

Theory of science and research methods in art, technology and design

Spring 2020 (7,5 cr.)

The course is divided into four modules held January–June 2020 at The School of Architecture, KTH on 6th floor conference room (if not stated otherwise).

Course leaders: Catharina Gabrielsson and Meike Schalk

Examiner: Meike Schalk

Course content

The course provides an insight in theories of science and an orientation in methodological traditions across the scientific fields. Notions of paradigmatic shifts, divides between different scientific traditions, and inter- and transdisciplinary research are presented and framed in ways that are particularly useful for PhD students pursuing practice-based research, artistic research and design research. PhD researchers are provided with an understanding of key concepts – and the relationship between research question, method, aim and result – through lectures, literature seminars and workshops. The course introduces participants to recent thinking on reflexive and critical methodologies, qualitative and innovative methods, and performative research practices. Historical examples and key philosophical sources are combined with current discussions. On completion of the course, PhD researchers will be able to position her/himself within a scientific field and will be provided with tools to critically reflect over the epistemological and ethical challenges inherent to his/her own practice.

Prerequisites

PhD researchers are expected to read and discuss literature at an advanced theoretical and philosophical level, to present and discuss their readings at literature seminars, to partake in group exercises and to conduct independent critical and reflective thinking in the writing of a paper. To be eligible for the course, PhD students must have completed a masters' degree or have an equivalent level of education in technology, art or design (such as architecture, planning, civil engineering, design, arts and crafts, or fine arts) or affiliated subjects within the humanities and social sciences. The course requires a minimum of 5 and a maximum of 20 students to be held.

Apply to the course by sending an email including a short abstract of your PhD project before January 31 to: meike.schalk@arch.kth.se

Course objectives

On completion of the course, participants should be able to

- Account for the basic principles of different scientific traditions and critically assess them in relation to knowledge claims
- Account for the main traditions in research methodology and critically assess them in relation to outcomes, topics and aims
- Account for notions of paradigmatic shifts, inter- and transdisciplinary research, and for perceived divides between different scientific traditions
- Critically reflect over how social complexity affects the preconditions for a specific study
- Critically reflect over his/her own research practice in view of its epistemological and ethical challenges

The course plan for FAD3100 can be obtained under:
<https://www.kth.se/student/kurser/kurs/FAD3100?l=en>

Course literature (sample)

Mats Alvesson and Kaj Sköldböck, *Reflexive Methodology: New Vistas for Qualitative Research* (SAGE Publications, 2013)

Gregory Bateson, *Steps to an Ecology of Mind* (2000 [1972])

Henk Borgdorff, Peter Peters & Trevor Pinch, *Dialogues between Artistic Research and Science and Technology Studies* (Routledge 2019)

Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (2015)

John Dewey, *How We Think* (1997 [1919])

Donna Haraway, "Situated knowledges: The Science Question in Feminism and the Privilege of Partial Perspective", *Feminist Studies* Vol. 14, No. 3 (Autumn 1988)

John Law, *After Method: Mess in Social Science Research* (London: Routledge, 2004)

Mona Livholts, *Situated Writing as Theory and Method* (Routledge, 2019)

Celia Lury and Nina Wakeford (eds.), *Inventive Methods: The Happening of the Social* (Routledge, 2014)

Maria Puig de la Bellacasa, *Matters of Care. Speculative Ethics in More than Human Worlds* (Minnesota University Press, 2017)

Sergio Sismondo, *An introduction to Science and Technology Studies* (2010)

Isabelle Stengers, *In Catastrophic Times: Resisting the Coming Barbarism* (Open Humanities Press, 2015)

Michael Williams, *Problems of Knowledge: A Critical Introduction to Epistemology* (Oxford University Press, 2001)

Course literature specific to the modules will be handed out for preparation two weeks before modules start latest.

SCHEDULE

All modules start at 13.15 on Wednesdays and end 15.30 on Fridays.

