WTMC SERIES

ON TEACHING &
LEARNING STS

EXPERIMENTING

or HOW TO CHANGE

THE WORLD WITH STS

Summer School

2019(2)

WTMC

*Netherlands Graduate Research School
of Science, Technology and Modern Culture*

WTMC Series on Teaching and Learning STS

Publication of the Netherlands Graduate Research School
of Science, Technology and Modern Culture (WTMC)

Director:

Stefan Kuhlmann

Training co-ordinators:

Bernike Pasveer & Anne Beaulieu

Information on the programme:

j.a.beaulieu@rug.nl

Practical information, registration, and hotel arrangements:

Elize Schiweck, e.schiweck@utwente.nl

Last minute emergencies: +31-24-3615999 (Soeterbeeck)

Cover design:

Zahar Koretsky

Information about the series:

j.a.beaulieu@rug.nl

b.pasveer@maastrichtuniversity.nl

Available at: <https://www.wtmc.eu/graduate-program/>

issn: 2666-2892

DOI:

Table of contents

Programme.....	4
Introduction.....	7
Detailed overview	8
1.1 Introductions.....	8
1.2 Michael Guggenheim: Experimenting. Trying to Change the World with STS.....	8
1.3 Klasien Horstman: How to change public health practices with STS? Experimenting new relationships between science, politics and society.....	9
1.4. Exercise part 1: Taking the normative implications of our own projects seriously.....	9
2.1 Exercise part 2: Bringing your insights to the plenary	10
2.2 Core reading: Hacking, Ian. Representing and Intervening. Introductory Topics in the Philosophy of Natural Science. Cambridge: Cambridge University Press, 1983.....	10
2.3 Nelly Oudshoorn How feminisms intervene in techno-science.....	11
2.4 Michael Guggenheim, The Aspiration to Intervene: From Critique to Experiments.....	11
2.5 PhD Presentations.....	12
3.1 Exercise: Intervene and Create Phenomena in your own project.....	12
3.2 Michael Guggenheim: How to intervene 1: Creating Provocative Containments.....	12
3.3 PhD Presentations (skill)	13
4.1 Michael Guggenheim: How to intervene 2: Participatory Experiments.....	13
4.2 PhD Presentations.....	13
4.3 Bernd Kraeftner: This is (not) a Syndrome. Remarks on a clinico-political approach to a “consciousness-multiple”.....	14
4.4 Exercise part 1: Revisit a project.....	14
4.5 Exercise part 3: Project Presentations to the Plenary	14
5.1 Willem Halfmann: Resisting productivist science.....	15
Exercise: Preparing Lunch.....	15
Michael Guggenheim: Closing Lecture.....	15
About the lecturers	16
About the co-ordinators.....	18
Presentation guidelines.....	19
Feedback for Presentations	20

Programme

Monday: Who wants to change the world?			Type of Session
10.30-11.00		Arrival and coffee	
11.00-12.30	1.1	Introductions	Preparation needed!
12.30-13.30		Lunch	
13.30-15.00	1.2	Michael Guggenheim: Experimenting. Trying to change the world with STS	Lecture
15.00-15.30		Break	
15.30-17.00	1.3	Klasien Horstman: How to change public health practices with STS? Experimenting new relationships between science, politics and society	Lecture
17.00-17.30		Explaining the exercise for this evening	Exercise
17.30-19.00		Dinner	
19.00-20.00	1.4	Exercise part 1: Taking the normative implications of our own projects seriously	Exercise Preparation needed!
Tuesday: How has STS tried to change the world?			
09.00-09.15		What kept you awake?	
09.15-10.45	2.1	Exercise part 2: share in plenary outcomes of 1.4	Exercise
10.45-11.15		Break	
11.15-12.45	2.2	Core reading: Ian Hacking	
12.45-14.00		Lunch	
14.00-15.30	2.3	Nelly Oudshoorn: How feminisms intervene in techno-science	Lecture
15.30-16.00		Break	
16.00-17.30	2.4	Michael Guggenheim, The Aspiration to Intervene: From critique to experiments	Lecture
17.30-19.00		Dinner	
19.00-20.45	2.5	PhD presentations	Skill

