Feminist Philosophy of Science

Seminar, winter semester 2021/22
Monday 12:00 - 14:00
Room B 410, Im Moore 21 (Geb. 1146), 4th floor
First session: Monday, 18.10.2021

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Course description

Feminist theory has actively contributed to shaping our understanding of the role values and social perspectives play in the production of knowledge. Nevertheless, many questions remain controversial. To what extent is science gendered and in what ways does scientific research contribute to the subordination of women? Are there limits to what a specific gender (e.g. what men as men) can know and understand? Can we conceptualise objectivity from a feminist perspective? What measures can, which measures have been taken to address exclusion and injustice in science? To come to grips with these questions this course highlights major contributions of feminist science and feminist philosophy of science and a number of key controversies. The course is divided into four parts.

In part One we take a historical approach to gain an overview of the key debates among feminist philosophers of science from the 1970s through to the 1990s. We discuss Sandra Harding's tripartite division between feminist empiricism, feminist standpoint epistemology and feminist postmodernism and pay particular attention to the critiques levelled against standpoint epistemology.

Part Two engages the contributions feminists have made to the (still ongoing) *values in science* debate. In public discourse feminists are regularly characterised as overtly critical voices focused on find finding problems rather than solving them. In the *values in science* debate, however, feminists took on a constructive role, proposing practical solutions to

the stalemate between constructivist sociologists of science (deemed too relativistic by analytic philosophers) and defenders of the value-free ideal of science (who faced increasing evidence that even 'our best science' is fundamentally value-laden). Helen Longino's work is particularly insightful in this context: her account of objectivity as a feature of scientific communities will be our entry point into the discussion. We also consider Janet Kourany, who argues that science should be based on "sound" values; discussing her claim that research with discriminatory impact ought not to be pursued.

Part Three shifts the focus to contemporary debates and concepts developed in recent years – in philosophy of science as well as in epistemology – to discuss issues of discrimination and structural injustice. We look at Robert Proctor's concept of agnotology (the study of ignorance), discussing how this applies to issues feminists are trying to address and Miranda Fricker's notion of epistemic injustice (and hermeneutical injustice in particular). We also spend time discussing some influential charges that have come from intersectional and queer feminism, pointing out implications of white, middle class feminism, which some argue dominate the discourse in feminist philosophy of science.

The fourth and final part shifts the focus to those issues women in academia are facing today, both in research and in teaching. We look at different explanations for the persisting gender gap particularly in STEM subjects but also in fields like philosophy. We consider the impact of implicit bias, sexism and misogyny and discuss models to address these issues.

Administration

All information about the course as well as digital versions of the required reading can be found on **studip.uni-hannover.de**. For some texts, the syllabus includes links to video versions of the material. Feel free to use them in whatever way helps you to take in the information.

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 at all, it is required that you come to class having read **at least the text that is marked as key reading** and that show up continuously, so that we have a common basis for our conversation.
- **Give a group presentation on the key feminist debates within *one* scientific field of your choice:** In week 2, students will form groups and decide on a scientific field or subfield (for instance archaeology, cognitive science, primatology, climate science, economics and so on) they wish to work on (see "Case Studies"). Presentations will take place in week 6 (22.11.) and week 10 (20.12.). The aim of the group work will be to (1) get an overview of the variety of issues and debates there are on gender questions in different fields and (2) to critically reflect on the theoretical literature discussed in the course. Which theories and concepts are of help when discussing real-world cases, which are not? Examples of possible topics will be provided in week 1.

If students want to do a "*Prüfungsleistung*", this can be done in form of **either** an essay ("*Hausarbeit*"), based on the case studies and the literature discussed in the class, **or** an oral exam. For either format, come talk to me about the exact requirements (the length of the paper as well as the exam will depend on your level of study). I encourage you to write a paper given that being able to write well and coherently is a skill that is more useful at university and outside than being able to pass oral exams.

The current covid regulations allow us to hold classes in person. To participate in class you have to be either vaccinated, recovered or recently tested (*3G-Regel*). The classroom will be aired on a regular basis (before and after the seminar and every 20 minutes) and masks have to be worn during the seminar. For more information see: https://www.uni-hannover.de/de/universitaet/aktuelles/corona/. I will inform you, if the regulations change during the semester.

Finally, should there be any issues or anything you feel uncomfortable with, I appreciate receiving (constructive) feedback both during and at the end of the course. 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). I will provide a platform for anonymous comments after every session and circulate a feedback form at the end of the course.

