

WTMC SERIES

ON TEACHING &
LEARNING STS

OPENING UP DIVERSITY

Summer School

2022 (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: Esther Turnhout

Training co-ordinators: Anne Beaulieu & Andreas Weber

Practical information, registration, and hotel arrangements:
Elize Schiweck, e.schiweck@utwente.nl

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

Cover design:

Zahar Koretsky

Information about the series:

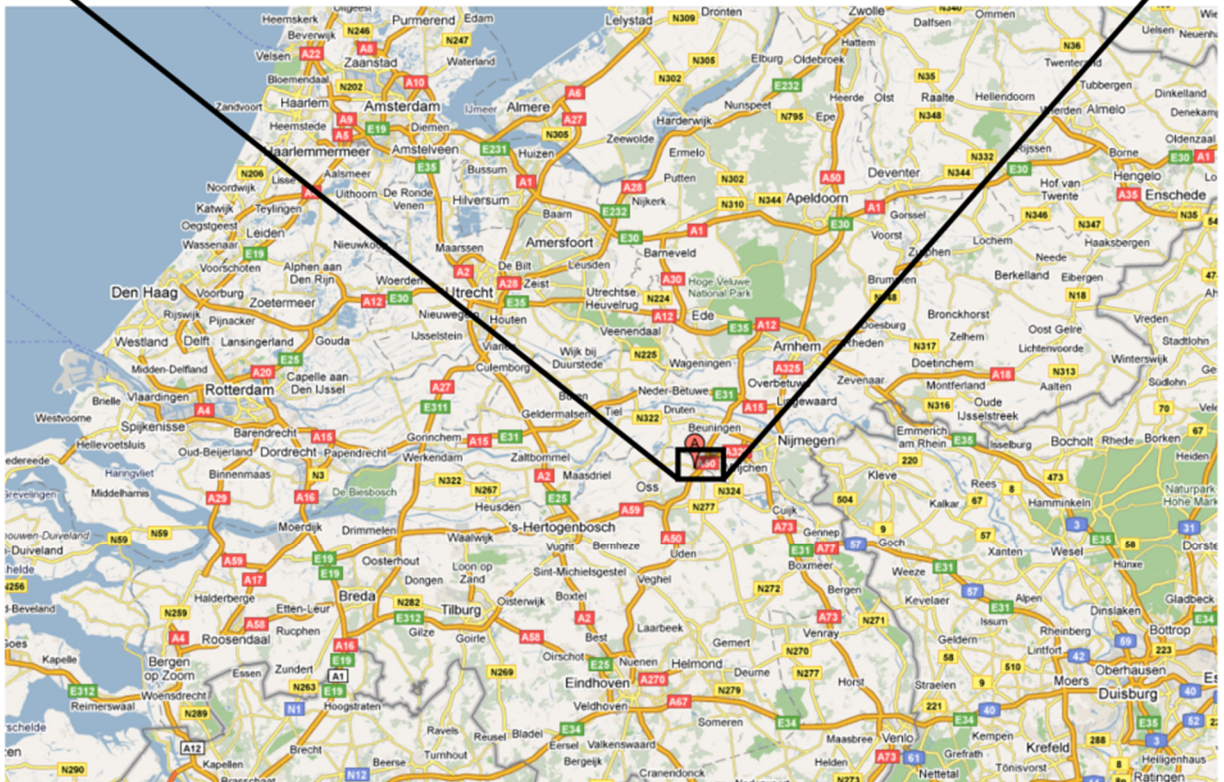
j.a.beaulieu@rug.nl

a.weber@utwente.nl

Table of Contents

Maps	4
Directions	5
Introduction to the summer school	6
Practical Notes.....	8
Programme	9
Revised programme (Due to heat wave)	10
Detailed overview.....	11
About the speakers	20
About the coordinators	23
Participants.....	24
PhD Presentation guidelines	27
Feedback on Presentations.....	28