Wednesday: Changing practices to change the world			
09.00-09.15		What kept you awake?	
09.15-10.45	3.1	Intervene and Create Phenomena in your own project	Exercise
10.45-11.15		Coffee & tea	
11.15-12.45	3.2	Michael Guggenheim: How to intervene 1: Creating provocative containments	Lecture
12.45-13.45		Lunch	
13.45-15:30	3.3	PhD presentations	Skill
15.30-18.00		Free time	
18:00 -		Vegetarian buffet and free evening	

Thursday: How could we change the world?			Type of session
09.00-09.15		What kept you awake?	
09.15-10.45	4.1	Michael Guggenheim: How to intervene 2: Participatory Experiments	Lecture
10.45-11.15		Break	
11.15-12.45	4.2	PhD presentations	Skill
12.45-14.00		Lunch	
14.00-15.30	4.3	Bernd Kraeftner: This is (not) a Syndrome. Remarks on a clinico-political approach to a “consciousness-multiple”	Lecture
15.30-16.00		Break	
16.00-17.30	4.4	Exercise part 1: Revisit a project	Exercise
17.30-19.00		Dinner	
19.00-20.45	4.5	Exercise part 2: Present your insights	Exercise
Friday: How is changing the world valued?			
09.00-09.15		What kept you awake?	
09.15-10.45	5.1	Willem Halffman: Resisting productivist science	Lecture
10.45-11.15		Break	
11.15-12.45	5.2	Preparing Lunch	Exercise/Method Preparation needed!
12.45-14.00		Lunch	
14.00-15.30	5.3	Michael Guggenheim: Closing Lecture	Interactive lecture
15.30-16.00		Round off & farewells	

Note that you need to bring/prepare in advance

1. Three 2-3 minute pitches about your research (see 1.1)
2. Three **printed copies** of a 2-page description of your research project (see 1.4)
3. Two ingredients, a kitchen tool and an eating implement (see 5.2)

Introduction

Welcome to the Summer School. Together with anchor teacher Michael Guggenheim, we will explore experimentation. The exploration starts here, well before you arrive at our beautiful convent Soeterbeeck. This programme, together with the readings, provides the luggage for your journey. Come well prepared!

It is advisable that you first carefully study the whole programme, before embarking on the actual reading. This should help you get a sense of the themes and how they connect, and how specific texts fit in those themes. The compulsory reading material should take about a week to read and make notes. Some assignments also require preparation, while others require you to bring certain things. And finally, we will have a number of participant presentations. Be sure to know whether you are scheduled as a discussant for one of them.

For each of you, the ideas and concepts discussed during the Summer School will have different kinds of relevance. This depends on your research topic and method, the phase you are currently in, and your personal interests. The Summer School is not a “one size fits nobody” event, and getting the most out of it does require some work. Make sure that you have in mind what you would like to learn, and how that can be achieved. In general, it is good practice to prepare one or more written questions about the reading material for each session. This helps focus your attention during lectures, and it ensures that you have something to contribute to the discussion, especially if you are not that eager by nature to join discussions. Of course, going with the flow and welcoming things the way they happen to come to you, is also an important mode of learning.

This Summer School will engage with how STS scholars have provided accounts of how the sciences change the world through intervention and experiments, while STS work itself seems to differ from such relationships to the world: STS seems to either insist on a position of neutrality or on taking sides in controversies.

In this Summer School we want to take up various recent attempts to move to a more experimentalist and interventionist STS which is learning from its own accounts of science. What could STS experiments look like? What happens if STS scholars design interventions and devices to invent the (social) world? How do we account for our own roles in such experiments and how do we care for the people with whom we design such projects? What is the role of devices, exercises, prototypes, and trials? How can we gain the necessary skills to design such experiments? We will provide an overview of recent attempts to create experimentalist interventions and work with participants to turn their own projects into experimentalist interventions. We will also discuss how an experimentalist STS fits in the ongoing changes of current academia.

We hope you will enjoy preparing for this Summer School and look forward to meeting you (again) in a few weeks!

Bernike and Anne

Detailed overview

Monday: Who wants to change the world?

1.1 Introductions

Thoroughly prepare three substantially **different** and short (2-3 mns) pitches about your research project (one could for example focus on theories or on methods, the second on who funds the research, the third on aspirations to change the world).