Case Studies

A presupposition most feminist philosophers of science share is that gender matters in a wide array of if not all scientific fields. Yet there are significant differences between the disciplines. Gender bias in sociology, anthropology, and biology, for instance, might be more obvious than in engineering or physics. To do justice to the heterogeneity of science and the complexity of feminist perspectives in and on research, the participants of the course will be asked to, in groups, select **one** scientific field and:

- Research the impact of women and feminists within this specific domain.
- Research ongoing debates within the field concerning the role of gender.
- Select **at least one** of the texts discussed in the course and critically discuss its presumptions and main arguments in light of the chosen case study.

The different case studies will be presented in Week 6 (22.11.) and Week 10 (20.12.) and form the *Studienleistung* of the course. We will discuss in class different approaches to working with case studies. All groups should furthermore submit an outline of their case study before the presentations.

An overview on feminist research in different scientific fields can be found for instance in:

- Creager, A. N., Lunbeck, E. and Schiebinger, L. L. (eds.). (2001). *Feminism in twentieth-century science, technology, and medicine*. University of Chicago Press.
- Schiebinger, L. (2001). *Has Feminism Changed Science?* Harvard University Press.
- Crasnow, S. and Intemann, K. (eds.) (2021). *The Routledge Handbook of Feminist Philosophy of Science*. Routledge. (Part IV)

Intended Learning Outcomes

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

- Gained an overview of the early debates within feminist philosophy of science.
- Thought about the role of values in science from a feminist perspective.
- Become familiar with key concepts within the feminist discourse.
- Considered different explanatory frameworks and proposed solutions for persisting gender inequalities in academia.
- Critically discussed different scientific disciplines from a feminist perspective.
- Practiced applying theoretical texts to a case study and assessing the usefulness and plausibility of theoretical work from the perspective of an applied issue.

Semester Plan

Week	*Topic*	*Preparation*
Week 1 (18.10.):	Introduction	No reading
	Part 1: Early Debates in Feminist Philosophy of Science – Feminist Empiricism, Standpoint Epistemology (and Postmodern Feminism) **Key Questions:** What are the different positions in feminist philosophy of science? What does it mean for knowledge to be situated? Do women (and other marginalised groups) have an epistemic vantagepoint; if so, why? Why has standpoint theory been so controversial?	
Week 2 (25.10.)	Distinguishing feminist approaches	**Core reading:** Harding, S. G. (1986). From the woman question in science to the science question in feminism. *The science question in feminism*. Cornell University Press, pp. 15-29. **Secondary reading (optional):** Intemann, K. (2010). 25 years of feminist empiricism and standpoint theory: Where are we now? *Hypatia*, *25*(4), pp. 778-796. Butler, J. (2007). *Gender Trouble*. Routledge, pp. 1-22 **Other preparation:** Watch: Sandra Harding: On Standpoint Theory's History and Controversial Reception (~20 min) https://www.youtube.com/watch?v=xOAMc12PqmI Come to class with at least **two options** for case studies you would like to work on.

Week 3 (01.11.)	Standpoint theory	**Core reading:** Wylie, A. (2012). Feminist philosophy of science: Standpoint matters. In *Proceedings and Addresses of the American Philosophical Association,* 86(2), pp. 47-76. [Audio version available at: https://www.youtube.com/watch?v=YNNm6kwKvOY] **Secondary reading:** Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies*, 14(3), pp. 575-599. Hartsock, N. C. (1983). The feminist standpoint: Developing the ground for a specifically feminist historical materialism. In *Discovering reality.* Springer, Dordrecht, pp. 283-310.

Part 2: Feminist Contributions to the Values in Science Debate

Key questions: Where do values enter scientific knowledge production (from a feminist perspective)? What are feminist accounts of objectivity? What makes socially responsible scientific research?

Week 4 (08.11.)	Values and objectivity	**Core reading:** Longino, H. E. (1990). Values and Objectivity. *Science as Social Knowledge*. Princeton University Press. pp. 62-82. **Secondary reading:** Nelson, L. H., & Wylie, A. (1998). Coming to terms with the value (s) of science: Insights from feminist science scholarship. In *Workshop on Science and Values, University of Pittsburgh*. Intemann, K. (2020). Feminist Perspectives on Values in Science. In *The Routledge Handbook of Feminist Philosophy of Science.* Routledge, pp. 201-215.
Week 5 (15.11.)	Socially responsible science	**Core reading:** Kourany, J. A. (2010). What Feminist Science Study Can Offer. *Philosophy of science after feminism*. Oxford University Press. pp. 49-77. **Secondary reading**: Brown, M. J. (2013). The source and status of values for socially responsible science. *Philosophical Studies*, *163*(1), pp. 67-76.

