

Political Philosophy of Science

MA seminar

Thursday 14:15 – 15:45, summer semester 2024

First session: 4 April 2024

Room 107, building 1920, Lange Laube 32 (first floor)

Institut für Philosophie, Philosophische Fakultät

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Lange Laube 32, room 103

Office hours: Tuesday, 10:00 – 11:00 (please book a slot via Stud.IP)

Course description

Questions about the proper relationship between science and politics have always prompted controversy, most recently during the course of the Covid-19 pandemic. There are various positions: some people criticise political decision-making for not being evidence-based enough. Others worry that democratic decision-making procedures are subverted when scientists have too much political influence. There are also those who argue that science is being politicised and fear for the detrimental effects this may have on quality of research.

The aim of this seminar is to critically reflect on these questions by drawing on resources from both philosophy of science and political philosophy, in recognition of the valuable insights that both fields have to offer in this context. Philosophers of science pay close attention to the way scientific evidence is gathered; when such evidence is trustworthy and the different ways in which research and researchers can be biased, for example. Political philosophy, on the other hand, deals with questions about when decision-making is (democratically) legitimate, how authority is constituted and how accountability mechanisms can and should work.

The approach to combine resources from these two fields has recently been dubbed 'political philosophy of science'. This is an emerging field within the broader philosophy of science discourse on science and society. This seminar will introduce some of the key texts of this discourse. It will also invite critical reflection on the assumptions and

presuppositions of the main proponents of this approach by comparing it to work done in adjacent fields, especially to science and technology studies. The seminar is aimed at students who are interested in reading both philosophy of science and political philosophy, in making connections across fields and engaging with new and emerging research.

In the first half of the course, we will read and discuss some key texts within political philosophy of science. We will begin by asking what role science occupies in democratic societies and discussing a prominent answer: that its role is to provide public knowledge; or more specifically: that science allows citizens to effectively self-govern and develop well-informed preferences. This notion is particularly present in theories of deliberative democracy. We will then consider the challenge that value-laden science presents for this view and discuss whether participatory research can respond to this challenge.

In the second half of the semester, we focus on a different school within political philosophy: non-ideal theory. We will read different views on what the role of science in societies (democratic or not) may look like and pay specific attention to whether and, if so, under which circumstances scientists should be activist and if there ought to be (more) accountability mechanisms for scientists.

Administration

All information about the course as well as digital versions of the required reading can be found on **studip.uni-hannover.de**.

To gain credits for the course you will be expected to:

- **Regularly participate in class:** Part of the joy of philosophy classes is to enter into a discussion that takes seriously and does justice to the thinkers we engage with. In order for this to be possible, it is required that you come to class having read **at least the text that is marked as key reading** and that you show up continuously, so that we have a common basis for our conversation.
- **“Studienleistung”:** Throughout the semester, you have to complete a portfolio consisting of (1) an initial reflection, (2) a summary of a text read in the course, (3) a textual commentary, (4) feedback for another student’s textual commentary and (5) a final reflection (see below).

If you want to do a **“Prüfungsleistung”**, you can either write an essay (**“Hausarbeit”**) based on the literature discussed in the class, or choose to do an **oral exam**. Regardless of the format you choose, you will be expected to meet with me beforehand to discuss and receive approval for your topic(s) of choice. More information on the format of and expectations for the respective examination will be provided in week 5 (2 May).

Portfolio

The **“Studienleistung”** for this course consists of a portfolio comprising four short texts, as well as the feedback by another student on one of these texts. Consequently, you will be

expected to provide this feedback on another student's text too. These tasks will be due throughout the semester. To gain credits, you are expected to complete all five of them.

The aim of the assignments in the portfolio is for you to practice those reading, writing and feedback skills that you need in philosophy. You will receive feedback from me on your summary and textual commentary and we will do short "how-to" sessions in class before the texts are due. Texts are to be submitted via Stud.IP.