The introduction consists of three rounds of 25 minutes each. In each round, you will present a different version of your pitch to an entirely new group of people. There is room for informative questions, but no pitch + question should take up more than 5 minutes.

You will be 6 groups of 5 people each. See schedule below.

Round 1: colors

red	blue	green	yellow	purple	orange

Round 2: birds

robin	eagle	godwit	dove	pelican	ostrich

Round 3: trees

baobab	willow	oak	chestnut	spruce	pine

1.2 Michael Guggenheim: Experimenting. Trying to Change the World with STS

In this introductory lecture, we will try to get an overview over the current state of STS, and how we come to think about thinking with “experimenting” and “trying to change the world with STS”. The main move here, as indicated in the title of the summer school, is from a notion of critique that aims to analyse and offer alternatives that others may or may not implement, towards an ongoing process of experimental involvement, to risky participatory practices that involve STS practitioners to collaborate with lay people, users and scientists. At the core sits the diagnosis that STS has analysed science and engineering, yet kept its practice largely unaffected from the lessons it has drawn from studying science and engineering. STS has been mostly a descriptive practice, or a critical practice that approached science as something that is problematic and needs to be changed and a practice whose primary mode of being is the written text. We will thus begin by surveying some key ingredients to these new notions of interfering with the world, starting with the move from critique to intervention, but also the recent rapprochement between STS and design, art and architecture and how they have lead to a multiplicity of new forms and formats.

Readings:

Downey, Gary Lee, and Teun Zuiderent-Jerak (201). “Making and Doing: Engagement and Reflexive Learning in STS.” In Ulrike Felt, Rayvon Fouché, Clark A Miller, Laurel Smith-Doerr, and Society for Social Studies of Science (eds), *The Handbook of Science and Technology Studies*. London: SAGE

Law, John, and John Urry (2004), “Enacting the Social.” *Economy and Society*, 33(3), pp. 390–410.

Marres, Noortje, Michael Guggenheim, and Alex Wilkie (2018). "Introduction." In *Inventing the Social*. Manchester: Mattering Press, pp. 17-40.

1.3 Klasien Horstman: How to change public health practices with STS? Experimenting new relationships between science, politics and society.

In this presentation, I will show how I use specific conceptual and methodological approaches in studying public health practices and how these approaches relate to the development of diverse interventionist experiments: movies to enable conversations about mental health concerns (In Maastricht and in Colombia), citizen's summits on urban health and care, university-in-the-neighborhood (www.universiteitmetdebuurt.nl), experimental interventions with respect to health and wellbeing in work settings for vulnerable and practical skilled employees, and an experimental tool/process to improve accountability cultures and to provide more space for citizen's initiatives. In the presentation it will become clear how research and action/intervention co-develop, and which difficulties come to the fore in this research/intervention practice.

Readings:

Knibbe, Mare and Klasien Horstman (2019), "The making of new care spaces. How micropublic places mediate inclusion and exclusion in a Dutch city". *Health & Place*, 57, pp. 27-34.

Knibbe, Mare, Marten de Vries and Klasien Horstman (2015), "Engaging cultural resources to promote mental health in Dutch SLES neighbourhoods". *Health Promotion International*, 1-10. doi:10.1093/heapro/dav095

1.4 Exercise part 1: Taking the normative implications of our own projects seriously

Preparation: Please bring *3 copies of a printed 2-page description of your project* to the summer school. Make sure the description explains the main research questions, the theoretical underpinnings and the methods used.

In this sensitizing workshop you will learn about each other's projects and think together what the normative implications of your own projects are, and what follows from these. In groups of four, each participant will briefly introduce her own project. End the discussion by deciding which insight(s) or reflection(s) you want to present to the plenary (session 2.1), and how you want to present them (a ppt slide, a short play, drawings, a regular presentation, etc.) in no more than 7 minutes.

- What is your main research question?
- Why are you interested in this question?
- What have you done so far?
- How are you researching this project?

You will then try to spell out the normative implications of your project and also those of one of the other group members:

- How do you hope the world will change because of your project?
- What could be unintended consequences of your project?
- If you had the power to change the world, how would you change the field/object of study based on your

research?

