

SYLLABUS HIGH LEVEL EXPLANATION

Introduction

Sept 7 Our topic; background; reduction and its discontents

Explanatory Autonomy

Sept 14 Genetics and unification

▷ Kitcher, P., 1953 and all that: A tale of two sciences, *Philosophical Review* 93:335–373, 1984; read up to p. 351, and pp. 346–351 in particular.

▷ Kitcher, P., Explanatory unification, *Philosophy of Science* 48:507–531, 1981, especially §1–6.

Sept 21 Evolutionary biology and high level patterns

▷ Sober, E., *The Nature of Selection*, MIT Press, Cambridge, MA, 1984; read §4.2, 4.3 (pp. 110–134).

▷ Rosenberg, A., *Instrumental Biology or The Disunity of Science*, Chicago University Press, Chicago, 1994; read chap. 4 as a foil to Sober.

Sept 28 Psychological properties and counterfactual dependence

▷ Read either Lewis, D., Causal explanation, in *Philosophical Papers*, volume 2, pp. 214–240, Oxford University Press, Oxford, 1986 or Woodward, J., *Making Things Happen: A Theory of Causal Explanation*, Oxford University Press, Oxford, 2003; §5.1 (pp. 187–194).

▷ Lepore, E. and B. Loewer, Mind matters, *Journal of Philosophy* 84:630–642, 1987.

Oct 5 Psychological properties and legal predicates

▷ Fodor, J., Making mind matter more, in *A Theory of Content and Other Essays*, chap. 5, MIT Press, Cambridge, MA, 1990.

▷ Schiffer, S., Ceteris paribus laws, *Mind* 100:1–17, 1991.

Oct 12 Social science, robustness and modal comparatives

▷ Railton, P., Probability, explanation, and information, *Synthese* 48:233–256, 1981; read §3.

▷ Jackson, F. and P. Pettit, In defense of explanatory ecumenism, *Economics and Philosophy* 8:1–21, 1992.

Strevens on Explanation

- Oct 19 Difference-making and explanation
▷ Garfinkel, A., *Forms of Explanation*, Yale University Press, New Haven, CT, 1981; read pp. 51–66.
▷ Strevens, M., The causal and unification accounts of explanation unified—causally, *Noûs* 38:154–176, 2004.
- Oct 26 Difference-making and explanation
- Nov 2 High level probabilistic explanation in the sciences of complex systems
▷ Strevens, M. How are the sciences of complex systems possible? Available online at homepages.nyu.edu/~ms4099/teaching/hex_f04.
- Nov 9 Probabilistic explanation as high level explanation
▷ Excerpts from Strevens explanation manuscript
- Nov 16 Functional analysis and blackboxing
▷ Kim, J., Multiple realization and the metaphysics of reduction, *Philosophy and Phenomenological Research* 52:1–26, 1992.
▷ Shapiro, L., Multiple realizations, *Journal of Philosophy* 97:635–654, 2000 (optional).
▷ Block, N., Anti-reductionism slaps back, in J. E. Tomberlin (ed.), *Mind, Causation, World*, volume 11 of *Philosophical Perspectives*, pp. 107–133, Blackwell, Oxford, 1997 (optional).
- Nov 23 Functional analysis and blackboxing, continued.

Various Topics

- Nov 30 Representation
▷ Strevens, M. The role of the concept of representation in explanation. Available online at homepages.nyu.edu/~ms4099/teaching/hex_f04. Read especially sections 2, 5, 6.
Optional:
▷ Cummins, R., *The Nature of Psychological Explanation*, MIT Press, Cambridge, MA, 1983, chap. 2, especially pp. 34–44.
▷ Dretske, F., *Explaining Behavior*, MIT Press, Cambridge, MA, 1988, chap. 4.
- Dec 7 Representation, continued