

**Philosophy 920 – Philosophy of Biology – Altruism and Units of Selection – Fall, 2009 – Elliott Sober**

Elliott Sober (2009): *Did Darwin Write the Origin Backwards and other Reflections on Darwin's Theory*.

Paul Oppenheim and Hilary Putnam (1958): "The Unity of Science as a Working Hypothesis." In H. Feigl, G. Maxwell, and M. Scriven (eds.), *Minnesota Studies in the Philosophy of Science*, 3-36.

Hilary Putnam (1973): "Reductionism and the Nature of Psychology." *Cognition* 2: 131-146. Reprinted as "Philosophy and our Mental Life." In *Mind, Language, and Reality*. Cambridge UP, pp. 291-303.

Jerry Fodor, "Special Sciences." *Synthese*, Vol. 28, No. 2 (Oct., 1974), pp. 97-115.

Phillip Pettit and Frank Jackson (1992): "In Defense of Explanatory Ecumenism." *Economics and Philosophy* 8: 1-22.

Elliott Sober (1999): "The Multiple Realizability Argument against Reductionism." *Philosophy of Science* 66: 542-564.

George C. Williams (1966): *Adaptation and Natural Selection*. Princeton UP.

Robert Axelrod (1984): *The Evolution of Cooperation*. Basic Books.

Richard Lewontin (1970): "The Units of Selection." *Annual Review of Ecology and Systematics* 1: 1-18.

Michael Wade (1976): "Group Selection among Laboratory Populations of *Tribolium*." *Proceedings of the National Academy of Sciences* 73: 4604-4607.

Sober and Richard Lewontin (1982): "Artifact, Cause, and Genic Selection." *Philosophy of Science* 49: 157-180.

Kim Sterelny and Philip Kitcher (1988): "The Return of the Gene." *Journal of Philosophy* 85: 339-360.

Peter Godfrey-Smith and Richard Lewontin (1993): "The Dimensions of Selection." *Philosophy of Science* 60: 373-395.

Sober and David S. Wilson (1994): "A Critical Review of Philosophical Work on the Units of Selection Problem." *Philosophy of Science* 61: 534-55.

Robert N. Brandon and H. Frederik Nijhout (2006): "The Empirical Nonequivalence of Genic and Genotypic Models of Selection: A (Decisive) Refutation of Genic Selectionism and Pluralistic Genic Selectionism." *Philosophy of Science*, 73: 277-297.

Sober and Wilson (1998): *Unto Others*. Harvard UP.

Michael Ruse (1980): "Charles Darwin and Group Selection." *Annals of Science* 37: 615-630.

Samir Okasha, "Biological Altruism." *Stanford On-Line Encyclopedia of Philosophy*.

Samir Okasha, *Evolution and the Levels of Selection*. Oxford University Press, 2006.

Brian Skyrms, *The Evolution of the Social Contract*. Cambridge University Press, 1996.

Zachary Ernst (2001): "Explaining the Social Contract," *BJPS* 51: 1-24.

A. Gardner and A. Grafen (2008): "Capturing the Superorganism – a Formal Theory of Group Adaptation." *Journal of Evolutionary Biology* 22: 659-671.

David Jablonski (2008): "Species Selection – Theory and Data." *Annual Review of Ecology and Systematics* 39: 501-524.

Donald Campbell (1974): "Downward causation in hierarchically organised biological systems." In F. Ayala and T. Dobzhansky (eds.), *Studies in the philosophy of biology: Reduction and related problems*, pp. 179-186. London: Macmillan.

Stephen Stich (2007): "Evolution, Altruism and Cognitive Architecture: A Critique of Sober and Wilson's Argument for Psychological Altruism," *Biology and Philosophy* 22, 267-281.

Armin Schulz (2009): "Sober & Wilson's Evolutionary Arguments for Psychological Altruism: A Reassessment." *Biology and Philosophy*.

Herb Gintis, Samuel Bowles, Robert Boyd, and Ernst Fehr, "Moral Sentiments and Material Interests: Evidence and Consequences." In H. Gintis et al. (eds.), *Moral Sentiments and Material Interests*. MIT Press, 2005, pp. 3-40.

<b>Week</b>	<b>Date</b>	<b>Schedule of Readings</b>
1	9/2	Sober (2009), ch. 1 & §5.1; Oppenheim and Putnam (pp. 3-16)
2	9/9	Putnam (pp. 131-136); Fodor; Jackson and Pettit; Sober (1999)
3	9/16	Williams 1966 (pp. ix-xiii, 1-34, 56-61, 92-125)
4	9/23*	Williams 1966 (pp. 146-57, 193-250 )
5	9/30	Lewontin 1970; Wade 1978
6	10/7	Axelrod 1980 (chs. 1,2,3,5)
7	10/14	Sober and Lewontin; Sterelny and Kitcher; Sober 2009 (§5.2).
8	10/21*	Sober and Wilson 1994; Brandon and Nijhout.
9	10/28	Sober and Wilson 1998 chs. 1-5 (mainly 1-2).
10	11/4	Ruse; Sober 2009, ch. 2.
11	11/11	Gardner and Grafen; Sober 2009 (§5.2); Okasha 2008; Jablonski; Campbell.
12	11/18*	Skyrms (chs 1-4); Ernst.

13	11/25	Sober and Wilson, chs. 6-10
14	12/2	Stich; Schulz; Gintis et al.
15	12/9	Sober 2009, chs. 3, 4, 5.3

\*= we will need to reschedule these classes.