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Montreal Conference

Organization is underway for the 16th biennial conference of the International Society of Human Ethology, which will be held in Montreal at the Hotel Gouverneur from Aug 7 to Aug 10, 2002. This year's 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.

Carel van Schaik:

Orangutan tool use and the evolution of technology and intelligence

Sarah Hrdy: Maternal love and ambivalence in the Pleistocene, the 18th Century, and right now

Barry Bogin: Childhood begets children: human reproductive successthen and now

Filippo Aureli: Conflict Resolution: The Big Picture

Montreal was enthusiatically 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 (McGill, Concordia, University of Montreal and the University of Quebec at Montreal). Both French and English are spoken nearly everywhere 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 registration information.

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. Abstracts for all submissions have a final deadline of April 1st, 2002, but earlier submissions are urged.

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 DowntownMontreal:

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 Celsuis, cooling off at night. However mid-August can be quite variable and sometimes cooler.

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 bustrip to the old capital city of Quebec on Sunday. Dining and dancing in downtown Montreal every night or all night is optional.

For more information contact:

peterlaf@maine.edu or visit the ISHE web site: http://evolution.anthro.univie.ac.at/ishe.html

Lodging: We have reserved 50 rooms at the Hotel Gouverneur Place Dupuis, on a first come, fisrt serve basis. The 4 Star conference hotel is modern, spacious and centrally located with the interesting part of the city right out the front door. Because the Canadian dollar is currently trading at less than .65 US, costs are exceptionally good value. 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)We are also investigating lodging at the nearby dormitories of the University of Quebec at Montreal for students.

Meals: Registration fees include a welcome buffet on Wednesday evening, mid-day lunch and two coffee breaks served daily at the hotel during the 3-day conference for all those registered for the conference, regardless of choice of lodging. Breakfast and evening meals can be obtained at the hotel or in a wide price-range of nearby restaurants at your own expense.

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

Registration Form

Registration Fee (Before April 1st)

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

Registration Fee (After April 1st)

Members:\$250USNon-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 fundsmade 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

Society News

Dues Increase Coming in 2002

A word to the wise: Please take a minute to check your mailing label and renew now, if necessary, before dues increase on January 1, 2002. ISHE voters have approved the first increase in many years due to the rising costs for printing and mailing the bulletin.

Voters also elected Karl Grammer as the first official ISHE Webmaster, a position he has occupied unoficially for a number of years. Congratulations, Karl!

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. Beginning in January, membership in the International Society for Human Ethology is \$40.00/yr or \$100.00 for 3 years. Or you may renew before January at current rates: \$25/yr or \$60./yr. You may pay by cash, check or a memo authorizing the ISHE Treasurer to charge your VISA or Eurocard a specific amount plus your credit card numberand 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 ourreaders 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 "Constitutional and Environmental film 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

AARON T. BECK AWARD

This award is offered by the Across-Species Comparisons and Psychopathology Society (ASCAP) for the best published or unpublished article or manuscript at the intersection of clinical work in the human therapeutic disciplines, neuroscience, and evolutionary biology. Applicants must be either sole or first author, and be a student or within five years beyond the terminal degree in their field. The annual award comes with \$1000 to be used toward expenses to present the paper at the ASCAP Society meeting 19 June 2002 at Rutgers University in New Brunswick, New Jersey, USA. Deadline for submissions is 1 March 2002. Applicants are to be Please send manuscripts and any inquiries to Bette Hartley, Madison Institute of Medicine, 7617 Mineral Point Road, Madison, WI 53707 USA, fax 1-608-827-2479,

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 onbiological 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 Talankana, 207,707,7688, avt. 4520, Fay. (207)878

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 ongesticulation and to serve forum for broad а а and lively as of interdisciplinary exchange 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 onthe 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)

Deadline: January 1, 2002 (extended).

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

BOOK REVIEWS

Darwinism Today

Darwinism Today is a series of mini-books edited by Helena Cronin and Oliver Curry and published by Yale University Press. All volumes are approximately 60 pages long, cloth-bound, and priced at \$9.95 (U.S.), £4.99 (UK).

The series developed out of a program at the London School of Economics to present the latest Darwinian thinking and its application to humans as understood by leading figures in the field. The initial volumes in this series been appearing in 1998 (Weidenfeld & Nicolson), and were first published in the U.S. beginning in 1999 (Yale). In what follows, the first six volumes in this series are reviewed by <u>Bulletin's Book</u> Review Editor (T.R.A.) and by a student of ISHE President Linda Mealey (T.B.) who read and reviewed four volumes while taking a senior seminar in Evolutionary Psychology.

Forthcoming volumes will include <u>What is</u> <u>Evolutionary Psychology: Explaining the New</u> <u>Science of the Mind</u> by Leda Cosmides and John Tooby, and <u>Warrior Lovers: Erotic Fiction,</u> <u>Evolution, and Female Sexuality</u> by Catherine Salmon and Donald Symons.

