

PHIL 8130: Varieties of Kinds
CRN 17725
Fri., 9:00–11:30, 34 Peachtree, Rm. 1123
Spring 2011

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Course description

Dividing the world into categories is essential to everyday thought and language, as well as more specialized cognitive practices such as scientific explanation and modeling. We often want these taxonomic divisions to capture the structure that the world has *naturally*; we want to group things together in virtue of some deep, underlying, or otherwise important properties that they have in common, not because of some potentially idiosyncratic or arbitrary features having to do with our psychology, our language, or our disciplinary practices. The search for the classificatory structure that the world possesses objectively is the search for so-called ‘natural kinds’.

In this seminar we will survey much of the contemporary debate over natural kinds as well as other types of kinds that exist (artifact kinds, functional kinds, human kinds, etc.). Kinds have played a central role in many important debates: over scientific realism and anti-realism, semantics, the structure of concepts, the laws of nature, causation and explanation, inductive inference, essentialism, reductionism, and multiple realization, *inter alia*. We will touch on all of these topics, and we will take a fairly detailed look at how debates over kinds play out in several of the special sciences, including biology, chemistry, psychology, and psychiatry.

Course objectives

The goal of this course is to acquaint students with the contemporary literature on kinds, as well as the skills of philosophical analysis and argumentation. Students will be expected to know the contents of the readings, and be able to explain and critique them orally and in writing. The aim of the seminar is to equip students to conduct independent research into any of the topics covered.

Prerequisites

Graduate standing or permission of instructor.

Readings

There are no assigned books for the course. All of the readings will be available on electronic reserve (ER). See the end of this document for the schedule of readings. The readings, as well as other course materials, will be available from the course webpage, which is located on PAWS. The course syllabus provides a general plan for the course; deviations may be necessary.

Assignments

The points available for the class break down as follows (no extra credit):

In-class presentation	15%
Response papers	15%
Final paper	70%

All written work will be submitted to me as an email attachment in a standard document format (.doc, .docx, .rtf, or .txt). Do not put your name on submitted work; use only your Panther ID number. Be sure to put the course number and a description of the assignment in the subject line.

The *in-class presentation* is a tightly focused 10-minute discussion of some aspect of one of the required readings. You should *not* aim to summarize the entire article in this time! Rather, you should focus on a particular argument or claim made by the author. Situate the target claim in terms of the larger issues raised in the reading, then analyze and assess it. The point of the presentation is to be a selective, critical, and constructive engagement with one of the problems dealt with in the reading. You will sign up for readings to present during the first class meeting. For more details, consult the separate presentation guidelines sheet.

Response papers (RPs) are short (300-600 word) critical discussions focusing on a single claim or argument made in one of the readings. They are not summaries of an entire paper. Rather, they are focused discussions of a very small part of a paper. You are expected to submit four of these during the semester. They may be turned in at any time, subject to the requirements that (1) no more than one RP be turned in per week, and (2) no RP may deal with material that we have discussed in class already. RPs should cover only required readings, not optional ones. For more details on what is expected from RPs, consult the separate guidelines sheet.

The *final paper* is a research paper of between 4000 and 6000 words. In this paper you are expected to motivate, develop, and defend a substantial philosophical position of your own. The topic may be anything that we have covered in class, or anything that bears a plausible relation to the course content. You must meet with me to discuss your proposed final paper topic no later than 4/8/11.

Lateness policy

Late assignments will not be accepted without prior permission from the instructor. In case of illness, family medical emergency, or other major extenuating circumstances, arrangements can be made to move due dates. These arrangements must be made in advance, where possible. You must also provide adequate documentation when you are requesting permission to turn in an assignment late. If you hand in an assignment late without requesting prior permission, or without providing adequate documentation, I reserve the right not to accept the assignment. Assignments that are turned in late will be graded down by 1/3 of a letter grade per day.

Special accommodations

All efforts will be made to accommodate students with special needs, so long as sufficient notice is given. If you require special accommodations for lectures, papers, exams, or any other course component, you must contact me within the first week of class. You must also notify Disability Services (Student Center, 2nd floor, Suite 230, 404-463-9044, web: <http://www2.gsu.edu/disability>).

Attendance

We will meet for the entire scheduled time unless otherwise noted. Sale of recordings or transcripts of lectures and discussions is not permitted, although you may make such recordings for your own personal use. If you need to miss class for religious observances, you must notify me in advance. I expect you to adhere to normal standards of good classroom behavior: cellphones silent, no loud personal conversations, snoring, etc.