		Rolin, K. H. (2020). Objectivity, trust and social responsibility. *Synthese*, pp. 1-21.
Week 6 (22.11.)	Case studies 1	No reading.

Part 3: Concepts and Tools for Feminist Critique

Key questions: What is the role of (the production of) ignorance for the continuing dominance of androcentric science? What are cases of missing words and concepts (hermeneutical injustice) in science, as well as other forms of epistemic injustice? What are the challenges from intersectional feminism to traditional philosophy of science?

Week 7 (29.11.)	Feminist agnotology	**Core reading:** Kourany, J. A. (2018). Agnotology, Feminism and Philosophy: Potentially the Closest of Allies. In: Garavaso, P. (ed.). *The Bloomsbury Companion to Analytic Feminism*. New York: Bloomsbury Academic, pp. 281-309. [audio version available at: (https://www.youtube.com/watch?v=MZz8lUniwHM)] **Secondary reading:** Proctor, R. (2008). Agnotology. A Missing Term to Describe the Cultural Production of Ignorance (and Its Study). In: R. Proctor and L. Schiebinger (eds.). *Agnotology: The Making and Unmaking of Ignorance.* Stanford University Press, pp. 1–33. Pinto, M. F. (2020). Ignorance, Science, and Feminism. In *The Routledge Handbook of Feminist Philosophy of Science* (pp. 225-235). Routledge.
Week 8 (06.12.)	Epistemic injustice	**Core reading:** Fricker, M. (2007). Hermeneutical injustice. *Epistemic Injustice. Oxford Scholarship Online*, pp. 147-175. **Secondary reading:** Medina, J. (2012). Hermeneutical injustice and polyphonic contextualism: Social silences and shared hermeneutical responsibilities. *Social Epistemology*, *26*(2), pp. 201-220. Hall, K. Q. (2017). Queer epistemology and epistemic injustice. In *The Routledge handbook of epistemic injustice.* Routledge, pp. 158-166.
Week 9 (13.12.)	Intersectional feminism	**Core reading:**

		Collins, P. H. (2002). Black feminist epistemology. In: *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. Routledge, pp. 251-271. **Secondary reading:** Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *u. Chi. Legal f.*, pp. 139-167. Harding, S., & Mendoza, B. (2020). Latin American Decolonial Feminist Philosophy of Knowledge Production. In *The Routledge Handbook of Feminist Philosophy of Science.* Routledge, pp. 104-116.
Week 10 (20.12.)	Case studies 2	No reading
	Christmas Break	

Part 4: Women in Academia

Key questions: What challenges do women (and nonwhite, queer or members of other marginalised groups) in academia face today? What explanations are there for gender gaps in different fields? What measures are taken to address these issues, what measures are appropriate? How do students at university contribute to gender discrimination?

Week 11 (10.01.)	Gender gap in academia (and how to discuss it)	**Core reading:** Thompson, M. (2017). Explanations of the gender gap in philosophy. *Philosophy Compass*, *12*(3), pp.1-12. **Secondary Reading:** Ceci, S. J., & Williams, W. M. (2011). Understanding current causes of women's underrepresentation in science. *Proceedings of the National Academy of Sciences*, *108*(8), pp. 3157-3162. Leuschner, A., & Pinto, M. F. (2021). How Dissent on Gender Bias in Academia Affects Science and Society: Learning from the Case of Climate Change Denial. *Philosophy of Science*, *88*(4) pp. 573–593. **Other preparation:** Come to class with **at least two proposals** for paper topics.
Week 12 (17.01.)	Misogyny in academia, bias in student feeding	**Core reading:** Manne, K. (2017). *Down girl: The logic of misogyny*. Oxford University Press, pp. TBA

		Secondary reading: Haslanger, S. (2018). Why I Don't Believe in Patriarchy: Comments on Kate Manne's Down Girl. Sprague, J., & Massoni, K. (2005). Student evaluations and gendered expectations: What we can't count can hurt us. *Sex Roles*, *53*(11), pp. 779-793.
Week 13 (24.01.)	Feedback and Recap	Reading to be decided in class.