

Natural Kinds at Every Level?
Phil 232 Philosophy of Science
Wednesday 2-5
Dodd 299
Description

Scientific disciplines seem to divide the natural world into kinds—think of species, or of the chemical elements, or of fundamental particles. The goal of this seminar is to think about what natural kinds are, what role they play in the disciplines in which they are studied, and how natural kinds discovered by one discipline relate to those discovered by another discipline. We will start by considering some rival approaches to the metaphysics of natural kinds (e.g., conventionalism, naturalism, realism). Then, we will turn to a debate about whether the kinds investigated by the “special sciences” (e.g., biology, chemistry) are genuinely natural kinds, with special attention paid to how special science natural kinds (if there are any) might relate to fundamental natural kinds. No familiarity with the topic is presupposed.

Evaluation

Those taking the course for any sort of credit will do the following:

1. Two short papers (3-5 pgs, double spaced) that critically engage with (at least one of) the readings for some particular week. Due at the start of class on the week of your chosen readings.

Those taking the course for a grade (i.e., not S/U) will also complete:

2. One term paper on the topic of your choosing (12-15 pgs, double spaced). The paper may be an extension of one of your shorter papers. (In fact, that sounds like a pretty good idea.) We’ll take the last day of seminar to hear about your paper ideas. But don’t wait until the last day of seminar to write your paper, which is due June 10th.

Schedule

Only the readings for the first 5 weeks of class are scheduled. During week 5, we’ll discuss which more specialized topics we ought to dig into. Obvious options are: biological kinds, chemical kinds, social (human) kinds, but maybe we’ll come up with some less obvious options along the way.

All readings are posted on our course website.

March 30th: Class Cancelled

April 6th: Mill and Quine

1. Excerpt from *A System of Logic*, J.S. Mill (1884)
2. Quine, W.V., 1969. *Ontological Relativity and Other Essays*, New York: Columbia University Press.

April 13th: Fodor and Hacking

1. Fodor, J. A., 1974. "Special Sciences or the Disunity of the Sciences as a Working Hypothesis", *Synthese*, 28: 97–115.
2. Hacking, I. 1991 "A Tradition of Natural Kinds", *Philosophical Studies*, 61: 109–126.

April 20th: Boyd and Millikan

1. Boyd, R. 1991. "Realism, Anti-Foundationalism and the Enthusiasm for Natural Kinds", *Philosophical Studies*, 61: 127–148.
2. Millikan, R. G., 1999. "Historical Kinds and the Special Sciences", *Philosophical Studies*, 95: 45–65.

April 27th: (more) Boyd and Dupré

1. Boyd, R., 1999. "Kinds, Complexity and Multiple Realization", *Philosophical Studies*, 95: 67–98.
2. Dupré, J., 1993. Excerpt from *The Disorder of Things : Metaphysical Foundations of the Disunity of Science*, Cambridge MA: Harvard University Press.

May 4th: Hawley & Bird and Franklin-Hall

1. Hawley, Katherine & Bird, Alexander (2011). What are natural kinds? *Philosophical Perspectives* 25 (1):205-221.
2. Franklin-Hall, L. R. (2015). Natural kinds as categorical bottlenecks. *Philosophical Studies* 172 (4):925-948.