*(1) Initial reflection (300-500 words): Due **Tuesday, 9 April***

In the first week of the course, you will submit a short initial reflection. The aim is to encourage you to actively think about what you want to get out of this course so that you can select your later readings more effectively. Furthermore, it helps me to take your interests, needs and background knowledge into account. Questions that you should address in your initial reflection are:

- What interests you about the topic? What questions do you have?
- What background knowledge do you have? Have you, for instance, done political philosophy before? What do you know about philosophy of science already?
- What do you expect from the seminar?
- How much experience do you have in writing and reading philosophical texts?

*(2) Summary and questions (300-500 words): Due **18 April – 30 May***

For your second assignment, you may select one of the **readings (core or secondary)** from week 3 to week 7. You will have to summarise this text and formulate two questions on the basis of it. Your summary will be due on the respective day that we discuss the text. To spread the workload for me, I will ask you to sign up for a text on Stud.IP by Friday, **12 April**. You will receive feedback for your summaries from me. We will do a session on how to summarise arguments in philosophy in week 2 (11 April).

Your questions will be used as a basis for discussion in the respective session. You should therefore attend and be prepared to discuss your questions in class.

*(3) Textual commentary (700-1000 words): Due **6 June – 27 June***

The textual commentary builds on your second assignment. This time you will be asked to summarise and comment on one of the texts read between week 8 and 11. Again, you will be asked to choose a text beforehand, by Friday, **31 May**. You will receive feedback on your textual commentary by a fellow student. If you wish to receive feedback by on your text by me also you can make an appointment during my office hour. We will do a session on how to write a textual commentary in philosophy in week 7 (30 May).

Your commentary will be used as a basis for discussion in the respective session. You should therefore attend and be prepared to discuss your commentary in class.

*(4) Feedback: Due **4 July***

Giving and receiving feedback is a critical to developing your understanding and writing skills but requires practice. To this end, you will be asked to provide constructive feedback on the textual commentary of a fellow student. We will do a session on how to do this well in week 11 (27 June) and use this week to pair up the teams and exchange texts. You will have time during the session on 4 July to talk about your texts with each other.

*(5) Final reflection (300-500 words): Due **Tuesday, 9 July***

In the final reflection you have space to think on what you have learnt, address those things that aren't clear to you, and describe your thoughts on the general approach of this field of philosophy. Questions you may address in your final reflection are:

- Have the expectations from your initial reflection been met? Were some of the questions you had addressed? Were any new questions raised?
- Is there something that puzzles you still or that is difficult for you to understand? If so, what don't you understand, and why?
- Which text(s) did you find most interesting and why?
- What do you think about this field's approach to combine philosophy of science and political philosophy?
- Formulate a research question that you would be interested in exploring with the literature read in this course (this may be particularly interesting for those who want to do an exam).

Contact

Should there be any administrative issues or anything you feel uncomfortable with during class, please do contact me early on. Feel free to reach out also if you experience any personal struggles I should know about (for instance struggles with the workload, with the topics discussed in the course, mental health issues or others).

You can contact me via email or Stud.IP. If you wish to talk to me in person you can always approach me after class or make an appointment for my office hour on Stud.IP. I will also provide a platform for anonymous comments after every session.

Intended Learning Outcomes

By the end of the course, the student will have:

- Gained an overview of key topics in political philosophy of science.
- Become familiar with key concepts both from philosophy of science and political philosophy.
- Critically discussed different views within philosophy of science based on their presuppositions about the nature of democracy and society more broadly.
- Reflected on issues of power and injustice in science.
- Considered different propositions for how to improve current systems of knowledge production and dissemination.
- Practiced key skills of philosophical writing.

