

Science, Values, and Democracy

John Dougherty

SoSe 2022

Meeting:	Wednesdays, 14:00–16:00 (c.t.) Ludwigstr. 31, Room 021
Office Hours:	Thursdays, 14:00–16:00 (c.t.) Ludwigstr. 31, Room 126
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Overview

Description This course is an introduction to philosophical thinking about the relationship between science and society. It's often thought that they are basically separate: society is organized around the negotiation of competing values, while science is neutral, impartial, and objective—concerned only with facts, independent of values. Society makes policies on the basis of facts that science discovers, and decides to pursue scientific projects that it finds valuable, but this is the only interaction between science and values. Or, at least, it should be; when things go wrong, the values of scientists can influence their analysis and the values of a society can influence their reception of scientific facts, leading to climate change denial and vaccine skepticism. This picture of the relationship between science and society is known as the “value-free ideal”. In this course we will consider arguments against the value-free ideal, alternatives to the value-free ideal, and specific controversies about science and society that we can use to compare the different proposals.

In the first part of the course, we will read Matthew J. Brown's book *Science and Moral Imagination*. This book is a thorough and approachable introduction to the issues we will discuss in this course, and it designs and defends an alternative to the value-free ideal. In the second part of the course, we will look at a series of case studies, including public health policies regarding disease screening and vaccines, climate policy, and the impact of values on medicine.

Objectives By the end of the course, you should be able to (i) state one or more philosophical problems concerning the interaction of science, values, and democracy, and (ii) explain why they are problems. Exhibiting ability (i) means giving a statement, in academic writing and in your own words, of an argument about values in science. Exhibiting ability (ii) means explaining why the argument poses a problem: why someone might want to believe the premises but not the conclusion.

Materials

Brown's *Science and Moral Imagination* is available under an Open Access agreement with the University of Pittsburgh at the following link:

<https://valuesinscience.com/>

In the second part of the course, we will read articles published in academic journals and peer-reviewed volumes. These—and all other course materials—will be made available on LSF.

Assessment

The evaluation for this course will be by means of a term paper submitted at the end of the semester. If you would like to submit a term paper, you must register through LSF during the registration period (04.07.2022 – 15.07.2022) and submit it to me by email by the term paper deadline (30.09.2022). Please note that extensions of this deadline are not up to me; if you need an extension, please contact Fabian Widerna (f.widerna@lmu.de) at the Prüfungsamt für Geistes- und Sozialwissenschaften (PAGS).

Your paper should be on a topic related to the philosophical issues discussed in this course. Near the end of the semester I will distribute a list of suggested questions and grading criteria. You may write your paper on topic not on that list; if you do, then I recommend speaking to me before writing the paper, so that I can advise on the topic and scope of your planned alternative. The term paper should be 3000 words. It should be written in 12pt font, with 1.5 spacing, 3cm margins on the left and right, and a standard academic typeface (Computer Modern, Times New Roman, Palatino, Calibri, etc.).

Resources

Questions about the administration of philosophy teaching at LMU should be directed to Thomas Wyrwich (thomas.wyrwich@lrz.uni-muenchen.de). The Erasmus coordinator for philosophy at LMU is Peter Adamson (office.peter.adamson@lrz.uni-muenchen.de). The list of women's representatives (Frauenbeauftragte) for the Philosophy Faculty can be found on the Faculty's webpage (<https://www.philosophie.uni-muenchen.de/fakultaet/frauenbeauftragte/index.html>); the representative for the MCMP is Silvia Jonas. Issues regarding the economic, social, and cultural aspects of student life—including studying with a child or studying with a disability—are the responsibility of the Munich Student Union (<https://www.studentenwerk-muenchen.de>).

Schedule and readings

Please see the reading list for secondary readings and further bibliographic information. The starred weeks will be rescheduled based on participants' availabilities.

April 27: Introduction

- No reading

May 4: What is science?

- Brown, M. J. (2020a). Empirical science as practical inquiry. In Brown (2020e), chapter 1, pages 25–56

May 18: Where do values enter?

- Brown, M. J. (2020d). The need for values in science: The contingency argument. In Brown (2020e), chapter 2, pages 57–86

May 25: How do we currently think about values in science?

- Brown, M. J. (2020c). The need for a better theory of values. In Brown (2020e), chapter 3, pages 87–112

June 1: What kinds of values are relevant?

- Brown, M. J. (2020f). The sources and types of values in science. In Brown (2020e), chapter 4, pages 113–149

June 8: How should we make decisions about values?

- Brown, M. J. (2020g). Value judgment as empirical, imaginative inquiry. In Brown (2020e), chapter 5, pages 150–184

June 15: Brown's proposal

- Brown, M. J. (2020b). The ideal of moral imagination. In Brown (2020e), chapter 6, pages 185–216

June 22: Alternative ideals

- Bright, L. K. (2018). Du Bois' democratic defence of the value free ideal. *Synthese*, 195(5):2227–2245
- Schroeder, S. A. (2021). Democratic values: A better foundation for public trust in science. *The British Journal for the Philosophy of Science*, 72(2):545–562

June 29: Disease screening

- Kourany, J. A. and Fernández Pinto, M. (2018). A role for science in public policy? the obstacles, illustrated by the case of breast cancer screening policy. *Science, Technology, & Human Values*, 43(5):917–943
- Plutynski, A. (2017). Safe or sorry? cancer screening and inductive risk. In Elliott and Richards (2017), chapter 8, pages 149–170

July 6: Vaccines

- Goldenberg, M. J. (2016). Public misunderstanding of science? reframing the problem of vaccine hesitancy. *Perspectives on Science*, 24(5):552–581
- Allchin, D. (2021). Who speaks for science? *Science & Education*, pages 1–18

July 13: Climate

- Havstad, J. C. and Brown, M. J. (2017). Neutrality, relevance, prescription, and the IPCC. *Public Affairs Quarterly*, 31(4):303–324
- Frank, D. M. (2017). Making uncertainties explicit. In Elliott and Richards (2017), chapter 5, pages 79–100

July 20: Evidence in medicine

- Stegenga, J. (2017). Drug regulation and the inductive risk calculus. In Elliott and Richards (2017), chapter 2, pages 17–36
- Bluhm, R. (2017). Inductive risk and the role of values in clinical trials. In Elliott and Richards (2017), chapter 10, pages 193–212

July 27: Facts and values

- Alexandrova, A. (2018). Can the science of well-being be objective? *The British Journal for the Philosophy of Science*, 69(2):421–445
- Djordjevic, C. and Herfeld, C. (2021). Thick concepts in economics: The case of Becker and Murphy's theory of rational addiction. *Philosophy of the Social Sciences*, 51(4):371–399