

Evolution and Cognition (2628)

Prof. E. Machery

Fall 2005

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Class Meetings

Thursday 1.30-4.00 pm

Room: G28

Office Hours

By appointment.

1017CL.

Course Description/Goals

Psychology has recently undergone a paradigm shift: Evolutionary considerations are increasingly brought to bear on the study of cognition. This approach is supposed to offer new methods as well as new research questions. Philosophers of psychology and biology have paid considerable attention to this new line of research. This seminar is designed as a survey of the recent developments in this field. We will also examine the objections that have been mounted against this paradigm shift by philosophers and psychologists. During the Fall 2005 seminar, we will discuss David Buller's recent book against evolutionary psychology, *Adapting Minds*.

Prerequisites

Graduate standing or permission of instructor.

Texts

Laland, K. N., & Brown, G. R. 2002. *Sense and Nonsense*. Oxford: OUP.

Buller, D. 2005. *Adapting Minds*. Cambridge, MA: MIT Press.

Other readings will be available for photocopying in the 'Course Mailbox' in the HPS office, 1017CL.

Recommended, but not required, texts include:

Sterelny, K., & Griffiths, P. 1999. *Sex and Death*. Chicago: University of Chicago Press.

Barrett, L., Dunbar, R. & Lycett, J. 2002. *Human Evolutionary Psychology*. London: Palgrave.

Assignments

- (1) Readings and participation;
- (2) At least one seminar presentation;
- (3) A research paper due at the end of the term.

The seminar presentation includes a powerpoint presentation and the leading of the discussion during the seminar. Students should meet me at least one week before their presentation with a draft of their powerpoint presentation.

The research paper may be on any subject of relevance to the seminar. To assist you in commencing work, I ask you submit a brief essay proposal by **November 3**. It should contain a short paragraph describing the topic to be investigated and give a brief indication of the sources you intend to use. It may, but need not, be based on the seminar presentation. I advise you to talk to me about possible topics as soon as possible.

The paper should have the form and the length of a short journal article (no less than 4000 and no more than 8000 words).

It has to be submitted **by 12 pm**, either in 1017CL or by e-mail. **I do NOT issue incomplete grades**, save in extraordinary circumstances. In return for the rigidity of the deadline, the seminar will not meet in the final week of term (i.e., *no class December 15*).

Assessment

Your grade will be mostly based on the quality of your research paper due at the end of the term. I will also take into account your preparation for and participation in weekly seminars.

Class Organization

This course will be based on the discussion of the readings. Save for a couple of classes that I will lead, one or several seminar participants will present the reading(s) and lead the discussion. Participation in class discussion is expected. Reading the articles is of course mandatory. You are expected to attend every class.

COURSE SCHEDULE (Subject to revision as the semester proceeds)

Thursday 09/01

Topic: Introduction
Reading: Laland and Brown, chap. 1.

Thursday 09/08

Topic: Evolutionary Psychology
Readings: 1. Buller, chap. 2.
2. Tooby, J., and Cosmides, L. 1998. Evolutionary Psychology: A Primer.
At <http://www.psych.ucsb.edu/research/cep/primer.html>.

Thursday 09/15

Topic: Human Behavioral Ecology
Readings: 1. Laland and Brown, chap. 4.

2. Winterhalder, B., and Smith, E. A. 2000. Analyzing adaptive strategies: Human behavioral ecology at twenty-five. *Evolutionary Anthropology*, 9, 51-72.

Thursday 09/22

Topic: Gene-Culture Coevolution

- Readings:*
1. Laland and Brown, chap. 7.
 2. Henrich, J. and McElreath, R. 2002. The evolution of cultural evolution. *Evolutionary Anthropology*, 12, 123-135.

Thursday 10/06

Topic: Adaptations & Evolutionary Psychology (1)

- Readings:*
1. Buller, chap. 3, 83-92.
 2. Schmitt, D.P. & Pilcher, J.J. 2004. Evaluating evidence of psychological adaptation. *Psychological Science*, 15, 643-649.
 3. Sherman, P. & Reeve, H.K. 1997. Forward and backward: Alternative approaches to studying human social evolution. In L. Betzig (ed.), *Human Nature*. Oxford University Press, pp. 147-157.