The Truth about Cinderella:

A Darwinian View of Parental Love

By Martin Daly & Margo Wilson. 1999, 68p. ISBN 0-300-08029-8.

Reviewed by Thomas R. Alley, Department of Psychology, Clemson University, Clemson, SC 29634-1355, USA.

Daly and Wilson begin their mini-book with a chapter that uses folk tales, fairy tales and proverbs to reveal a consistent stereotype of step-parents as poor and often dangerous parents. Are fairy tales like Cinderella a reflection of actual human relations, or do they just promote an unjustly negative stereotype of step parents?

Chapter 2 provides a comparative and evolutionary perspective on step-parents and infanticide, introducing the essential concepts of inclusive fitness, parent-offspring conflict and limited parental resources, and (correctly; see Williams, 1966) denying group selection. One notable weakness is that "Darwinian processes" and "Darwinian selection" are invoked prior to any explanation of the mechanisms involved. Nonetheless, Daly and Wilson provide a sufficient basis for a cost-benefit analysis of parenting that predicts reduced parental care and, in some situations, infanticide. The following chapters shows that this evolutionary reasoning is in accord with scientific evidence. Chapter 3 starts on an autobiographical note, addressing how an animal behaviorist ended up studying human step parents, and then reviews sociological research on human step families. Chapter 4 provides an overview of the research onstep families for which Daly and Wilson are rightly famous. This chapter also contains a clear and compelling review of a variety of other studies, spanning 5 continents, that also demonstrates a dramatic increase in risk of maltreatment from step parents. In summary, this research reveals that having a step-parent is "the most powerful epidemiological risk factor for severe child maltreatment yet discovered" (p. 7). Perhaps most striking is the immense increase in risk of death faced by young children from a co-residing step-parent, estimated in various studies at 70 to 150 times the risk from genetic parents!

Chapter 5 uses cross-species comparisons to highlight the important differences in parental discrimination and treatment of offspring versus other young. The concept of an environment of evolutionary adaptedness (EEA) is introduced to explain such differences. Finally, the chapter closes with a brief discussion of the typically greater paternal (versus maternal) uncertainty, and the differences between adopted and stepchildren. In the last two chapters, Daly and Wilson effectively counter-attack a variety of theories and alleged alternative counterevidence for the increased risk of co-residing step-parents. Readers will find the attacks on Daly and Wilson's view disturbing; they appear to forsake an objective scientific approach and

may have had harmful effects on public policy and popular opinion.

In conclusion, this book will make an excellent supplementary reading for a variety of courses in psychology, sociology and human In this eye-opening look at the biology. inherently engaging issue of child care, empirical results are routinely discussed from a critical stance, and the pros and cons of different perspectives are considered. Ultimately, the power of evolutionary theory is amply displayed. Students will learn quite a few 'facts' from this mini-book and, more importantly, learn about the complications of interpreting empirical results and using them to evaluate scientific I believe most students will be theories. motivated to continue to think and learn about issues raised in the book long after they have finished reading it. Unfortunately, no references are provided, but 13 recommended readings are listed and the authors frequently provide both the publication date and author's name for critical readings (e.g., "In 1974, Trivers ...").

Reference

Williams, G.C. (1966). <u>Adaptation and natural</u> <u>selection</u>. Princeton: Princeton University Press.

Mind The Gap: Hierarchies, Health, and Human Evolution

By Richard Wilkinson. 2001 (in press), 74p. ISBN 0-300-08953-8.

Reviewed by Thomas R. Alley, Department of Psychology, Clemson University, Clemson, SC 29634-1355, USA.

Richard Wilkinson's <u>Mind The Gap</u> is the most recent volume in the Darwinism Today series. The gap in mind is the gap in equality of income between members of a society. In this provocative book, Richard Wilkinson provides a novel Darwinian perspective on the implications of human inequality. His primary point is to argue that there is a causal negative relationship between socioeconomic inequality, particularly income inequality, and health. In short, he claims that inequality kills. More broadly, his aim is to clarify why our health is strongly related to our social and economic circumstances, and to use evolutionary theory to help make the connections.

Wilkinson presents an impressive array of findings and arguments to support his proposal. For instance, both rich and poor die younger in countries with the greatest inequalities in income. Large health differences remain even when such factors as diet, smoking, exercise are controlled. Even though income and health are strongly correlated within a country or region, they are only weakly related between countries or regions, suggesting that relative wealth and social status are more important than absolute living standards or income. In terms of mechanisms, Wilkinson argues that increases in income inequality reduce the quality of the social environment by altering the balance of affiliative versus dominance/submission strategies. Moreover, many of the biological processes that can impair our health are psychosocial; i.e., "triggered by what we think and feel about our material and social circumstances" (p. 2). Stress is the most obvious psychosocial factor, but Wilkinson also points to differences in trust, friendship, hostility, social networks, social cohesion, autonomy, etc. The specific links that have evolved between psychosocial processes and biological responses (diseases) are detailed in Chapter 3, where experimental studies showing the harmful effects of low social status in non-human primates also are presented.

