes active with the infant; a third stage in which the mother, father, and baby play triadically; and the final two plus one configuration, in which the parents interact and the baby is kept peripheral. Throughout, the parents decide how to orient the infant seat, when to shift across the four parts; when each parent will be active, and so on.

Although the LTP process is divided into stages, with different individuals assuming different roles at strategic times, the process is an emergent rather than particulate one. "We know from systems theory that the interactions between the elements of a system generate a new, unique property that is irreducible to its parts. It is sustained as long as the interaction lasts. We assume that the two-faced quality of working together and helping each other is the emergent property" (p. 9). Particularly important are the transitions between the four parts, when the need for cooperation is likely to be at a premium. The authors argue compellingly that instances of miscoordination are not always problematic, but are in fact often quite normal. "What will make the difference is whether subsequent cooperative repair is initiated and proves effective" (p. 17)

Once multiple families are filmed undergoing the LTP procedure multiple times, over some months, how are the data assessed? Methods are driven by one key question: Does this family work together as a team, with the partners helping each other? and by various specific objectives, including a micro-description of each family's interactions in order to discern its patterns of relating. Although the frame-by-frame video analysis described is an excellent

approach, the book becomes slightly confusing in presenting a myriad of ways to categorize the nature of each family's interactions.

The authors advocate four different frameworks to characterize the family alliances that emerge from the LTP process: cooperation, stress, collusion, and disorder. The first two indicate, to different degrees, that the family is basically working together as a team, whereas the latter two, also to different degrees, indicate obstacles to full cooperation. This seems straightforward enough, but the authors go on to discuss what they call four functions (participation; organization; focal attention; and affective contact) and four levels of nonverbal interaction (via the pelvis, the torso, gaze, and expressions) that somehow combine to comprise (I think!) formations. Thus, the "four types of formations that serve the four functions at the four different levels of interaction constitute the triangular framework" (p. 14). No doubt conceptually solid, this hierarchical arrangement with inter-connected levels can be hard going for the reader unfamiliar with the LTP scenario.

At first, I worried that the LTP situation might be too contrived: why not just observe what the families naturally do rather than forcing them into an artificial scenario in the lab? But as The Primary Triangle unfolded, and case studies were presented, the value of this method became clear. Case studies of different families show, as no aggregate or statistical data could hope to do, that the video analyses do indeed uncover essential differences across families and just as importantly, that families can be helped to work toward more comfortable alliances for all involved, especially the infants.

As should be evident, my opinion of The Primary Triangle is positive. Already a convert to the worth of systems theory for understanding mother-infant dyads (Fogel 1993), I had that "but of course!" reaction when confronted with the need to think triadically rather than dyadically. This volume is full of groundbreaking ideas relevant to the application of systems theory in multiple disciplines, all enhanced by the authors' multiple readings of family patterns (that is, clinical, structural, process and developmental readings are all defined and explored).

Naturally, such a complex volume is not flawless. The major problem relates to the underlying assumption that the two-parent family is the fundamental context for infant development across human societies. Anthropologists know that the nuclear family is far from the norm cross-culturally, and as I write this review, the press is full of the news that only about 25% of American families show the supposed typical nuclear family arrangement (parents living alone with their children). Are the basic concepts in this volume applicable to the variety of family structures in the world today? The authors hint that the answer is yes when they acknowledge that "there are as many ways to use the LTP situation as there are clinically significant triangles" (p. 155) and when they note that their paradigm applies to quadrangles and larger units too (p. 183). I still wished for an acknowledgment of the variety of vital family structures in today's world - shouldn't we study two same-sex parents and baby; parent, older siblings, and baby; and so on? Yet, these questions point to a strength of *The Primary Triangle*, for this book will stimulate productive research into the dynamic family for years to come.

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New Books

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Bulletin Submissions

All items of interest to ISHE members are welcome: Society Matters; articles; replies to articles; suggestions; announcements of meetings, journals or professional societies; etc. These sorts of submission should be sent to the editor. Book review inquiries should go to the book review editor. All submissions should be in English, and sent to the appropriate editor via e-mail, as an attachment in order to maintain formatting. If e-mail is impossible, hard copies will be accepted, as long as they are accompanied by the same text on diskette (preferably in Microsoft Word version 6.0 or earlier). Shorter reviews are desirable (less than 1000 words). **Please include complete references for all publications cited.** For book reviews, please include **publisher's mailing address and the price of hardback and paperback editions**. Submissions are usually reviewed only by the editorial staff. However, some submissions are rejected. Political censorship is avoided, so as to foster free and creative exchange of ideas among scholars. The fact that material appears in the bulletin never implies the truth of those ideas, ISHE's endorsement of them, or support for any of them.

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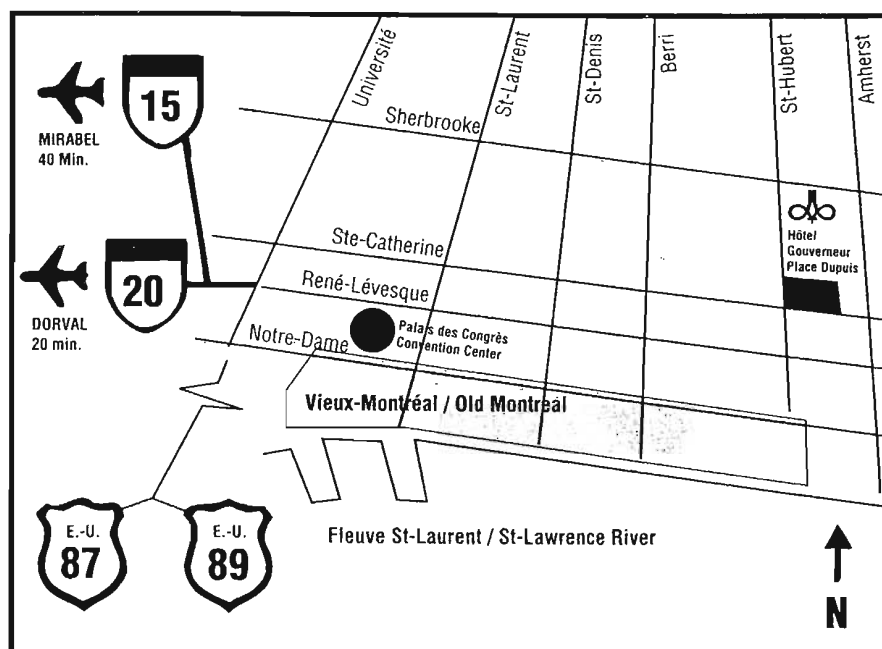
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