Laptops and other electronic devices

Use of laptops and related electronic devices (iPads, Kindles, iPhones and other smartphones, etc.) is not permitted during class.

Contact outside of class

Email is the main means of out-of-class communication. I will be sending updates on readings and assignments to your GSU email account throughout the semester. You are expected to check this account regularly. For in-person meetings I have regular office hours. If you cannot attend my scheduled office hours, email your question or comment, or schedule a meeting at another time. I will try to respond to email within a reasonable amount of time; however, immediate replies aren't guaranteed. If I haven't replied within 48 hours, re-send your message. You must put the course name or number in the subject line of your emails.

Instructor availability

If you cannot attend my scheduled office hours, feel free to email your question or comment, or schedule a meeting at another time. I will try to respond to email within a reasonable amount of time; however, immediate replies aren't guaranteed. Put the course name or number in the subject line of your emails.

Academic honesty

Plagiarism, cheating on exams, and other violations of the University's code of academic honesty will not be tolerated. ***The penalty for such violations is failure of the course.*** Further administrative action may also be pursued. If you are not certain what constitutes a violation of the code of academic honesty, it is *your* responsibility to consult the full text of the code, which is available at: http://www2.gsu.edu/~wwwdos/codeofconduct_conpol.html

Schedule of readings

The first set of readings for each week is required and will be discussed at the meeting. So you should focus your attention on these. The optional readings are for those who want to branch out and explore these topics in greater depth. For further suggestions, see the excellent bibliography on natural kinds put together by the AHRC Metaphysics of Science Project:

<http://www.bris.ac.uk/metaphysicsofscience/bibliographies/naturalkindsbibliographies.html>

1. Historical background (1/14)

Whewell, *The Philosophy of the Inductive Sciences* (Bk. VIII)

Mill, *A System of Logic* (Bk. I, Chs. VII, VIII; Bk. II, Chs. III, IV, XXII)

Venn, *The Principles of Empirical or Inductive Logic* (Chs. III, IV, XII, XIII)

Optional:

Bird and Tobin, 'Natural kinds' [SEP entry]

Mill, *A System of Logic* (Bk. II, Ch. V)

Venn, *The Logic of Chance* (1st ed., Chs. VII, XI; 3rd ed., Ch. III)

Russell, *Human Knowledge: Its Scope and Limits* (Pt. IV, Ch. 9; Pt. VI, Ch. 3)

2. Constructivism and anti-realism (1/21)

Quine, 'Natural kinds'

Goodman, *Ways of Worldmaking* (Chs. 1, 7)

Optional:

Goodman, 'Seven strictures on similarity'

Hacking, 'Natural kinds'

Putnam, 'Reflections on Goodman's *Ways of Worldmaking*'

3. Semantics for natural kind terms (1/28)

Putnam, 'The meaning of "meaning"'

Putnam, 'Is semantics possible?'

Putnam, 'Explanation and reference'

Optional:

Brown, 'Natural kind terms and recognitional capacities'

Koslicki, 'Natural kinds and natural kind terms'

Schwartz, 'Natural kinds and nominal kinds'

Wikforss, 'Are natural kind terms special?'

4. Rigidity and essentialism (2/4)

Kripke, *Naming and Necessity* (excerpts)

Optional:

Donnellan, 'Kripke and Putnam on natural kind terms'

Hacking, 'Putnam's theory of natural kinds and their names is not the same as Kripke's'

Kripke, 'Identity and necessity'

Mellor, 'Natural kinds'

Soames, 'Knowledge of manifest natural kinds'

5. Scientific essentialism (2/11)

Ellis, *Scientific Essentialism* (Chs. 1, 2, 4)

Optional:

Bealer, 'The limits of scientific essentialism'

Bigelow, Ellis, and Lierse, 'The world as one of a kind'

Fine, 'Essence and modality'

Khalidi, 'How scientific is scientific essentialism?'