book I remained After reading this unconvinced that income inequality is as central to health as Wilkinson claims. Income affects and reflects so many factors that it seems impossible to show that there is a strong, causal relationship between income and health. Likewise, a multitude of differences between countries and groups are likely to affect health, each of which could be correlated to, but not causally connected to, health. He also may overstate the cases for the egalitarian nature of prehistoric human societies, for a strong link between violence and respect (Chapter 2), and for other connections. On the other hand, there is no denying that this book presents a convincing case that human health is harmed by stressful social relations characterized by dominance, conflict

and submission; characteristics that become increasingly likely as a society produces increased levels of socioeconomic inequality. And Wilkinson does not present a simplistic portrait of the relationships between psychosocial and environmental variables; to the contrary, he portrays the relationships as part of a complex web of numerous interrelated variables.

All of the other volumes in this series would provide a good means to add a strong evolutionary perspective to a course. This book, however, does not fit in the Darwinism Today series as well as these other volumes: less use is made of evolutionary theory (excluding the discussion of the biology of stress in Chapter 3), and the focus is on environmental influences. Nonetheless, the book is often engaging and will provoke student thought and certainly discussion. Moreover, a book written from an evolutionary perspective that focuses on environmental influences should help dispel the misguided idea that evolutionary theorists ignore environmental effects. Indeed, this book highlights the importance of the social environment in human evolution.

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

Shaping Life: Genes, Embryos and Evolution

by John Maynard Smith, 1999, 50 p., ISBN: 0297841386.

Divided Labours: An Evolutionary View of Women at Work

by Kingsley Browne, 1999, 70 p., ISBN: 0297841408.

Neanderthals, Bandits and Farmers: How Agriculture Really Began

by Colin Tudge, 1999, 53 p., ISBN: 0297842587.

A Darwinian Left: Politics, Evolution, and Cooperation

by Peter Singer, 2000, 70 p., ISBN: 0300083238.

Collectively Reviewed by Theresa Benoit, College of St. Benedict, St. Joseph, MN 56374 US

The editors of Darwinism Today series, Cronin and Curry, hope that with these little books "the best Darwinian ideas will reach an even wider audience". Specifically responding to a concern that many evolutionary psychologists and biologists recognize, they hope to reach undergraduate students who are unfamiliar with an evolutionary perspective. While research in evolutionary thought has expanded substantially in recent years, often this information is not presented to undergraduate students, even in the fields of biology and psychology. Shellberg recently articulated this in this Bulletin when he wrote, "We have not provided suitable educational opportunities for most students to learn the basics of behavioral biology" (Shellberg, 2000 (4), p.10). As a senior undergraduate psychology major whose only experience with evolutionary psychology has been one senior seminar, I believe that these books are greatly needed. The books are all

small and short, making them a quick and fun read. They are delightfully packaged in bright colors and with captivating titles, yet they contain some of the most advanced evolutionary views. The books are written by leading evolutionary theorists, but in a way that the average undergraduate student, with an inquisitive mind but relatively little knowledge about the evolutionary perspective, can encounter and understand some of the most spectacular debates of the modern day.

In the first book in the series, <u>Shaping Life:</u> <u>Genes, Embryos, and Evolution</u>, Maynard Smith draws attention to the current gap between the field of development and the field of evolution. This gap is unfortunate since the two are fundamentally connected in that evolution explains the ultimate reasons for change and development explains the proximate process of change. Maynard Smith points out that with recent advances in both fields, there are a great many valuable connections to be made. He hopes that his book will encourage dialogue between the disciplines.

In my estimation, this is the weakest book of the four I read in terms of meeting the goals of the editors-not because it is uninteresting, but because it is too advanced for an audience unaccustomed to evolutionary biology. At the very least, the style is limiting; its prerequisites for comprehension exclude people new to this line of thought. Most undergraduate students would be turned off by this book's detailed language and difficult material. On the other hand, the book is not aimed at people already familiar with the field. My sense is that evolutionary biologists who would comprehend and enjoy this book would simply never pick it up, since it is clearly packaged for a newcomer; besides, they would likely already be familiar with the material. In this instance, the author and the editors seemed to have different goals. The only group of people that I envision benefiting from this book would be undergraduates taking advanced biology courses.

Unlike <u>Shaping Life</u>, Kingsley Browne's <u>Divided Labour: An Evolutionary View of</u> <u>Women at Work</u> is easily comprehensible for its targeted audience, and provides an enormous and much needed challenge to the popular view of women and work. Browne criticizes recent

propaganda that the wage gap and glass ceiling are due to discrimination by employers and instead makes the argument that the observable differences are more easily accounted for by most social scientists evolution than acknowledge. Browne backs up his argument by first pointing out how evident it is that sex differences between men and women do exist: just as there are group differences in height between the sexes, there are differences in assertiveness and risk-taking behaviors between them as well. In humans, as is true in most species, males are the sex that has these attributes. Browne then goes on to explain that in the modern world, employees who take risks, are assertive, and dedicate their lives to the job are the ones who will receive higher pay and reach the top, regardless of their sex. Since women are generally less willing to sacrifice time spent with their families, among other things, we find that they do not earn as much or hold as high positions as men. Browne emphasizes that it is inaccurate to conclude that these differences indicate discrimination. He is a strong proponent of the notion that the differences we see in pay and position are due to the fact that men are more willing to put in what it takes to be an exemplary employee, while women are not. Furthermore, he explains that since women are most interested in men who are able to provide, it make sense that men will work hard to meet this expectation.