Additional Readings: 1. Gould, S. 1997. The Pleasure of pluralism. *New York Review of Books*, June 26, 1997.

At: <http://cogweb.ucla.edu/Debate/Gould.html>.

2. Gould, S. 1997. Darwinian fundamentalism. *New York Review of Books*, 44, 10, June 12, 1997.

At: <http://www.nybooks.com/articles/1151>.

3. Tooby, J. and Cosmides, L. 1997. Letter to the Editor of *The New York Review of Books* on Stephen Jay Gould's "Darwinian Fundamentalism" (June 12, 1997) and "Evolution: The Pleasures of Pluralism" (June 26, 1997)

At: http://cogweb.ucla.edu/Debate/CEP_Gould.html.

4. Mayr, E. 1983. How to carry out the adaptationist program? *The American Naturalist*, 121(3), 324-334.

Thursday 10/13

Topic: Adaptations & Evolutionary Psychology (2): What can We Know about Past Environments?

- Readings:*
1. Buller, chap. 3, 92-112.
 2. Kaplan, J.M. 2002. Historical evidence and human adaptation. *Philosophy of Science*, S294-S304.

Thursday 10/20

Topic: Modularity (1)

- Readings:*
1. Buller, chap. 4, 127-160.
 2. Samuels, R. 2000. Massively modular minds: Evolutionary psychology and cognitive architecture. In P. Carruthers (ed.), *Evolution and the Human Mind*. Cambridge University Press.

Additional Reading: 1. Carruthers, P. 205. The case for massively modular models of mind. In R. Stainton (ed.), *Contemporary Debates in Cognitive Science*. Blackwell.

Thursday 10/27

Topic: Modularity (2)

Readings: 1. Buller, chap. 4, 160-200.
2. Cosmides, L. & Tooby, J. 2005. Neurocognitive adaptations designed for social exchange. In D.M. Buss (ed.), *Evolutionary Psychology Handbook*. NY: Wiley.

Thursday 11/3

Topic: *Mate Choice (1): What do Men Want?*

Readings: 1. Buller, chap. 5, 201-228.
2. Geary, D.C., Vigil, J., & Byrd-Craven, J. (2004). Evolution of human mate choice. *Journal of Sex Research*, 41, 27-42.
3. Miller, G.F., & Todd, P.M. 1998. Mate choice turns cognitive. *Trends in Cognitive Sciences*, 2(5), 190-198.

Deadline for essay proposal

Thursday 11/10

Topic: *Mate Choice (2): What do Women Want?*

Readings: 1. Buller, chap. 5, p. 228-257.
2. Gangestad, S.W., & Simpson, J.A. 2000. On the evolutionary psychology of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, 23, 573-587.

Thursday 11/17

Topic: *Marriage*

Readings: 1. Buller, chap. 6.
2. Buss, D.M., Larsen, R.J., Westen, D., & Semmelroth, J. 1992. Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science*, 3, 251-255.

Additional Reading: 1. Harris, C. R. 2003. A review of sex differences in sexual jealousy, including self-report data, psychophysiological responses, interpersonal violence, and morbid jealousy. *Personality and Social Psychology Review*, 7(2), 102-128.
2. Sagarin, B.D. 2005 Reconsidering Evolved Sex Differences in Jealousy: Comment on Harris (2003). *Personality and Social Psychology Review*, 9(1), 62-75.
3. Harris, C. R. 2005. Male and Female Jealousy, Still More Similar than Different: Reply to Sagarin (2005). *Personality and Social Psychology Review*, 9(1), 76-86.

Thanksgiving Break

Thursday 12/01

Topic: *Parenthood*

Readings: 1. Buller, chap. 7.
 2. Daly, M. & Wilson, M.I. 1998. The evolutionary social psychology of family violence. In C Crawford & D Krebs (eds.), *Handbook of Evolutionary Psychology: Ideas, Issues and Applications*. Mahwah NJ: Erlbaum.
 3. Daly, M. & Wilson, M.I. 1996. Violence against stepchildren. *Current Directions in Psychological Science*, 5, 77-81.

Thursday 12/08

Topic: *Human Nature?*

Reading: 1. Buller, chap. 8.

Thursday December 15, 12 pm

No Class—Deadline for the term paper