Semester Plan

| <i>Week</i> | <i>Topic</i> | <i>Preparation</i> |
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| <i>Week 1 (04.04.):</i> | Introduction | No reading |
| Part 1: Value-laden science in democracies | | |
| <u>Key Questions:</u> Do democracies need science? What for? When is evidence-based politics technocratic? How should values in science be managed? Is participatory research a good answer to worries of technocracy? | | |
| <i>Week 2 (11.04.)</i> | Do democracies need science? <i>Portfolio: How to write a summary in philosophy?</i> | Core reading: Kitcher, P. (2011). <i>Science in a democratic society</i> . Amherst: Prometheus; Roundhouse. Chapter 3 (pp. 63-74). And: Course Syllabus. Secondary reading (optional): Rawls, J. (1971). <i>A Theory of Justice</i> . Harvard University Press. Sections 63 and 64 (pp. 407-424). Portfolio: Submit your "Initial Reflection" by Tuesday, 9 April |
| <i>Week 3 (18.04.) ONLINE</i> | Technocracy and values in science | Core reading: Lusk, G. (2021). Does democracy require value-neutral science? Analyzing the legitimacy of scientific information in the political sphere. <i>Studies in history and philosophy of science</i> 90, pp. 102–110. Secondary reading: Schroeder, S. A. (2020). Thinking about Values in Science: Ethical versus Political Approaches. <i>Canadian Journal of Philosophy</i> , pp. 1–10. Intemann, K. (2015). Distinguishing between legitimate and illegitimate values in climate modeling. <i>European Journal for Philosophy of Science</i> 5 (2), pp. 217–232. |
| <i>Week 4 (25.04.)</i> | Well-ordered science | Core reading: Kitcher, P. (2001). <i>Science, truth, and democracy</i> . Oxford University Press. Chapter 10 (pp. 117-136). |

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| | | <p>Secondary reading: Schroeder, A. (2021). Democratic Values: A Better Foundation for Public Trust in Science. <i>British Journal for the Philosophy of Science</i>.</p> <p>Rolin, K. (2021). Objectivity, trust and social responsibility. <i>Synthese</i> 199 (1-2), pp. 513–533.</p> |
| Week 5 (02.05.) | Deliberative mini-publics and science | <p>Core reading: Fishkin, J. (2011). <i>When the People Speak. Deliberative Democracy & Public Consultation</i>. Oxford University Press. Chapter 1 (pp.1-31).</p> |
| | Format and expectations final examination | <p>Secondary reading: Blum, M. (2022). Co-Producing Sustainability Research with Citizens: Empirical Insights from Co-Produced Problem Frames with Randomly Selected Citizens. SSRN.</p> <p>Kowarsch, M., Garard, J., Rioussset, P. et al. (2016). Scientific assessments to facilitate deliberative policy learning. Palgrave Communications.</p> |

09.05. Ascension Day: No class

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| Week 6 (16.05.) | Epistemic justice and climate science | <p>Core reading: Irzik, G. and Kurtulmus, F. (2021). Distributive Epistemic Justice in Science. <i>British Journal for the Philosophy of Science</i>.</p> |
| | (University sustainability week) | <p>And: Elabbar, A. (forthcoming). Varying Evidential Standards as a Matter of Justice. <i>British Journal for the Philosophy of Science</i>.</p> <p>Secondary reading: Fricker, M. (2009). <i>Epistemic injustice. Power and the ethics of knowing</i>. Oxford University Press.</p> |

23.05. University “Excursion Week”: No class

Part 2: Non-ideal approaches to science and democracy

Key Questions: What societal/political role does science occupy from a non-ideal perspective? How can current systems of knowledge creation and dissemination be improved upon? When is activist science legitimate? Should scientists be held accountable and if so how? What is the role of conflict in science?

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| Week 7 (30.05.) | Ideal vs. non-ideal theory | <p>Core reading: Mills, C. (2005). “Ideal Theory” as Ideology. <i>Hypatia</i> 20(3), pp.165-184.</p> |
| | Portfolio: How to write a textual | <p>Secondary Reading: Young, I. (2000). <i>Inclusion and Democracy</i>. Oxford University Press. Chapter 1, pp. 16-51 (especially 36-51).</p> |