Browne's examination wellseems documented and well-presented. However, a major criticism that many undergraduate students will have is his misunderstanding of modern feminist views. Browne makes the assertion that feminists inaccurately view sex differences as sexism. In addition, he blames feminists for making womenfeel inferior in their feminine roles. Browne's assumptions are inaccurate for a number of reasons. First, he presents feminist thought as though it is a singular and permanent view. Yet, as feminist and evolutionary biologist Patricia Gowaty points out, assumptions of this nature show an ignorance of the feminist movement. She writes that "using the lens of gender to view the world results in diverse images or theories: liberal feminism, Marxist feminism, socialist feminism, African-American feminism, lesbian separatist feminism, conservative or essentialist feminism, psychoanalytic existentialist feminism,

feminism, radical feminism, and postmodern feminism" (1997, p.22-23). Furthermore, many modern feminists acknowledge, if not embrace, sex differences, and many do not believe that a woman should feel obligated to work outside the home if it is her choice to do so. These feminists focus instead on the dilemma that women face because of the fact that men's work (in the public sphere) is considered by society to be more valuable than women's work (in the private sphere). Browne asserts that feminists are the ones that label women's work as inferior. However, he misunderstands our patriarchal culture if he believes that only feminists have deemed "women's work" inferior. Being a feminist myself, I found it intriguing to ask Gowaty's question: "does the gender of the scientist influence the sorts of questions asked, the methods of observation, the theories and conclusions drawn from the data?" (1997, p.22).

Browne's book might be especially interesting if presented in an undergraduate Feminist Ethics or Women's Studies course. Not only could it be used as an interesting critique, it could serve as a way to challenge assumptions about gender roles and stimulate dialogue as well. Undergraduate political science and peace study students might likewise benefit from this book in that it could stimulate new ideas about public policy. Additionally, undergraduate psychology students would be able to gain insight from Browne's book. However, while I would recommend Browne's book for a number of undergraduate classrooms, I would caution instructors to be aware that students new to evolutionary theory may not have the critical thinking skills necessary to refrain from committing the naturalistic and genetic fallacies. Despite the fact that Browne makes mention of these, I think it is important for an instructor to review them in detail and be aware of the tendency of students to revert back to them. If assistance is not granted with this book, there may be a number of counterproductive outcomes. If they misunderstand the hypothesis, feminist students may dismiss Browne's book entirely to resolve their cognitive dissonance. Perhaps more damaging, ignorant sexist individuals may see it as support for their views. It is important that instructors encourage discussion of, and allow dissent concerning this reading material.

The third book of the series is Colin Tudge's, Neanderthals, Bandits and Farmers: How Agriculture Really Began. This book lives up to its provocative title. Tudge defends the hypothesis that contrary to the popular belief that farming is something that primitive people eventually discovered and were pleased to do, rather that people were forced into farming reluctantly out of necessity. He begins by explaining that farming, at least in terms of "manipulating the plants and animals around them in ways that increased their own efficiency" began in Paleolithic times, some 40,000 years ago, even before hominids developed the consciousness to name the practice (p.15). However, it was not until the Neolithic Revolution and the end of the Ice age that farming, by necessity, became the main method of obtaining food. Prior to excessive hunting that caused many large animals to become extinct, and prior to the swelling waters of melted ice-caps that forced the people inland, farming was used periodically to increase productivity, but hunting and gathering sufficed in most instances. According to Tudge, farming is much more difficult than hunting and gathering because farmers were forced to work hard and deal with famine, disease, and unsuitable land-obstacles they had never faced in their hunting and gathering "paradise" (p.41).

<u>Neanderthals, Bandits, and Farmers</u> proved to be a delightful book, bringing with it challenges to popular thought and insight into the evolutionary perspective. Intriguing, easily readable, and thought provoking, this book will likely be a favorite of undergraduate students. It would be especially useful in an undergraduate class in agronomy, anthropology, or sociology.

The final book that I read, <u>A Darwinian Left:</u> <u>Politics, Evolution, and Cooperation</u> by Peter Singer, examines how the Darwinian Left differs from the traditional Left and suggests that a new paradigm for the left is needed. Singer also describes strategies for a more cooperative society. He explains, with the aid of examples like the Prisoner's Dilemma, the tit-for-tat theory, and the reproductive advantages of kindirected altruism, that cooperation is part of our evolutionary script and suggests that we should set up conditions in which cooperation thrives.