Maps



Thank you, Google maps

Directions

Address

Studiecentrum Soeterbeek / Study and Conference Centre Soeterbeek
Elleboogstraat 2
5352 LP Deursen-Dennenburg
Phone: +31-24-36 15 999

<https://www.ru.nl/soeterbeek/>

By train

Take the local train ('stoptrein', NOT the Intercity or fast train) in Nijmegen or 's Hertogenbosch to Ravenstein, leaving every half hour. This takes 15 or 20 minutes, respectively. At the railway station in Ravenstein take the exit at the back of the station, and follow the small footpath ('Stationspad'); at the end of the path turn right and enter the Soeterbeek premises through the entrance gate. This is a 10-minute walk. Dutch railway schedules can be found at www.ns.nl.

By road

Motorway A50 Arnhem - 's Hertogenbosch (= coming from Arnhem): take the exit Ravenstein (nr.17); at the roundabout turn left, next roundabout straight on, next roundabout turn left (de Rijt), and again left after 100 m (Elleboogstraat), enter the Soeterbeek premises through the entrance gate.

Motorway A 50 's-Hertogenbosch - Arnhem (= coming from 's-Hertogenbosch). Take exit Ravenstein (nr.17); at T-junction, turn left, and again left at the traffic lights; first roundabout straight on, and again straight at second roundabout; next roundabout turn left at the crossing (De Rijt), and again left after 100 m (Elleboogstraat); enter the Soeterbeek premises through the entrance gate.

Introduction to the summer school

Welcome to the Summer School. Together with our anchor teacher Sabina Leonelli, we will explore the theme of ‘Opening up diversity’. The exploration starts here, well before you arrive at the summer school. This programme, together with some readings that you will have to prepare yourself, provides the luggage for your journey. Travel 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 amounts to (the equivalent of) roughly 499 pages, which at 8 pages per hour would take you about 62 hours to prepare. Also, some assignments require preparation, others require you to think about what you want to learn. And finally, we will have a number of participant presentations. Be sure to check whether you are assigned the role of 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 interest. 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. So here we go.

Opening up Diversity

What role does diversity play in research? “Let a thousand flowers bloom” is an expression often used within the academic world, to underscore the impression that cultivating a wide variety of perspectives on as many topics as possible is the best way to foster research. This is especially significant in the face of the many flavours of knowledge monopolies that have emerged in the last few decades. The effect of these monopolies has been to foreground specific research repertoires – and the typologies of people, materials, knowledge, technologies, values and politics that underpin them. These become entrenched as models for best practice, as it is very often the case within scientific disciplines and institutions. There is a substantive worry around how far such models of best practice can be generalised and extended, particularly when they become so formalised as to control what counts as legitimate research in the first place. Paying attention to diversity, and particularly, to what may have been excluded or devalued, can be a powerful way to disrupt existing knowledge systems, thus fostering creativity and novelty as well as justice and fairness in the choice of research topics, participants, and tools. There have therefore been strong calls – not least in STS – to cultivate diversity as an important lever against dogmatism, conservatism, and exclusionary logics in research. And yet, diversity can also be harnessed to

protect the status quo. It can be evoked as an excuse to avoid political stances and clashes of values, or incorporated into neoliberal tales of liberation achieved through technocratic solutions.

In this summer school, we will consider what diversity amounts to in relation to science and technology, the ways in which this notion can be mobilised, and what appeals to diversity can and cannot do for STS research. We will look at types of diversity, ranging from epistemic (concerned with the content and conditions of knowledge) to social (demographic categories and identity politics) and institutional (systems of governance, communication and evaluation). We will consider how diversity comes to be at stake in contemporary environmental and biomedical research, and the path dependencies created by power differential and colonial legacies. We will pay particular attention to the Open Science movement, as a double-edged attempt to multiply research perspectives and forms of engagement which proves challenging when implemented through existing research institutions and assessment systems. This exploration will help us to question how concepts of diversity relate to structural and epistemic injustice in research. We will also consider how specific technologies - and related standards and classification systems - can help cement, rather than disrupt, existing inequalities. Most importantly, the summer school will provide a space to reflect on what diversity means to contemporary STS research, especially for early career researchers whose trajectory is so profoundly marked by the current pandemic and related calls to produce socially relevant research under considerable political and time pressure.