- Is there any chance that the world will actually move into this direction? Why/Why not?
- What would need to change to make these changes happen? Is there any possibility that you could influence these changes?

Tuesday: How has STS tried to change the world?

2.1 Exercise part 2: Bringing your insights to the plenary

Here each group will bring one or two of their most salient insights about from the reflections on their projects to the plenary. In order to leave room for discussion, each group may take max 7 minutes to present.

2.2 Core reading: Hacking, Ian. Representing and Intervening. Introductory Topics in the Philosophy of Natural Science. Cambridge: Cambridge University Press, 1983.

During all WTMC workshops and Summer Schools, we close-read a classic from the STS canon that somehow connects to the theme of the event. You are expected to thoroughly read the parts of the book indicated below, and you may use the 'reading-questions' as a guide. During the session, you will work in small groups of 3 to discuss the text for about 1 hour. We end with a short (semi-)plenary.

The book connects in many ways to the other literature for this Summer School, but the order in which to read it, can be chosen as you wish; you may either first read parts of this book as a starting position from which to read the other literature, or first read the other literature so as to have a well-informed critical look at this text.

This year we have chosen a classic of the philosophy of science that marks the turn of theories of science away from focusing on theories and towards experimentation, in sync with the nascent laboratory studies in STS.

During the session

You will discuss the texts in groups of three. First discuss your understanding of Hacking's text and its main concepts on its own terms. Next, list things you are still puzzled by, and maybe the others in your group can help you? After that, connect the text to the broader context of the Summer School. We will convene in a plenary to wrap up the session.

- Who are the opponents of Hacking?
- What are Hacking's main concepts, and what do they mean?
- Why does Hacking only write about the natural sciences, primarily physics?
- Could Hacking's arguments be transferred to the social sciences/humanities?
- What do you think has changed in the relationship of STS and the sciences since this text was first published

(use Lynch here for direction)

- Having read Lynch, what follows for the notion of "intervening"?

Readings:

Hacking, Ian (1983). *Representing and Intervening. Introductory Topics in the Philosophy of Natural Science* (1983). Cambridge: Cambridge University Press.

- Analytical Table of Contents x-xiv”,
- Chapter 13 “the Creation of Phenomena, pp. 220-232
- Chapter 16 “Experimentation and Scientific Realism”, pp. 262-275.

Lynch, Michael (1994), Representation is overrated. *Configurations*, 2(1), pp. 137-149.

2.3 Nelly Oudshoorn How feminisms intervene in techno-science

In this lecture I will discuss and reflect on the different ways in which feminist STS has tried to intervene in the world of techno-science in the past three decades. Engagement has always been a major concern for feminist scholars and was the very reason for founding the new disciplines of gender and women studies, which can be considered as an important intervention in its own right.

I will discuss three different intervention techniques, including feminist engagements with changing the gender norms in the design of experiments in the life sciences; intervening by making an exhibition on Gender and Things; and the longstanding concern of rethinking dualisms in techno-science.

Readings:

Schiebinger, Londa (2000), Has feminism changed science? *Signs*, 25(4), pp. 1171-1175.

Oudshoorn, Nelly et.al. (2002), Gender and things. Reflections on an exhibition on gendered artifacts. *Women's Studies International Forum*, 24(4), pp. 471-483.

2.4 Michael Guggenheim, The Aspiration to Intervene: From Critique to Experiments

In this lecture, we will trace the interventionist logics of STS from its early beginnings to more recent ideas about speculative and experimental research. We will trace some of the diverse backgrounds of STS and think about its normative and interventionist logics. Specifically, we will think about Garfinkel's breaching experiments as an important source of ethnomethodological STS. We will then consider claims that “critique has run out of steam” and why such claims have recently appeared, and at attempts to revive different notions of critique. We will also wonder what follows from constructivists analyses of STS *for* STS. If social science constructs the social world, the question becomes *how* we should construct it. We will think about why research in the social sciences is so different from the experimental paradigms prevalent in much of natural science. If STS studies natural science and is convinced that natural science is powerful because of its experimental stance, then why does STS not follow this stance? Arguably, this problem is related to the problem of media in social research and we will therefore ponder why STS is so focussed on writing.