Module 1 THEORY (26 – 28 February)

The first module focuses on the question of the use of theory and "how we know" in art-based and design-based research. Course activities include lectures, reading seminars, workshops, tasks and presentations of own works. With introductions by Catharina Gabrielsson and Meike Schalk and presentations by Rasmus Fleischer, Maria Lind and Sven-Olov Wallenstein.

Module 2 METHOD (1-3 April 2020)

The second module takes its point of departure in the emerging field of critical posthuman studies and explores the methodological implications of bridging of the theory-practice-divide. Activities include lectures, reading seminars, workshops, tasks and presentations of own works. With presentations by Martin Avila, Isabelle Doucet, Mona Livholts, Karin Reisinger and Cecilia Åsberg.

Module 3 PRAXIS (13-15 May)

The third module considers research as a craft, a form of practice, and the ethical and political implications of pursuing and constructing knowledge. Course activities include lectures, reading seminars, workshops, tasks and presentations of own works. Guest lecturers include Maan Barua and Jonathan Metzger.

Module 4 SYNTHESIS (date to be decided, 2020)

Presentations and reflections on papers with responses by guests.

Confirmed participants

Martin Avila is professor in design at Konstfack/ The University College of Arts, Crafts and Design in Stockholm. Trained as industrial designer he conducts research through design.

Maan Barua is a lecturer in cultural and environmental geography at the University of Cambridge with an interest in the spaces, politics and governance of the living and material world. Maan's research interests include urban ecology, more-than-human geographies, biodiversity conservation and the politics of lively capital.

Isabelle Doucet is professor of theory and history in architecture at Chalmers University of Technology, Gothenburg. Her books include *Transdisciplinary Knowledge Production in Architecture and Urbanism* (2011 co-edited with Nel Janssens).

Rasmus Fleischer is an economic historian, researching and teaching at Stockholm University. He has published extensively about music's political economy and writes the blog *Copyriot*.

Catharina Gabrielsson is associate professor in urban theory at KTH School of Architecture with a background as architect, critic and curator. Her work occupies sites in historiography, architecture and urban theory and artistic research in critically investigating modes of spatial production.

Maria Lind is a writer, curator and educator. She was director of Tensta konsthall, München Kunstverein and Iaspis, intendent at Moderna Museet, and curator of Timisoara Biennale (2019), Gwangju Biennale (2016), Sao Paulo Biennale (2002), Manifesta 2, and has published widely.

Mona Livholts is associate professor at Linköping University. Her research focuses on the uses and creative and transformative practices of narrative life writing genres in research and education, such as diaries and letters, memory work, poetry photography and art-based methods.

Jonathan Metzger is professor in urban and regional studies. Most of his research deals with decision-making concerning complex environmental issues – generally with a focus on urban and regional planning, policy and politics and debates within the subject areas of Planning Studies, Human Geography, STS (Science- and Technology Studies) and Organizational Studies.

Karin Reisinger teaches arts in changing environments and intersectional feminisms at TU Vienna. Her research addresses gender ecologies in mining societies in Norrland (Malmberget) and Austria.

Meike Schalk is associate professor in urban studies and urban theory at KTH School of Architecture. Her transdisciplinary research combines critical inquiry into discourses of sustainability, democracy and participation in urban development processes with practice-based research methods.

Sven-Olov Wallenstein is professor of philosophy at Södertörn University. His research is in aesthetic theory with focus on art and architecture. He has published widely and translated works of Immanuel Kant, Martin Heidegger, Ernst Jünger, Gilles Deleuze, Jacques Derrida and Giorgio Agamben to Swedish.

Cecilia Åsberg is guest professor of STS, Gender and Environment at KTH, Division of History of Science, Technology and Environment, and professor of Gender, Nature, Culture at Linköping University. She is the founding director of the Posthumanities Hub (2008–), and the Seed Box: An Environmental Humanities Collaboratory (2013–2017).