On Monday, we will start off with asking why diversity matters, and zoom in on epistemic diversity in particular. The topic will be further explored in relation to practices around 'race'. In the evening, we will consider how open science intersects with diversity and look at the expectations for PhDs around open science practices in the Netherlands and in other academic contexts.

On Tuesday, the dynamics around repertoires will be considered. How does 'the best way of doing things' end up narrowing our approaches and our knowledge? This line of thought will be further deepened through an exercise that requires you to think about your own research in these terms.

On Wednesday, the focus will be on how diversity, justice, institutions and policy are entwined. The emerging importance of Open Science, of replication and archiving will guide our exploration of how epistemic diversity is shaped.

The lectures and sessions on Thursday will inform us on how practices and values of classification, reform, and pluralism shape epistemic diversity. The week will end on Friday by revisiting some of the issues from Tuesday's exercise, while also highlighting which tools STS offers to further think and act on diversity.

We can't wait!!!

Anne and Andreas, also on behalf of the speakers.

Practical Notes

To do before the summer school

Allow about two weeks for preparation of this summer school. As already said, the compulsory literature consists of roughly 499 pages. At 8 pages per hour, this takes about 62 hours. We expect you to spend about 18 more hours to prepare the exercises, and read part of the recommended literature as you wish. This amounts to 80 hours in all, which is the standard amount of preparation time for a summer school. In preparation, proceed as follows:

- Read the detailed programme and pay special attention to the activities so that you know in advance what you need to prepare and think about.
- Read all literature before you arrive. There is no time to read during the workshop. Make notes about what you don't understand, questions you would like to ask, things you want to discuss.
- Check the programme to see if you are a discussant for one of the PhD presentations. Look at the sections "PhD presentation guidelines" and "Feedback on presentations", which contains guidelines for presenters, discussants and all others!

What to bring with you

- Debit card or credit card. In the evenings, after the formal programme, there are informal drinks, which you have to pay on Friday upon check out. This also goes in case you desire to have more than one drink during dinner. Cash is not accepted.
- **Earplugs:** we reside in an old convent, so corridors and doors may be noisy at night.
- Running addicts: bring your **running gear**.
- To get moving during breaks: bring footballs, badminton gear, Frisbees etc. Soeterbeeck provides a ping-pong-table, bats & balls, and (usually) some bicycles.
- Check the weather forecast and if needed, bring **rainproof clothes & footwear**.

Attendance/cancellation

- *The summer school is residential:* you are expected to check in at Soeterbeeck on Monday morning and check out on Friday afternoon. On most days, the programme continues into the evening.
- In order to receive credit for attending the summer school, *you are required to be present throughout the entire event*. Only calamities are taken as liable to depart from this rule. If this creates problems, then please contact the coordinators beforehand and as soon as possible.
- If, for any reason, you are unable to attend the summer school, please let Elize Schiweck (e.schiweck@utwente.nl) know **as soon as you can**. If notice of cancellation is received more than 10 days prior to the start of the workshop, you will receive a refund for all of the fees, minus €100 to cover the costs of administration and course materials. In the case of cancellations received less than 10 days before the start of the summer school, fees and any other costs that have been incurred by WTMC will not be refunded.

