

THE ETHOS OF SCIENCE

Objectivity, disinterestedness and autonomy of scientific research

Seminar
Winter term
AY 201819

General information

- Open for MA and PhD, 2cp (= 4 ECTS credits), Tue: 13:30-15:10; Room: N13/302.
- Cross-listed in gender studies, history, philosophy, political science, sociology/anthropology (see for details: <https://courses.ceu.edu/courses/ethos-science-objectivity-disintrestedness-and-autonomy-scientific-research>)
- Office hours: Tue, Wed 11-13. Contact: kronfeldnerm@ceu.edu
- See e-learning site for all readings and further material and announcements related to the course.

DESCRIPTION

This course deals with three important norms that are often mentioned as part of the ethos of science: objectivity, disinterestedness, and the autonomy of scientific research. After studying what these norms are, how they relate to each other and how they structure scientific knowledge production, we will discuss how they relate to the value-free ideal of science, i.e. the ideal that social or political values should play no role in sciences. The aim is to better understand which tensions might arise from the mentioned relations, be this in the natural or social sciences. For instance, is the use of value-laden “thick” concepts such as “aggression” a violation of objectivity, disinterestedness or autonomy? Is the influence of values in so-called inductive risk situations violating any of the three? Should it be forbidden or discouraged (e.g. by public funders) to study whether there are gender differences in cognition because it can harm those studied, or would that violate scientific autonomy? Is private research funding creating systematic biases that violate autonomy, disinterestedness and objectivity that should be prevented? These and further controversial issues will concern us in this course.

Structure

After an introduction, Part I will concentrate on classic works on objectivity, the ethos of science and the value-free ideal of science (e.g. by Max Weber and Robert Merton). Part II will contain discussions of important contemporary contributions to the above-mentioned issues, in particular with respect to objectivity, value-ladenness, thick concepts, autonomy and the ethics of scientific attention (e.g. by Lorraine Daston, Philip Kitcher, Janet Kourany and Theodore Porter, Helen Longino, etc). Part III will diversify the discussion with a set of case studies that should give rise to the term papers of the students. The choice of readings and the case studies in the second and third part will depend on the interests of the participating students.

Learning goals, requirements, deliverables and grading

Students will understand the core issues related to the topic of the course. They will practice their reading, analytic and discussion skills. No preliminary knowledge about the subject is necessary for successful participation.

Students are required to read the mandatory material for each class and to participate in oral discussions. Students might have to prepare short presentations of the core readings, depending on number of students participating. Students will also have to work on a specific case study. See for more details on rules of participation in the Handout attached to this Syllabus.

Even though the core readings in Part I and II are epistemological in orientation, students are encouraged to follow their own interest, disciplinary background, material covered (be it from, anthropology, gender studies, history, literary studies, nationalism studies, philosophy, political sciences, public policy, religious studies, sociology, urban studies, visual studies, etc.)

Grading will be based on written final paper 2/3 of the grade, in class and case study work 1/3 of the grade. The case study work can be reused in the final paper.

SCHEDULE

Wk 1: Introduction

Part I: Classic works

Wk 2: John St. Mill on the freedom of speech and the productive role of dissent

Wk 3: Max Weber on objectivity and the value-free ideal of science

Wk 4: Robert Merton on the ethos of science

Part II: Contemporary contributions

Wk 5: Lorraine Daston and Theodore Porter on objectivity as a historically changing epistemic value

Wk 6: Helen Longino on diversity as social objectivity to overcome biases in research

Wk 7: Philip Kitcher on the autonomy of sciences

Wk 8: Janet Kourany on whether some research in the social sciences should be forbidden

Part III: Case studies

Wk 9-11: For instance, case study on funding bias in biomedical research (Wilholt), on epistemically detrimental dissent in debates about climate change (Leuschner and Biddle), on Cold War social science on rationality, on psychologist's involvement in the Post-9/11 US torture program (Hoffman), on inductive risk in bioethical regulations (Lewens), on measuring university autonomy and academic freedom (Matei and Iwinska) on ##, etc.)

Wk 12: Discussion of study proposals by students

REFERENCES (CORE READINGS AND FURTHER RELATED MATERIAL)

- Bernal, J. D. (1939). *The social function of science*. London: George Routledge & Sons.
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- Bilgrami, A., & Cole, J. R. (2015). *Who's afraid of academic freedom?* Irvington: Columbia University Press.
- Carrier, M. (2013). Values and objectivity in science: Value-ladenness, pluralism and the epistemic attitude. *Science & Education*, 22, 2547–2568.
- Carrier, M., Howard, D., & Kourany, J. A. (Eds.). (2008). *The challenge of the social and the pressure of practice: science and values revisited*. Pittsburgh, PA: University of Pittsburgh Press.
- Cohen-Cole, J. (2014). *The Open Mind: Cold War politics and the sciences of human nature*. Chicago: University of Chicago Press.
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- Douglas, H. (2000). Inductive Risk and Values in Science. *Philosophy of Science*, 67, 559–579.
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- Finkin, M. W., & Post, R. (2011). *For the common good: Principles of American academic freedom*. New Haven; London: Yale University Press.
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- Ignatieff, M., & Roch, S. (Eds.). (2018). *Academic freedom: The global challenge*. Budapest: Central European University Press.
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- Longino, H. (1995). Gender, politics, and the theoretical virtues. *Synthese*, 104, 383–397.
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- Weber, M. 1904 (1949). *Die Objektivität sozialwissenschaftlicher und sozialpolitischer Erkenntnis* (Objectivity in Social Science and Social Policy). Engl. Version in *The Methodology of the Social Sciences*, E. A. Shils and H. A. Finch (ed. and trans.), New York: Free Press.