Though Singer does not proclaim that he has all the answers or that our task of creating a more cooperative society will be easy, he energizes the reader with his optimistic outlook. Singer clearly shows how we can use what evolutionary theory tells us about humans to create the type of society in which we would like to live. He ends his book by writing, "For the first time since life emerged from the primeval soup, there are beings who understand how they have come to be what they are... In a more distant future that we can still barely glimpse, it may turn out to be the prerequisite for a new kind of freedom" (p.63). It is this optimistic attitude combination with an evolutionary in understanding that makes Singer's book capable of igniting the minds of his readers with new possibilities. Political science, philosophy, and peace studies are all disciplines in which undergraduates would profit immensely from reading this book.

The Darwinism Today series is successful in presenting evolutionary theory to a broader audience. A large range of undergraduate courses (i.e. biology, psychology, political science, peace studies, anthropology, sociology, and agronomy) could benefit from using these books. Since they are short in size and length, they could easily be assigned as additional reading to add a new dynamic to a larger text. They would work well for book reports and reflective journals as well. Importantly, the target audience for the series is exactly the minds that need to be tapped into if we want awareness of evolutionary theory to expand. Without the assistance of this type of series, evolutionary theory could easily be left out of many relevant discussions. I believe that the Darwinism Today series has great potential to engage new minds and to bridge the gap between standard social scientific method and evolutionary thought.

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The Origin of Virtue: Human Instincts and the Evolution of Cooperation

By Matt Ridley. Penguin, 1998, 304p. [L8.99 (U.K.); \$13.95 (U.S.)] paperback. ISBN 0140264450.

Reviewed by Lucio Ferreira Alves. Department of Philosophy. Pontificia Universidade CatÚlica. Rio de Janeiro.

This brilliant book is by Matt Ridley, author of The Red Queen: Sex and the Evolution of Human Nature. The author displays erudition (he talks about Shakespeare, the Crusades, Kropotkin, the war of Roses, Adam Smith, and philosophy) and a sense of humor. The book has 13 chapters, each of which is tightly connected to the adjacent chapters.

Chapter 1 discusses the importance of collaboration in the animal kingdom and suggests that even cells in human bodies form a coalition: Genes associate to form cells; cells team up to form bodies, and bodies team up to form colonies. He supports the selfish gene concept by saying that far from being a Hobbesian injunction to go out and ignore the interests of other, the selfish gene revolution is the very opposite. A selfless collaboration is certainly an illusion but what matters to society is whether individuals are nice to each other, not their motives. At heart, he says, we are Rousseaunian, and consciously or not share a belief in pursuing the greater good. We praise selflessness and disdain selfishness. Ridley emphasizes that human virtue is demonstrated by the lack of parallels to the animal kingdom. Unlike insects, people usually try to suppress kin nepotism.

Ridley traces a brilliant parallel between the division of labor, a specialization that makes human society greater than the sum of its parts, and our immune system. Each T cell, the defending cell or antibody, is highly specific and attacks only one kind of invader. Each cell is also rare, ready to multiply to counter its target invader. The immune system is a competitive world in which those cells thrive that divide when they get the chance. But to multiply, the defending T cell, the 'killer cell', needs a supply of interleukins or helper T cells. The molecules that allow the former to obtain the latter are the same that allow it to recognize a foreign invader. And the 'helper cells' only help because the molecule that compels it to help is the same molecule that it needs to grow and multiply.

Ridley argues that reciprocity explains how human society originated. A game known as prisoner's dilemma has been central in biology and economics to understand why people cooperate with each other. The prisoner's dilemma has many versions but, briefly speaking, it occurs in any situation in which one is tempted to do something that it would be a great mistake if everybody else did the same. When two individuals play it once or a known number of times, both will try to defect, but reciprocity occurs when the players interact an indefinite number of times (Axelrod, 1990). Two things are necessary for reciprocity to emerge. The individuals have to (1) have enough brain big enough to recognize each other and (2) be able to develop reputations. In today's big cities, most people are strangers, so we may be rude without running the risk of meeting the same people But in the conditions in which we again. evolved, strangers were very rare and the sense of reciprocity must have been very palpable.

Ridley admits that it is hard to produce reciprocity even within a pair, so what about three or more individuals? In his view, reciprocal cooperation did not evolve as a mechanism to punish the defectors and those who fail to punish them. Rather, there is another potentially more powerful way to deal with the problem of free-riders in large groups: the power of social ostracism. If people can recognize defectors, they can simply refuse to play with them. Reciprocity, Ridley remarks, hangs over our heads like a sword of Damocles. Our language and life are full of reciprocity: obligation, debt, favor, bargain, contract, deal, exchange. In no sphere is this more true than in our attitude to food. Eating food is a social activity in every culture around the word and meat is usually the most communal of all foods we share. Ridley says that only human nature explains this universal practice. It is quite probable then, Ridley suggests, that human hunting started not for nutritional reasons but to seduce women. Man shares his meat with a woman, who in turn, shares her vegetables with him. The sexual division of labor that arose is far from being a symptom of male prejudice. It is observed in the most democratic and egalitarian societies.