Khalidi, 'Natural kinds and crosscutting categories'

Mumford, 'Kinds, essences, powers'
Tobin, 'Crosscutting natural kinds and the hierarchy thesis'

6. The psychology of essentialism (2/18)

Gelman, *The Essential Child* (Chs. 2-3)
Malt, 'Water is not H₂O'
Strevens, 'The essentialist aspect of naïve theories'

Optional:

Braisby, Franks, and Hampton, 'Essentialism, word use, and concepts'
Kalish, 'Essentialist to some degree'
Keil, 'The growth of causal understanding of natural kinds'
Medin and Ortony, 'Psychological essentialism'

7. Homeostatic property clusters (2/25)

Boyd, 'What realism implies and what it does not'
Boyd, 'Realism, conventionality, and "realism-about"'
Boyd, 'Realism, natural kinds, and philosophical methods'
Boyd, 'How to be a moral realist'

Optional:

Bird, 'The metaphysics of natural kinds'
Boyd, 'Scientific realism and naturalistic epistemology'
Boyd, 'Realism, anti-foundationalism, and the enthusiasm for natural kinds'
Craver, 'Mechanisms and natural kinds'
Hacking, 'A tradition of natural kinds'
Hacking, 'On Boyd'

8. Multiple realization and the special sciences (3/11)

Fodor, 'Special sciences'
Horgan, 'Nonreductive materialism and the explanatory autonomy of psychology'

Optional:

Batterman, 'Multiple realizability and universality'
Funkhouser, 'A liberal conception of multiple realizability'
Lycan, 'Form, function, and feel'
Putnam, 'The nature of mental states'
Putnam, 'Philosophy and our mental life'

9. Against multiple realization (3/18)

Kim, 'Multiple realization and the metaphysics of reduction'
Fodor, 'Special sciences: Still autonomous after all these years'

Optional:

Bechtel and Mundale, 'Multiple realizability revisited'
Block, 'Anti-reductionism slaps back'

Klein, 'An ideal solution to disputes about multiply realized kinds'
Shapiro, 'Multiple realizations'
Weiskopf, 'Functional kinds in the special sciences'

10. Species and biological kinds (3/25)

Ghiselin, 'A radical solution to the species problem'
Hull, 'A matter of individuality'
Boyd, 'Homeostasis, species, and higher taxa'

Optional:

Boyd, 'Kinds, complexity, and multiple realization'
Ereshefsky, 'Species, higher taxa, and the units of evolution'
Griffiths, 'Cladistic classification and functional explanation'
Hull, 'Are species really individuals?'
Lange, 'Are there natural laws concerning particular biological species?'
Mayr, 'What is a species and what is not?'
Millikan, 'Historical kinds and the special sciences'
Ruse, 'Biological kinds: Natural kinds, individuals, or what?'
Wilson, 'Realism, essence, and kind: Resuscitating species essentialism?'
Wilson, Barker, and Brigandt, 'When traditional essentialism fails'

11. Species pluralism and promiscuous realism (4/1)

Dupré, *The Disorder of Things* (Chs. 1-3)
Kitcher, 'Species'

Optional:

Brigandt, 'Species pluralism does not imply species eliminativism'
Dupré, 'Promiscuous realism: Reply to Wilson'
Ereshefsky, 'Eliminative pluralism'
Ereshefsky, 'Species pluralism and anti-realism'
Stanford, 'For pluralism and against realism about species'
Kitcher, 'Some problems about species'
Wilson, 'Promiscuous realism'

12. Chemical kinds (4/8)

Laporte, *Natural Kinds and Conceptual Change* (Ch. 4)
Hendry, 'Elements, compounds, and other chemical kinds'
Needham, 'The discovery that water is H₂O'

Optional:

Abbott, 'Water=H₂O'
Hendry, 'The elements and conceptual change'
Johnston, 'Manifest kinds'
Laporte, 'Living water'
Needham, 'Microessentialism'

13. Artifact kinds (4/15)

Elder, 'On the place of artifacts in ontology'

Thomasson, 'Artifacts and human concepts'

Sperber, 'Seedless grapes'

Optional:

Baker, 'The ontology of artifacts'

Keil, Greif, and Kerner, 'A world apart: How concepts of the constructed world are different in representation and in development'

Malt and Sloman, 'Artifact categorization: The good, the bad, and the ugly'

Sloman and Malt, 'Artifacts are not ascribed essences, nor are they treated as belonging to kinds'

14. Kinds of people (4/22)

Hacking, 'The looping effects of human kinds'

Hacking, 'Kinds of people: Moving targets'

Hacking, 'Historical ontology'

Optional:

Cooper, 'Why Hacking is wrong about human kinds'

Ereshefsky, 'Bridging the gap between biological kinds and human kinds'

Hacking, 'Making up people'

Khalidi, 'Interactive kinds'

Mallon, 'Human categories beyond non-essentialism'