



Review: [untitled]

Author(s): Satoshi Kanazawa

Reviewed work(s):

Evolution and Human Behavior: Darwinian Perspectives on Human Nature by John Cartwright

Source: *Politics and the Life Sciences*, Vol. 19, No. 2 (Sep., 2000), pp. 287-288

Published by: Association for Politics and the Life Sciences

Stable URL: <http://www.jstor.org/stable/4236610>

Accessed: 29/12/2009 14:49

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=apls>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Association for Politics and the Life Sciences is collaborating with JSTOR to digitize, preserve and extend access to *Politics and the Life Sciences*.

<http://www.jstor.org>

Evolution and Human Behavior: Darwinian Perspectives on Human Nature

John Cartwright

Cambridge, MA: MIT Press, 2000, 376 pp. US \$60.00 cloth. ISBN 0262032813. 400 pp. US \$24.95 paper. ISBN 0262531704. MIT Press, 5 Cambridge Ctr., Suite 4, Cambridge, MA 02142-1493, USA.

Satoshi Kanazawa Indiana University of Pennsylvania

I have two observations on John Cartwright's *Evolution and Human Behavior: Darwinian Perspectives on Human Nature*. First, this is one of the best books I have read on evolutionary psychology. I learned a lot from it and will always treasure it as a reference book on my desk. I will recommend it highly to all interested colleagues and graduate students of mine. Second, I am afraid Cartwright failed to achieve his goal in writing this book, and I suspect that it will be a market failure. Let me explain.

There is no question that this book provides an excellent overview of evolutionary perspectives on human behavior. For instance, his Table 2.1 (p. 49) provides one of the best summaries of the differences between evolutionary psychology (EP) and sociobiology (SB; or Darwinian anthropology or Darwinian social science), and Cartwright presents the best argument I have read that EP and SB are essentially the same (although I am personally still not convinced). His explanation of the Fisherian runaway selection process (pp. 142-145) is superb, and his discussion of the difficulties involved in adjudicating between the "sexy son" and "healthy offspring" hypotheses (pp. 147-151) is excellent.

Cartwright is also good at suggesting "the next question" in various areas within evolutionary psychology. Throughout the book, he points out intriguing puzzles, such as "Why is it that spiteful behavior is only observed among humans?" (p. 85), "What explains the "returning soldier

effect," whereby men returning from wars are more likely to produce sons than daughters?" (p. 121), and "Why is it that Hamilton's rule (help kin if $r > c/b$) in kin altruism looks very similar to Nowak and Sigmund's rule of indirect reciprocity (help nonkin if $q > c/b$ where q = probability that ego knows if alter helped another in the previous round)?" (pp. 299-300).

Like few others in the field, Cartwright also presents spirited and reasoned critiques of the "orthodoxy" of Cosmides, Tooby, and Dunbar (see, for instance, pp. 197-198 and 208-210). His critiques are to be taken seriously because they, unlike those from the Goulds, Lewontins, and Roses of the world, are not dismissive or politically motivated; they are based on deep understanding of evolutionary psychology on Cartwright's part.

So what is the problem? *Cartwright wrote this volume as an undergraduate textbook*. It is as such that I believe the book, unfortunately, fails. An average American undergraduate student, who would sit through an entire course of evolutionary psychology and raise a hand toward the end of the semester to ask timidly, "Um . . . does that mean . . . like . . . we're related to monkeys?" will simply not appreciate or care about the similarities and differences between EP and SB, or the theoretical and empirical problems with the modular view of the mind.

As an undergraduate introductory textbook, *Evolution and Human Behavior* has several shortcomings (although all of them are easily remediable in subsequent editions). First, the organization of the chapters is likely to confuse undergraduates. Cartwright introduces mating behavior in Chapter 4 and sexual selection in Chapter 5. He then switches to the topic of the evolution of the human brain and language in Chapters 7 and 8, only to return to mating behavior in Chapters 8 and 9. I simply do not see the logic behind this organization of the chapters. Chapter 11 on the evolution of altruism and culture, which is superb and highly original, is probably beyond most undergraduate students who have not had some prior exposure to game theory. His epilogue, in which he presents an excellent defense of evolutionary psychology against possible political and ideological attacks, should be placed at the beginning of the book, rather than at the end, so that the readers are already

Satoshi Kanazawa is Assistant Professor of Sociology, Indiana University of Pennsylvania, Indiana, PA 15705-1087, USA (Email: kanazawa@grove.iup.edu). His current work focuses on the introduction of evolutionary psychology into rational choice theory and sociology in general. His recent articles have appeared in *Mathematical Social Sciences*, *Sociological Theory*, *Journal of Politics*, *Social Science Research*, *Journal of Political and Military Sociology* (with Debra Friedman), *Social Forces* (with Mary C. Still), *Rationality and Society*, *American Sociological Review*, and *Evolution and Human Behavior*. His book (with Alan S. Miller), titled *Order by Accident: The Origins and Consequences of Conformity in Contemporary Japan*, was published by Westview Press in April 2000.

equipped with these defenses as they wade through the substantive chapters.