Readings:

Garfinkel, Harold (1967). "Studies of the Routine Grounds of Everyday Activities." In: Garfinkel, Harold (ed.), *Studies in Ethnomethodology*. Englewood Cliffs, N.J: Prentice-Hall, pp. 35-75.

Guggenheim, Michael (2013), "Laboratizing and De-Laboratizing the World: Changing Sociological Concepts for Places of Knowledge Production." *History of the Human Sciences*, 5(1), pp. 99–118.

Latour, Bruno (2004), "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry*, 30, pp. 226–48.

2.5 PhD Presentations

Important: See the PhD Presentation guidelines at the end of the programme.

Wednesday: Changing practices to change the world

3.1 Exercise: Intervene and Create Phenomena in your own project

Description: Taking the reading by Hacking as a starting point, you work in pairs. For Hacking, science is about representing *and* intervening. Intervening means creating phenomena, and the creation of phenomena makes them real. Revisit your project and the project of a partner, by trying to use the arguments of Hacking to rethink your projects.

- Does your project create its own phenomena?
- How does it do so?
- What is the reality of these phenomena?
- Could you think of some methods of how to increase the creation of phenomena?
- If you were to increase the creation of phenomena, which phenomena would possibly come into being?
- How would you handle these phenomena? How could you care for them?

3.2 Michael Guggenheim: How to intervene 1: Creating Provocative Containments

In this lecture we will focus on the possibility of creating "provocative containments" and think through what such provocative containments can do for our research questions. During the 1950s and 60s social psychology became a laboratory science, which invented some notorious experiments to ask questions about authority and power. Recent interpretations have cast the claims of these experiments into doubt, but have re-analysed them as attempts to create "provocative containments", or in other words, as elaborate experimental apparatuses that create new social phenomena. Taking these experiments as starting points, we will visit recent experiments within STS that aim to create specific social situations to create phenomena that have not previously existed and that intervene in the world in novel ways. We will analyse the technical and mediatic setups of such experiments and think through the ways in which they interfere with the world.

Readings:

Collins, Harry, Rob Evans, Rodrigo Ribeiro, and Martin Hall (2006). "Experiments with Interactional Expertise." *Studies In History and Philosophy of Science Part A*, 37(4), pp. 656–74. .

Guggenheim, Michael, Bernd Kräftner, and Judith Kröll (2016). “Creating Idiotic Speculators: Disaster Cosmopolitics in the Sandbox.” In Wilkie Alex, Marsha Rosengarten, and Martin Savransky (eds.), *Speculative Research: The Lure of Possible Futures*. London: Routledge, pp. 145-162.

Lezaun, Javier, Fabian Muniesa, and Signe Vikkelsø (2013), “Provocative Containment and the Drift of Social-Scientific Realism.” *Journal of Cultural Economy*, 6(3): pp. 278–93. .

3.3 PhD Presentations (skill)

Important: See the PhD Presentation guidelines at the end of the programme.

At 15.30 PM the formal programme ends. You are welcome to stay around for a nice vegetarian buffet and a evening of talk, drinks, dance, and play on the premises.

Thursday: How could we change the world?

4.1 Michael Guggenheim: How to intervene 2: Participatory Experiments

Recent research on participation in STS has pointed out that lay people often create their own experiments with the world. For example, people experiment with their diet to live with allergies or chronic illnesses or they create their own maps to make specific things visible in the world. Taking such experiments as a starting point, STS researchers have begun to co-experiment with lay people. In so doing they become collaborators rather than observers. They instigate participatory experiments where STS becomes a facilitator of experimentation. We will survey some of these experiments and think through the conditions that make these experiments possible, the changing relationship of researcher and researched and the complex power relations in such experiments. We will consider which new phenomena emerge from such experiments and how they change the world.

We will also think about which fields and objects are suited to such participatory experiments.

Readings:

Lezaun, Javier, Noortje Marres, and Manuel Tironi (20... “Experiments in Participation.” In: Felt, Ulrike, Rayvon Fouché, Clark A Miller, Laurel Smith-Doerr, and Society for Social Studies of Science (eds.), *The Handbook of Science and Technology Studies*. London: SAGE, pp. 195–221.

