

Syllabus – Philosophy of Biology Seminar
London School of Economics, May/June, 2000

Books:

- Elliott Sober, *Philosophy of Biology*, Westview Press, 1999, 2nd edition (= PB).
Elliott Sober (ed.), *Conceptual Issues in Evolutionary Biology*, MIT Press, 1994, 2nd edition.
(= CI).
George C. Williams, *Adaptation and Natural Selection*, Princeton University Press, 1966.
Elliott Sober and David S. Wilson, *Unto Others - the Evolution and Psychology of Unselfish Behavior*, Harvard University Press, 1998. (UO).
Elliott Sober, *Reconstructing the Past*. MIT Press, 1988. (= RTP).

Articles:

- John Beatty, "The Evolutionary Contingency Thesis." In G. Wolters and J. Lennox (eds.), *Concepts, Theories, and Rationality in the Biological Sciences*, 1995, 45-81.
*Elliott Sober, "Physicalism from a Probabilistic Point of View." *Philosophical Studies*, 1999, 95: 135-174.
John Beatty and Susan Mills, "The Propensity Interpretation of Fitness." *Philosophy of Science* 1979, 46: 263-286. In CI.
*Elliott Sober, "The Two Faces of Fitness." In R. Singh, D. Paul, C.. Krimbas, and J. Beatty (eds.), *Thinking about Evolution: Historical, Philosophical, and Political Perspectives*. Cambridge University Press, forthcoming.
Jerry Fodor, "Special Sciences," *The Language of Thought*. Thomas Crowell, 1975.
Elliott Sober, "The Multiple Realizability Argument against Reductionism," *Philosophy of Science*, 1999, 66: 542-564.
Richard Lewontin, "The Units of Selection." *Annual Review of Ecology and Systematics*, 1970, 1: 1-18.
Elliott Sober and Richard Lewontin, "Artefact, Cause, and Genic Selection," *Philosophy of Science*, 1982, 47: 157-180.
Kim Sterelny and Philip Kitcher, "The Return of the Gene," *Journal of Philosophy* 1988, 85: 339-361.
Elliott Sober and David S. Wilson, "A Critical Review of Philosophical Discussion of the Units of Selection Problem." *Philosophy of Science*, 1994, 61: 534-555.
Steve Orzack and Elliott Sober, "Adaptation, Phylogenetic Inertia, and the Method of Controlled Comparisons," In *Adaptationism and Optimality*, Cambridge University Press, forthcoming.
Joe Felsenstein, "Cases in Which Parsimony and Compatibility Methods can be Positively Misleading." *Systematic Zoology* 1978, 27: 401-410. In CI, 1st ed.
E. Sober, "Modus Darwin," *Biology and Philosophy*, 1999, 14: 253-278.

(* = available on my web site: <http://philosophy.wisc.edu/sober>)

Session	Topic	Readings
1 - May 24	laws of evolution	Beatty; Sober PB-chapter 1; Sober (PFAPPV, section 9).
2 - May 25	fitness	Mills and Beatty; Sober (TFF); Sober, PB (ch 3);
3	supervenience, physicalism and reductionism	Sober (PFAPPV, sections 1-8); Fodor; Sober (MRA).
4	units of selection	PB chapter 4; GC Williams (in CI, 2 nd ed.); Lewontin (1970).
5	units of selection	UO, chapters 1-3.
6	units of selection	Sober and Lewontin (in CI, 1 st ed); Sterelny and Kitcher; Sober and Wilson 1994.
7	adaptationism	PB chapter 5; Gould and Lewontin (in CI); Maynard Smith (in CI).
8	phylogenetic inference	Felsenstein; PB (Sections 6.5 and 6.6); RTP (chs. 1,4,5).
9	phylogenetic inference	RTP (ch 6); Sober (MD).
10	wrap up	