It is quite possible that the institution of marriage and the nuclear family were symbiotic with food sharing, he observes. But food sharing is not restricted to families. We also share with friends, business partners and even rivals at meals and parties. The tendency for men to feast together may be older than the tendency to share food with their families. But the more people share food, he observed, the more opportunity there is for the egoist to exploit the gullible and to be a freeloader. We are back with the argues dilemma. Ridley prisoner's that whatever techniques primitive peoples used to hunt large animals, cooperation was certainly the key to success. To bring down large game required cooperation. At the same time the prize is large enough to feed many mouths, which in turn allows cooperation. But why risk one's life joining the hunt rather than just taking a share later? Ridley argues that with the invention of the dart thrower, a group of men could surround a big game in relative impunity, therefore the free-rider problem almost disappeared.

The human brain is the exchange organ. It works as a ruthless and calculating machine. It is well equipped to exploit reciprocity, to establish social exchange, to trade favors even in the inappropriate conditions to get the benefits of social living. We do not know exactly how the social exchange organ works, but we surely know that it is there. That our moral sentiments evolved by natural selection to settle our conflict of interests, as Darwin suggested, is now well But group prejudice is the price a accepted. cooperative society has to pay. Ridley notes that we are probably one of the most social creatures on the planet, but also the most belligerent. Like the chimps and other social animals, we are territorial, and xenophobic. Conflicts between Muslims and Jews, Christians and Protestants, Serbs and Croats and even sport factions show that we are tribal creatures. The dark side of human groupism is our aggressiveness, but the bright side is trade.

Primitive and modern economies have, according to Ridley, two points in common. The first is that trade is the expression of the division of labor. The second is that the simple idea of gains from trade lies at the heart of both modern and ancient economies. The author suggests that trade, the division of labor and a sophisticated system of barter exchange were probably part of a hunter-gatherer society. According to Ridley, the advantages of trade for mutual benefit have been part of human nature at least as long Homo sapiens has been a species, and may have been found among Homo erectus. Trade is the glue that cements the complex alliances between different groups. Ridley goes still further, claiming that trade is the precursor of politics, not the consequence. He is aware that if it is true, 'a whole house of philosophical cards collapses'. Government, law and justice follow trade. Commercial laws were created by the merchants themselves, not by governments. Only later did the government take control, 'with mostly disastrous results'.

Ridley argues that our view of nature is both a myth and a hypocrisy. People preach for a new environmentally sustainable and global economy. But to preach is one thing; to practice another one. 'Ecology' is a kind of new religion and, like most religious rules, environmentalism is something we prefer to preach than to practice. Although people like to believe that ancient cultures had an environmental ethics, Ridley's data clearly shows how our indigenous ancestors devastated their land and extinguished animals during and after the last ice age. Reports linking human actions with the destruction of the been described environment have since Herodotus. Today it is well accepted that ecological forces were at work in the rise and fall of ancient civilizations (Southwick, 1995).

Aristotle described the way in which as each of our desires is satisfied, a new one appears in its place. Psychologist Michael Argyle (1987) showed that the satisfaction derived from money does not come from simply having it, but from having more money than others do and from having more of it this year than last. Ridley reaches the same conclusion. He observes that there is no instinctive environmental ethics in our species. Environmental ethics, he says, have to be taught. But he is optimistic. He stresses that prisoner's dilemma, the when played repeatedly, always favors good citizens. Perhaps, game theory can help us to find a solution for our environmental problems and

Private property is the key to keep the geese alive. The phrase 'everybody's property is nobody's property' is well known since Hardinís paper, 'The Tragedy of the Commons'. Hardin's legacy, Ridley argues, was a Hobbesian victory and became an excuse for aggrandizement by governments. But, he remarks that 'it is nonsense to argue that just because something is communally used it must suffer the tragedy of the commons.Commonproperty and open access freefor-alls are very different things' (p. 233). He illustrates his arguments with examples from Medieval England, Spain, Japan, Switzerland, India and Kenya and concludes that all sorts of common problems can be (and are) readily managed in sustainable ways by local people. Government is not the solution to tragedy of the commons, but the prime cause of them. The decline of African elephants and rhinos, and the irrigation systems in Asia were tragedies of the commonscreated by nationalization. In his own words, 'the key to solving common problems is the assertion of ownership, communal if necessary, individual if possible' (p. 241).

Ridley concludes this marvelous book by saying that for Saint Augustine the source of social order lay in the teachings of the Church; for Hobbes in the sovereign; for Rousseau in the Solitude; for Lenin in the party. The author concludes they were all wrong. Instead, the roots of social order are in ourheads, where we possess the instinctive capacity for creating not a perfect harmonious and virtuous society, but a better one than we have at present. The back cover claimed the book is enthralling, provocative, attractive, well supported, dashing, beautiful constructed, etc. The book is all that and more. It is accessible to commonreaders, indispensable for experts, and equipped with a superbibliography.