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| <p>Week 8 (06.06.)</p> | <p>commentary in philosophy</p> <p>Feminist philosophy of science</p> | <p>McKenna, R. (2023). <i>Non-Ideal Epistemology</i>. Oxford University Press. Chapter 2 (pp. 19-44).</p> <p>Portfolio: Last possible date to submit your summary.</p> <p>Core reading: Hartsock, N. C. (1983). The feminist standpoint: Developing the ground for a specifically feminist historical materialism. In <i>Discovering reality</i>. Springer, pp. 283-310.</p> <p>Or: Longino, H. (1990). <i>Science as Social Knowledge</i>. Princeton University Press. Chapter 4, pp. 62-82.</p> <p>Secondary Reading: Wylie, A. (2012). Feminist philosophy of science: Standpoint matters. In <i>Proceedings and Addresses of the American Philosophical Association</i>, 86(2), pp. 47-76.</p> <p>Biddle, J. (2009). Advocates or Unencumbered Selves? On the Role of Mill's Political Liberalism in Longino's Contextual Empiricism. <i>Philosophy of Science</i>, 76(5), pp. 612-623.</p> <p>For a short video by Sandra Harding on Standpoint Epistemology see: https://www.youtube.com/watch?v=xOAMc12Pqml.</p> |
| <p>Week 9 (13.06.)</p> | <p>Science activism</p> | <p>Core reading: Oppenheimer, M. et al. (2019). <i>Discerning experts. The practices of scientific assessment for environmental policy</i>. Chicago: The University of Chicago Press. Chapter 5, pp.171-194.</p> <p>Secondary reading: Sarewitz, D. (2004). How science makes environmental controversies worse. <i>Environmental Science & Policy</i> 7 (5), pp. 385-403.</p> <p>Pielke, R. (2004). When scientists politicize science: making sense of controversy over The Skeptical Environmentalist. <i>Environmental Science & Policy</i> 7 (5), pp. 405-417.</p> |
| <p>Week 10 (20.06.)</p> | <p>Science and conflict</p> | <p>Core reading: Latour, B. (2017). <i>Facing Gaia. Eight Lectures on the New Climatic Regime</i>. Translated by C. Porter. Cambridge: Polity Press. Lecture 7 (pp. 220-254).</p> <p>Secondary Reading: Mouffe, C. (1999). Deliberative Democracy or Agonistic Pluralism. <i>Social Research</i> 66(3), pp. 745-758.</p> |

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| | | Schönwitz, T. (2022). Values in Science, Biodiversity Research, and the Problem of Particularity. <i>Kennedy Institute of Ethics Journal</i> 32(1), pp. 69-101. |
| Week 11 (27.06.) | Accountability <i>Portfolio:</i> <i>How to give constructive feedback</i> | <p>Core reading: Douglas, H. (2021). Squaring Expertise with Accountability. In <i>Science, Values, and Democracy</i>. The 2016 Descartes Lectures. Tempe: Consortium for Science, Policy & Outcomes, pp. 67–96.</p> <p>Secondary Reading: Hall, S. (2011). Scientists on trial: At fault? <i>Nature</i> 477, pp. 264-269.</p> <p>Brown, M. (2009). <i>Science in democracy. Expertise, institutions, and representation</i>. Cambridge Mass.: MIT Press. Chapter 9, pp. 201-237.</p> <p>Portfolio: Last possible date to submit your textual commentary.</p> |
| Week 12 (04.07.) | Commercial science | <p>Core reading: Brown, J.R. (2002). Funding, Objectivity and the Socialization of Medical Research. <i>Science and Engineering Ethics</i> 8, pp. 295-308.</p> <p>And: New Books in Philosophy Podcast on Lisa Herzog’s book <i>Citizen Knowledge</i>: https://newbooksnetwork.com/citizen-knowledge</p> <p>Secondary Reading: Oreskes, N. and Conway, E. (2023). <i>The Big Myth. How American Business Taught Us to Loathe Government and Love the Free Market</i>. Bloomsbury Publishing. Introduction, pp. 10-20.</p> <p>Biddle, J. (2016). Bringing the Marketplace into Science: On the Neoliberal Defense of the Commercialization of Scientific Research. In <i>Science in the Context of Application</i>, Springer, pp. 245-269.</p> <p>Portfolio: Prepare feedback for the textual commentary of one other person.</p> |
| Week 13 (11.07.) | Exam Preparation | <p>No reading. Office hours 9-12AM, especially for those who want to do an exam for this course.</p> <p>Portfolio: Submit your “Final Reflection” by Thursday, 11 July.</p> |