Programme	Monday, 22 August	Tuesday, 23 August	Wednesday, 24 August	Thursday, 25 August	Friday, 26 August
	Why does diversity matter?	Practices and institutions: Diversity and scientific change	Power dynamics and openness: Diversity and injustice	Boundaries and classification: diversity and the limits of knowledge systems	What makes a good scholar? Diversity in your own research
9.00-10:30	<i>Arrival and check-in</i>	2.1 <u>PhD presentations 1</u>	3.1 <u>Lecture</u> , Diversity and injustice, Sabina Leonelli	4.1 <u>Lecture</u> , Process-sensitive naming, Sabina Leonelli	5.1 <u>Socratic walk</u>
10.30-10.45	1.0 Opening	break	break	break	break
10.45-12.15	1.1 <u>Lecture</u> , The value(s) of epistemic diversity, Sabina Leonelli	2.2 <u>Lecture</u> , Repertoires: The making and unmaking of epistemic diversity, Sabina Leonelli	3.2 <u>Lecture</u> , Epistemological diversity, Jeannette Pols	4.2 <u>Lecture</u> , Perspectival realism and scientific cosmopolitanism Michela Massimi	5.2 <u>Lecture</u> , Epistemic monocultures and the move to open research - what can STS contribute? Sarah de Rijcke
12.15-13.30	lunch	lunch	lunch	lunch	lunch
13.30-15.00	1.2 Core reading	2.3 <u>PhD presentations 2</u>	3.3 <u>Lecture</u> , Archives and epistemic injustice, Susan Lêgene	4.3 <u>Lecture</u> , Shamed into good science, Bart Penders	5.3: <u>Discussion Session</u> : Intervening in science policy, Sabina Leonelli
15.00-15.30	break	break	Free afternoon 3.4 <u>Session on Future</u> of WTMC, session organised by PhD reps	break	break
15.30-17.00	1.3 <u>Lecture</u> , “Race” based health care, Alana Helberg-Proctor	2.4 <u>Exercise</u> : What could go wrong? (part 1)		4.4 <u>PhD presentations 3</u>	5.4 Rounding off & farewells
17.00-17.30	break	break		break	
17.30-18.45	dinner	dinner	Optional buffet dinner	dinner	
18.45-20.15	1.4 <u>Skills training</u> , Open science, with Maud Radstake	2.5 <u>Exercise</u> : What could go wrong? (part 2)	Free evening	4.5 <u>Exercise</u> How do you WANT to implement diversity in your work	

Revised programme (Due to heat wave)	Monday, 22 August	Tuesday, 23 August	Wednesday, 24 August	Thursday, 25 August	Friday, 26 August
	Why does diversity matter?	Practices and institutions: Diversity and scientific change	Power dynamics and openness: Diversity and injustice	Boundaries and classification: diversity and the limits of knowledge systems	What makes a good scholar? Diversity in your own research
9.00-10:30	<i>Arrival and check-in</i>	2.1 <u>PhD presentations 1</u>	3.1 <u>Lecture</u> , Diversity and injustice, Sabina Leonelli	4.1 <u>Lecture</u> , Process-sensitive naming, Sabina Leonelli	5.1 <u>PhD presentations 3 (new time)</u> (No Socratic walk)
10.30-10.45	1.0 Opening	break	break	break	break
10.45-12.15	1.1 <u>Lecture</u> , The value(s) of epistemic diversity, Sabina Leonelli	2.2 <u>Lecture</u> , Repertoires: The making and unmaking of epistemic diversity, Sabina Leonelli	3.2 <u>Lecture</u> , Epistemological diversity, Jeannette Pols	4.2 <u>Lecture</u> , Perspectival realism and scientific cosmopolitanism Michela Massimi	5.2 <u>Discussion Session</u> : Intervening in science policy, Sabina Leonelli (new time)
12.15-13.30	lunch	lunch	lunch	lunch	lunch
13.30-15.00	1.2 Core reading	2.3 <u>PhD presentations 2</u>	3.3 <u>Lecture</u> , Archives and epistemic injustice, Susan Lêgene	4.3 <u>Lecture</u> , Shamed into good science, Bart Penders	5.3: <u>Lecture</u> , Perspectives on the Future of Open Science, Laurens Hessels (Rathenau Institute)
15.00-15.30	break	break	Free afternoon 3.4 <u>Session on Future</u> of WTMC, session organised by PhD reps	break	break
15.30-17.00	1.3 <u>Lecture</u> , “Race” based health care, Alana Helberg-Proctor	2.4 <u>Exercise</u> : What could go wrong? (part 1)			5.4 Rounding off & farewells
17.00-17.30	break	break			
17.30-18.45	dinner	dinner	Optional buffet dinner	dinner	
18.45-20.15	1.4 <u>Skills training</u> , Open science, with Maud Radstake	2.5 <u>Exercise</u> : What could go wrong? (part 2)	Free evening	4.5 <u>Exercise</u> How do you WANT to implement diversity in your work	