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Thinking Critically about Research

on Sex and Gender (2nd ed.)

by Paula Caplan & Jeremy Caplan. NY: Longman, 1999, 123 p. IBSN: 0321049292 [Paperback, \$24]

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When it comesto sex differences, it still appears that there are two oppositional camps: some people are "for them" while others are "against them." The authors of this book clearly fall into the latter category. They take the perspective that there are no fundamental, evolved behavioral sex differences: whatever differences do exist are presumed to be due to sexist socialization. There is very little discussion of adaptationism or nature-nurture modern interaction here. While one might expect such a perspective from authors of a book of radical feminist or social constructionist essays, or perhaps from a book titled something like "The Case Against Sex Differences," it is disconcerting and surprising to see such an uneven analysis in a book that suggests it is about applying critical thinking skills to evaluate research studies.

The book begins with sections titled: "The Cycle of Bias" and "Dangerous Assumptions." The authors first cast suspicion on the motives of sex differences researchers: "...there must be a reason that (some scientists) choose to spend their lives trying to find sex and gender differences" (p. 8). And what might that reason The answer is found in their rather be? sophomoric claim that "since most 'proof' of differences between groupsis used to 'prove' that one group is better than the other, and scientists are aware of this... Many (researchers) ... seem to be intent onjustifying the treatment of females as inferior" (p. 8). Obviously, few serious scientists use the word "proof" in formal publications or even in informal conversations. Fewer still arrive at value judgments that one sex is "inferior" to the other. Instead, all sex differences researchers, generally virtually including well known investigators such as Kimura and Benbow, support equality of

opportunity even in interest or aptitude areas where sex differences may indeed exist. This mischaracterization of the motives and values of researchers casts doubt on the integrity of the rest of the book.

The mischaracterizations continue in Chapter 2, "A Brief Historical Perspective on Sex-Difference Research." The authors uncritically present Kramarae and Treichler's (1985) definition of sociobiology as "an androcentric science which persistently depicts males as the normwhile defining females in relation to them, naming females as passive and inferior" (p. 18). One is very unlikely to find such perspectives in any modern evolutionary theory and research. To the contrary, recent books by Sara Hrdy (Mother Nature), Helen Fisher (The First Sex), Linda Mealey (Sex Differences), and others argue convincingly that females actively and assertively look out for their own reproductive interests. [See reviews of Mealey (2000) and Halpern (2000) in HEB, 2001 (2), Ed.]

The authors state that sociobiologists "often base their theories on the assumption that existing human behavior patterns are good things because they are the patterns that survived as humans have evolved, and therefore they must help to ensure the survival of the human species" (p. 18). And, when commenting on research by Buss that suggests that females preferentially mate with high status, resource rich males, the Caplans state that Buss "does not present persuasive evidence that the human species would die out otherwise" (p. 18). The Caplans are apparently unaware that the "for the good of the species" perspective withered in biology in the 1960s and 1970s with the development of Hamilton's inclusive fitness theory, George's Williams' critique of groupselection, and Richard Dawkins "selfish gene" theory. Further, most evolutionists do not commit the naturalistic fallacy by presuming that what is natural is good. The Caplans are thoroughly misinformed about sociobiology and evolutionary psychology, and they proceed to misinform their readers.

Despite the title, only 7 pages of the entire 123 page book (pages 23 - 30) present a discussion of research design, threats to validity (although threats to internal and external validity are not differentiated), and meta-analysis. The remaining chapters examine sex difference research on spatial, verbal, and quantitative

abilities, and sex differences in aggression, masochism, dependency, and hormones. In each of these chapters, the authors reserve their critiques to studies that have found sex differences, particularly those in politically sensitive areas. They omit a critical review of studies that report no sex differences. An informative discussion of the interaction of biological and social factors is entirely missing.

Given the above, this book is more of a political tract than an informed review and critique of research methods as applied to the study of sex differences. The authors' misunderstanding of even the basic postulates of modern evolutionary theories of sex differences is tiresome, if not inexcusable.

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Subordination and Defeat: An Evolutionary Approach toMood Disorders and Their Therapy

By Leon Sloman and Paul Gilbert (eds.). Mahwah, NJ: Lawrence Erlbaum Associates (Email: Orders@erlbaum.com), 2000. 230p. ISBN 08058-3298-x [Hdbk, \$59.95 (Special prepaid price \$27.50)].

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When other sciences or technologies have inspired psychology, they have usually ended up being mere metaphor and treated as psychologists find fit. Perhaps the most impressive example is to be found within "Family Therapy" – here theoretical physics, engineering and developmental biology, valid areas in their own right, are packed together with absolutely no scientific foundation for such cross-disciplinary transference. They are then used to argue for interventions for which they never have been *proven* to be relevant. Note that the intervention may be helpful and the theory valid in its own domain, but the link is not *scientifically founded* – it is thus mere metaphor!