Voss, Jan Peter, and Michael Guggenheim (manuscript, forthcoming 2019). “Making Taste Public: Industrial Orders of Tasting and the Democratic Potential of Experimental Eating.” *Journal of Politics & Governance, Special Issue on New Perspectives on Food Democracy*.

Guggenheim, Michael, and Laura Cuch (2018), “Encounter, Create and Eat the World: A Meal (Workshop).” *EASST Review*, 37(4). .

Whatmore, Sarah J., and Catharina Landström (2011), “Flood Apprentices: An Exercise in Making Things Public.” *Economy and Society*, 40(4), pp: 582–610. .

4.2 PhD Presentations

Important: See the PhD Presentation guidelines at the end of the programme.

4.3 Bernd Kraeftner: This is (not) a Syndrome. Remarks on a clinico-political approach to a “consciousness-multiple”

In contemporary art, the term “multiple” refers to an object that is composed of a certain number of serial, manufactured objects that are economically, physically and aesthetically equal or similar. This entity will be authorized in a final step by the author. So, then, what is a "consciousness-multiple?" The lecture will give a brief account of a research project that investigates the practical implications of a so-called ontological politics (Mol, 1999) at the intersection of science, art and society. It describes a syndrome that constitutes itself through the presence or the absence of consciousness and it investigates how different diagnostic approaches manufacture different versions of consciousness, that in turn alter the way how the syndrome, together with its human hosts, are cared for. By delineating this kind of consciousness-multiple, we ask if and how it is possible, within the clinical context, to create new versions of consciousness so that the multiple will be extended, enriched, re-presented. With regard to the notion of ontological politics, this method contributes to the discussion of the question of what the syndrome actually should be and how good or bad authorizations, or care, can be made available.

Readings:

See http://openhumanitiespress.org/books/download/Stengers_2015_In-Catastrophic-Times.pdf

Stengers, Isabel (2015), “A threat of regression?” From *In catastrophic times: resisting the coming barbarism*, pp. 108-115.

Stengers, Isabel. (2015), “Stupidity”. From: *In catastrophic times: resisting the coming barbarism* (2015), pp. 117-125.

Despret, Viviane (2004), “The body we care for: figures of Anthro-po-zoo-genesis”. *Body & Society*, 10(2-3), pp. 111-134.

4.4 Exercise part 1: Revisit a project

After having learned about various ways to experiment in STS, you will work in groups of three. Choose one of your projects, and try to collaboratively move it into the direction of the various versions of how to intervene that were presented throughout the week. Think through why you choose particular methods and media, and how you want to change the world with the project. Try to think about the doability of the project, the skills needed and what you could do to acquire the skills or with whom to collaborate if you do not have them.

- How is this project still the same as the original project?
- Does it add different phenomena to the world than the original project?
- How is the world going to be different from the previous project?
- What are the risks of this new project?

4.5 Exercise part 3: Project Presentations to the Plenary

Here each group may take 5-7 minutes to present their ‘revisitation’ of one of the group members’ project in light of the different modes of intervening discussed during the week.

Friday: How is changing the world valued?

5.1 Willem Halfmann: Resisting productivist science

In 2013, Hans Radder and I wrote the angry ‘Academisch Manifest’, calling on scientists to get organized and resist ‘the Wolf’ of managerialism at Dutch universities. The Manifesto highlighted some key objections raised against academic managerialism, but especially incited academics to political resistance, as well-reasoned objections seemed to have very little effect. After an English translation in 2015, we were surprised to receive endorsements from all over the world, demonstrating that ‘the Wolf’ was no longer an exclusively Dutch or Anglo-Saxon beast. The Manifesto is now available in seven languages and was used in academic protests from Madrid to Sarajevo. Meanwhile, sustained political action in the Netherlands has scored a few wins and there are at least some shifts in the policy discourse. Meanwhile, some activists are trying to articulate more radical alternatives in an academic ‘commons’.

Readings:

Halfmann, Willem and Hans Radder (2015), The Academic Manifesto: From an Occupied to a Public University. *Minerva*, 53(3), pp. 165-187. doi:10.1007/s11024-015-9270-9

Collini, Stefan (2015). Defending universities: Argument and persuasion. *Power and Education*, 7(1), 29-33. Retrieved from . doi:10.1177/1757743814567383
Utrecht University, "Strategic Plan 2016-2020",

5.2.