GENERAL RULES: PARTICIPATION, PRESENTATIONS, WRITTEN ASSIGNMENTS

Maria Kronfeldner

Interaction in class should be based on mutual reliability and mutual respect and should result in a fair and open intellectual exchange.

Participation

- Students are required to **attend classes regularly**.
- Students should **participate actively in seminar discussions**.
- Students have to **prepare the required reading** for the course.
- They have to **be able to ask questions** and **make comments on the required reading** and
- **respond to the presentations** of other students.

Presentations should

- include the **reconstruction of the main arguments of the text** and
- **interpretative remarks** or
- **substantial research questions** for discussion.
- If asked, students also have to **exhibit research skills** (e.g. referring to further literature regarding the topic).
- Students are expected to **prepare and distribute a one-page handout** (strict limit!) that they distribute before their presentation. A multimedia presentation (e.g. powerpoint) is possible but does not replace the handout. The tendency in recent years is to simply accumulate things, especially via powerpoint presentations. Yet, the art of thinking also consists in selecting the relevant from the irrelevant. This is why the handout is not allowed to be longer than 1 page!

Written assignments

Format and length of the written assignments varies. See course syllabus or specification on the e-learning site for this. If a longer term paper is assigned as an argumentative piece, this can be:

- either a careful **critique** of a particular and important argument for a position,
- a **comparison** between competing arguments about alternative solutions to a problem,
- or a **defense** of some particular position/argument against some relevant criticism.

In all these cases, your own argumentation, your critical voice, should be a significant part of the paper. Rule of thumb for the ideal: 20/80 (20% retelling of what others said; 80% your own way of organizing and defending things).

I will **evaluate assignments** according to the criteria in the STUDENT RECORD MANUAL

CEU GRADING SYSTEM				EUROPEAN CREDIT TRANSFER SYSTEM GRADING SCALE			
GRADE	NAME	POINT	CREDIT	GRADE	STUDENTS*	DEFINITION	AT CEU
A	Outstanding	4.00	yes	A	10%	Outstanding performance with minor errors	A
A-	Excellent	3.67	yes	B	25%	Above the average standard but with some errors	A-/B+
B+	Good	3.33	yes	C	30%	Generally sound work with a number of notable errors	B+/B
B	Fair	3.00	yes	D	25%	Fair but with significant shortcomings	B/B-
B-	Satisfactory	2.67	yes	E	10%	Performance meets the minimum criteria	C+
C+	Minimum Pass	2.33	yes	FX	-	Some more work required before the credit can be awarded	INC
F	Fail	0.00	no	F	-	Considerable further work is required	F

* Percentage of successful students normally achieving the grade

Feedback: Tests will be returned before the course ends (ideally around two weeks after the test), with general feedback and the possibility to discuss questions regarding the results. I will not comment on the content of student presentations during class, but in case students would like more feedback on their class performance, they can see me during office hours or after class. In response to written term paper work, students will receive a feedback sheet, which will translate the CEU grading system into philosophy specific criteria. See next page.

To stay up-to-date students need to regularly check the e-learning site of the course!

FEEDBACK-SHEET

Maria Kronfeldner

Seminar:
Piece:
Student ID/Name:

1. General evaluation

Grade (tendency):
(not necessarily the final grade)

2. Comparison to previous pieces (if applicable)

3. What you could improve

4. Further remarks
See also comments in your text.

SPECIFIC CRITERIA (Grade will result from scores on all criteria and also whether one is at the top or low end of a grade with respect to a specific criterion, which is not possible to represent in the grid, though)

A =4.00-3.68, A- =3.67-3.34; B+ =3.33-3.01; B =3.00-2.68; B- =2.67-2.34; C+= 2.33 (Minimum pass)

Research topic, argumentation and research skills	A	A-	B+	B	B-	C+	C
I. Does the paper have a precise, manageable, meaningful, independent and relevant substantial question, given its topic? Does it have a clear structure and upshot?							
II. Are the arguments precise, coherent and exhibiting argumentative depth?							
III. Are important concepts explicated?							
IV. Does the paper critically engage with the literature in an original way (e.g. anticipating counterarguments, developing an original organization of the material and/or argumentation)?							
V. Is there an indication for adequate comprehension of the relevant literature (incl. are the interpretations charitable)?							
VI. Is the paper mentioning relevant references, and is it clear who speaks (authorial voice)? Is there an indication of mastery of research techniques (e.g. have independently found sources been used)?							
Form and Presentation							
VII. Does the paper conform to the standards of academic writing? (quotations, layout, spelling, grammar, punctuation, word count mentioned, academic writing style, labeling of tables and figures, bibliography properly formatted and complete)							