Cartwright's writing is occasionally careless and is likely to confuse undergraduate readers. In his Box 6.1 (p. 163), he briefly discusses and compares the four non-human great ape species. For bonobos, he notes, "Despite their name, bonobos are only fractionally smaller than common chimps," when he has not mentioned that bonobos are commonly known as pigmy chimps (he does eventually mention it, once and very obliquely, in a caption to a picture of bonobos 16 pages later, p. 179). On page 200, Cartwright states that the proportion of subjects who solved the Wason selection task "rose to 75 per cent" when the task was set as a cheater detection problem, without telling the reader what (smaller) proportion of them got it right as an abstract logical problem. Cartwright later evaluates the empirical evidence for and against Hrdy's "nice daddy" and "daddy at home" hypotheses of concealed ovulation among women, without explaining at all what these hypotheses are. All of these minor problems are mere annoyances for practicing evolutionary psychologists who are already familiar with the field, but might become major stumbling blocks for our undergraduate students who are introduced to evolutionary psychology for the very first time.

The book has a few shortcomings even as an academic book (and not as a textbook). Cartwright tends to be a bit lazy in providing citations for others' ideas. Since the book contains many genuinely original ideas by Cartwright, his lazy citation makes it difficult for the reader to figure out which ideas are genuinely original and which ideas are borrowed. While Cartwright discusses Machiavellian intelligence (pp. 178-183), it is not quite clear in his exposition how the intellectual arms race, born out of our ancestors' need to deceive and outsmart each other, led to the enormous encephalization and the explosion of the brain size during the early hominid evolution. Cartwright rightly emphasizes all the work on fluctuating asymmetry done by Manning (pp. 249-251), but neglects the equally (if not more) important work in the area by Thornhill, Gangestad, and Møller. Cartwright omits Marlowe's (1998) nubility hypothesis as a new and very plausible explanation for why women have permanently enlarged breasts and why men find them sexually arousing (pp. 153-154).

Given that Buss's (1999) introductory textbook on evolutionary psychology came out first, followed closely by Cartwright (and Gaulin and McBurney [2001]), some comparisons are in order. Buss focuses almost exclusively on humans, whereas Cartwright has lots of discussion of non-human species. Buss naturally focuses on mate selection, whereas Cartwright has more material on the brain. In my experience of teaching evolutionary psychology to undergraduates, I have found that they simply love all the discussion of sex and mating, because they can then apply the knowledge to their own dating behavior and make sense out of it (although I have never been able to convince my undergraduate students—all of whom are young and know only others who are equally young—that women's age is an important criterion for mate selection for men; they simply don't know anybody over 30, except for their parents and teachers). For this reason alone, undergraduate students are bound to like Buss's textbook better. The waist-to-hip ratio (which Cartwright also discusses briefly) is definitely sexier than encephalization, if they know what it means.

In my mind, Cartwright's *Evolution and Human Behavior* is very similar to Trivers's *Social Evolution* (1985), which was also written as an undergraduate textbook. However, Trivers's book contained so many original ideas that it continues to be cited in scholarly work 15 years later. Cartwright's book is just as full of original ideas, and I expect it to be read and cited, not as an undergraduate textbook, but as an academic book. So here is my verdict. Read Cartwright's *Evolution and Human Behavior* because it is good and you will like it. Use it as a textbook, if you teach a graduate-level course in evolutionary psychology, or if you teach at an Ivy League school, elite state university, or in the United Kingdom (where Cartwright teaches). If not (and most of us don't), use Buss's textbook instead.

References

- Buss, D.M. (1999). *Evolutionary Psychology: The New Science of the Mind*. Boston: Allyn and Bacon.
- Gaulin, S.J.C. and McBurney, D.H. (2001). *Psychology: An Evolutionary Approach*. Upper Saddle River: Prentice Hall.
- Marlowe, F. (1998). "The Nubility Hypothesis: The Human Breast as an Honest Signal of Residual Reproductive Value." *Human Nature* 9 (3):263-71.
- Trivers, R.L. (1985). *Social Evolution*. Menlo Park: Benjamin/Cummings.