Exercise: Preparing Lunch

Please bring: *two ingredients* measuring together approximately 500g (tomatoes, parsley, apples, dried figs, almonds, carrots, a tin of sardines, biltong...). These ingredients need to be ready to eat (no raw potatoes, dried beans, or uncooked pasta). Ideally, at least one of them should be fresh: it may be bought in Ravenstein during the free part of Wednesday afternoon. If possible, also bring *a kitchen tool* (a grater, ...) and *an eating implement* (a twig, a fork, chopsticks, a piece of cardboard).

Michael Guggenheim: Closing Lecture

The closing lecture will be engaging with the things done and learned during the week. Michael will use his notes, the reading below, and your own input to do this.

Reading:

Mike Michael (2012), “What are we busy doing?": Engaging the idiot. *Science, Technology, & Human Values*, 37(5), 528-554.

About the lecturers

Michael Guggenheim has studied in Zürich and Berlin, and obtained a PhD in Sociology in 2005 from the University of Zürich. Prior to coming to the UK, Michael worked and researched in Budapest, Vienna, Montreal, and Berlin. Michael has taught both artists at art schools and natural scientists at technical universities, which has informed his understanding of how to teach sociology and how it can be used to intervene in the world. He has always found it important to work and experiment with different media and produce both theoretical texts but also visual and sensory works. Michael's work thus far has been defined by different yet connected themes relating to the relationship between experts and lay people, the role of objects for this relationship and on methodical and theoretical innovation derived from the combination of science studies with sociological theory. Michael was the lead PI on the ERC-funded project "", which looked at how disaster experts conceive of the population.

Willem Halfmann is senior lecturer in Science & Technology Studies at Radboud University Nijmegen, The Netherlands, associate member of the Centre for Science, Knowledge and Policy (SKAPE) at Edinburgh University, and a founding member of , the Dutch movement for more public, democratic, and reasonable universities. He has studied the processes of co-construction of science and policy, including the long-term mutual influences that shape regulatory institutions. He is interested in how boundaries of expertise are negotiated and institutionalised. He is currently co-authoring a handbook on environmental expertise for Cambridge UP, based on research of the past decades on the science-policy nexus. A newer research interest is research integrity, with empirical research on text recycling or the changing discourse of research integrity, attempting to identify ways in which practices of New Public Management are redefining what counts as misconduct. He coordinates the EU H2020 Printeger project on research integrity. Until 2014 he was a coordinator of WTMC.

Klasien Horstman was trained in philosophical sociology and in STS, and in 1996 she got her PhD: "Public bodies, private lives: the historical construction of life insurance, health risks, and citizenship in the Netherlands 1880-1920" (Rotterdam: Erasmus Publishing). In 2001 she was appointed as Socrates Professor Philosophy and Ethics of Bioengineering at the Technical University Eindhoven, The Netherlands. Eight years later, in 2009, she was appointment as full professor Philosophy of Public Health at Maastricht University, The Netherlands, where she leads an interdisciplinary research group Inequity, Participation, Globalization. She is director of the Participatory Public Health Centre Maastricht-Tomsk: . Her research focuses on relationships between science, politics and society in diverse public health practices, such as community health, work place health promotion, vaccination, antimicrobial resistance prevention. The methodologies are ethnographic, participative and experimental/interventionist.

Bernd Kräftner is an artist and researcher. He has realized numerous transdisciplinary research projects on and at the interfaces of science, society and art. He is a founder of the research group "Shared Inc." (Research Centre for Shared Incompetence) and teaches at the University of Applied Arts in Vienna at the Departments of Art & Science and Digital Art.

Nelly Oudshoorn is professor emerita of Technology Dynamics and Health care at the University of Twente. Her interests and publications include the co-construction of technologies and users, with a particular focus on medical technologies. Her most recent books include *Telecare Technologies and the Transformation of Healthcare*

Palgrave MacMillan 2011), and *The New Production of Users: Changing Involvement Strategies and Innovation Collectives* (Routledge 2016, co-edited with Hyysalo and Elgaard Jensen).