What about evolutionary theory? What will happen when the gem of the natural science of evolutionary biology is co-opted by the wily science and clinical social practice of psychology? As both an evolutionary psychologist and a clinical psychologist, I have found the development of actual and specific psychotherapy-technology founded on theoretical and academic work to be long overdue. So far evolutionary theory has been used in different ways to understand both normal psychological processing as well as psychopathology (Baron-Cohen, 1997; McGuire & Troisi, 1998; Gilbert, 1992; Stevens & Price, 1996), but these approaches do not concentrate upon treatment interventions. Neither does the current book, despite its title. Within clinical psychology there is a stronger leaning toward theories that may help the therapist understand, rather than practical methods of change.

The editors and main contributors, Leon Sloman and Paul Gilbert, are both familiar names within the evolutionary psychopathology of depression, having written several books and articles on the subject. The authors of the chapters include most of the familiar names – Michael McGuire, Alphonso Troisi, and John Price – although Randolph Nesse, who introduced this approach to general psychiatry in a recent paper (Nesse, 2000), is not included.

The book is divided into four parts. In Part I the two editors present the involuntary defeat strategy model. This model, influenced strongly by the work of John Price and Schjelderup-Ebbe, holds that when the individual is unable to succeed in a social competition, it will automatically signal defeat. If this signal behaviour, which is brought about by changing psycho-emotional state, does not reduce aggression or change the individual's goal orientation, then depression occurs. This is a more specific version of the behavioural immobilisation hypothesis (Henriques, 2000; Nesse, 2000), which is also based on foraging theory: when is it best to do nothing? Part II

presents two chapters on the biopsychology of subordination, focusing on serotonin levels and activity of the HPA-axis. Part III reviews psychosocial aspects of involuntary defeat, such as discrete emotions, self-esteem and social comparison. Part IV presents two psychotherapeutic approaches and the concluding comments - where the old Freudian "truth" is "Darwinised": "Therapy based on evolutionary principles aims to replace unconscious behavioral strategies with conscious ones" (p. 215).

The book makes a convincing case that humans, too, have evolved strategies for navigating their social ecology, and that these mechanisms are best understood through a biopsychosocial analysis. I could not agree more! But, the book has a major drawback: Yet again therapy techniques and understanding are proposed via a metaphoric implication of another science, rather than following the rules of that science. The concepts *adaptation*, *homology*, and *analogy* are not even in the index. Is this an "Evolutionary approach"?

I tend to agree that depression is a contextspecific, cue-triggered, phylogenetically adaptive response. But so far we do not know whether depression is an adaptation (Nesse, 2000), and we are not presented with the systematic, co-ordinated workings of this more specific hypothetical adaptation. This book takes this for granted, and does not explicitly discuss this point – which is rather important if the proposed interventions are to have a scientific and evolutionary basis.

Psychotherapy guided by other sciences often forgets that these other approaches do not merely offer metaphors. If the current model shall be one based on a science of human nature it has to investigate whether the current model or mechanism actually is an adaptation. Much work within this field is based on arguing and advocating that a certain phenomenon is adaptive, although if the study is evolutionary it should empirically test whether the mechanism governing the phenomenon is an adaptation. Symons (1992, p. 150) refers to a personal communication by John Tooby: "the adaptiveness merely study of draws metaphorical inspiration from Darwinism, whereas the study of adaptation is Darwinian"

(Italics in original). Based on the theory proposed, therapy interventions are implemented but there is no knowledge that this is founded on specific information processing. The model needs to explicate how information is processed, and how the general "insight-model" of psychodynamic theory actually works. Information processed "involuntary" seems to be very available to semantic, conscious, voluntary intervention ... but I need to do more than tell my phobic patients that the reason they fear spiders is that there exists an evolved involuntary fear reaction. Verbal reattribution is not enough!

I would suggest two paths that this current research fruitfully might branch into. First, an approach coupling it to the current British work within anxiety treatment - a cognitive neuroscience approach – exemplified by the work of Adrian Wells (1997; 2000). Second, this model, including attachment theory, might provide the method called Interpersonal therapy Psychotherapy (IPT) (Weissman, Markowitz, & Klerman, 2000) with a theoretic base. IPT is currently a theory-void, although evidencebased, specific therapy for depression, rooted in the belief that social role conflicts, role transitions and lack of social support and activity and emotional expression may cause depression.

I have, in the limited space of this review, been critical to a certain aspect of the book. In addition, the book fails to define or demarcate depression and subordination, shame, and a plethora of other states. Nonetheless, this is a good beginning. A very good idea is presented, and correlated findings are presented in a fine biopsychosocial fashion. This idea provides helpful heuristics for psychotherapy (as do most functional hypotheses of psychopathology) which the (scientifically premature) case examples in the book show. Now this idea has to be brought beyond advocacy. The proposed model must be shown to be an adaptation and the specific information processing needs to be investigated. Thereafter specific modes of therapy interventions may be proposed. If these shall be more than narrative interventions using the persuasion of metaphors of science, then more work has to be done to show how the therapist's verbal reattribution interventions actually work or may be facilitated.

I do firmly recommend this book to anyone interested in an evolutionary approach to, and a broader understanding of, depression and mental disorders.

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Current Literature

Compiled by Johan van der Dennen

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