About the co-ordinators

Anne Beaulieu is associate professor of Science and Technology Studies at Campus Fryslan and the Faculty of Science and Engineering, University of Groningen. At Campus Fryslan, she works on creating knowledge infrastructures for sustainability and is responsible for the major Responsible Planet in the programme Global Responsibility and Leadership. She also writes and teaches about the societal aspects of energy and Big Data at the Johan Bernoulli Institute of Mathematics and Computer Science. She is the co-founder of the Groningen Energy Summer School for PhDs and acted as one of its scientific directors for 6 years. She is a member of the Board of Studium Generale Groningen and of the NIAS-Lorentz Advisory Board.

Bernike Pasveer is Assistant Professor at the department of STS of the Faculty of Arts & Social Sciences (FASoS) at Maastricht University. She has worked on medical (imaging) technologies; on how (medical) technologies are constitutive of the human body's "natural" achievements such as childbirth, reproduction, and sports. Her current research is on dying well: how do hospices *do* their mission of providing for a good end of life? She looks in particular at how institutional requirements, moralities and mores come to intersect and 'correspond' with the lives of hospice residents whose autonomy is centered in hospice imaginaries and moralities. With Ingunn Moser and Oddgeir Synnes she works on an edited volume entitled *Ways of Home Making in Care for Later Life*. She holds a PhD in STS from the University of Amsterdam. She is programme director of the debating centre Sphinx in Maastricht, and an amateur singer.

Presentation guidelines

For presenters

- A projector and PC are available. Copy your presentation onto the PC in advance. You may want to use your own laptop, which usually works fine, but mind that it poses an extra risk of technical issues. Also, if you have video material, make sure you have it downloaded locally. There is internet, but relying on YouTube etc. is risky.
- The duration of your presentation should be **15 minutes**. Then there is another 15 minutes for the discussant and plenary discussion. We keep time very strictly.
- Try to make a sophisticated choice on what you want to present. One typical pitfall is wanting to give an overview of your whole PhD project, which leads to an unfocused and overloaded presentation. Rather select an interesting aspect of your research and discuss it in-depth.

For discussants

- Join the presenter in the front of the room after their presentation
- Present your comments in no more than **5 minutes**.
- Mind that being a discussant is not about pointing out all the flaws in the presenter's argument, but about setting the stage for a constructive discussion. Offering critique is good, but also try to bring out what the potentials of the argument are for improvement, and to identify some questions for the speaker or the group as a whole.
- You may want to get in touch with the presenter to prepare some comments. Feedback should address the quality of the presentation itself (slides, clarity, focus) as well as its content.

All others

- Before the presentations, make sure you have read the summary in this reader. It helps you sensitize your listening.
- Please fill in a **feedback form** for each presentation. They will be available at the Summer School. They will be collected and given to the presenter.
- Join the discussion after the discussant has given their feedback.
- Chances are that there is not enough time to discuss all questions from the audience. Please write them down on the feedback form. Even without discussion, your questions might be very valuable for the presenter!

Feedback for Presentations

Note: copies of forms will be available at the Summer School.

The form is to help you give feedback to your fellow participants, some of whom will be presenting their research during the Summer School. Using a separate sheet for each presentation, put your name and that of the presenter at the top of a piece of paper. That way, if something isn't clear, the presenter knows whom to ask. Write your comments during or immediately after the presentation and give them to the presenter during the next break.

Points to consider when preparing feedback (you don't need to cover everything):

- Attractiveness of title and opening
- Usefulness of summary provided in the reader
- Clarity and significance of problem definition, research questions and aims (refinement of, addition to, clarification or rejection of an existing thesis)
- Use of theory and/or historiography (concepts, interpretations, etc.)
- Embeddedness in fields relevant to WTMC
- Clarity of structure
- Presentation of the method(s) employed
- Validity and reliability of the method(s) employed
- Accessibility of the research data to the audience
- Use of (intriguing and relevant) details and examples
- Clarity of argument
- Relation to the nature and level of expertise of audience
- Use of PowerPoint and other audio-visual resources
- Contact with audience and audibility of speech
- Clarity and significance of conclusions
- Response to questions and comments