Detailed overview

Monday, 22 August: Why does diversity matter?

1.1 Lecture: *What is epistemic diversity?*, Sabina Leonelli

The notion of diversity has received an inordinate amount of press over the last fifty years of science studies, mostly as an important component of increasingly more situated and context-sensitive understandings of science and technology, but also as a potentially problematic keyword that has contributed to ‘normalise’ the enduring lack of power and representation within knowledge-making practices by certain social groups. In this first lecture, building on seminar scholarship from STS and feminist epistemology, I suggest an initial framing for the notion of epistemic diversity – as different from, but tightly related to, other forms of diversity such as social or institutional – which can help us start our week-long discussion. I will also point to some of the big questions emerging from consideration of epistemic diversity and its multiple meanings and expressions in current research cultures, which in turn highlight why this notion plays such a crucial role in contemporary society and what are the potential pitfalls in using it within STS research.

Required readings:

- Harding, Sandra. 2015. *Objectivity and Diversity: Another Logic of Scientific Research*. University of Chicago Press. Chapter 1 (pp.1-24).
- Leonelli, Sabina. 2021. Open Science and Epistemic Pluralism: Friends or Foes? PhilSci Archive <http://philsci-archive.pitt.edu/19817/> (and forthcoming in *Philosophy of Science*)

1.2. Core reading

In the core reading session we approach the theme of the summer school through the work of two studies in the field. The first study is by Karin Knorr Cetina and carries the title *Epistemic Cultures: How the Sciences Make Knowledge*, first published in 1999. In her study, she compares two entirely different ‘epistemic cultures’, those of high energy physics and molecular biology in order to understand the functioning of Western societies in which scientific knowledge play a pivotal role. The author of the second study, Helen E. Longino, takes up that topic and explores how the social embedding of knowledge making processes lead to a more robust and pluralist understanding of the sciences.

Please read the assigned text before you come to the summer school. During the workshop, we will discuss the texts first **in groups of 4** and then **in a plenary setting**. Make notes of any questions you want to discuss and of relations you see between the texts and the issues raised in the other readings.

Required readings:

- Karin Knorr Cetina, *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA (1999), introduction.
- Helen E. Longino, *The Fate of Knowledge*. Princeton (2002), chapter 8.

Questions for discussion of core readings

Methodological question to start with:

- What kind of work is this?
- What is the genre?
- How does science feature in this work, what does science mean to these authors concretely?
- Do you notice differences and similarities?

Questions more specifically directed at each of the readings

Knorr-Cetina, Epistemic Cultures

- On page 3, Knorr-Cetina writes about her aim to put forth epistemic cultures as a way to replace concepts such as ‘discipline’ or ‘specialty’. How do these terms relate to other units you have been reading about, such as ‘repertoire’?
- What does the distinction between the construction of knowledge and the machineries for the construction of knowledge mean to you? How useful is the distinction today, and is that any different from when Knorr-Cetina introduced it in the late 90s?
- Knorr-Cetina puts forth that a comparative approach is a useful one to make the invisible visible (page 4). Which lens, to pick up on her metaphor, do you use to make things visible in your research?
- For Knorr-Cetina, the boundaries of the laboratory or of a highly structured experiment serve to draw the lines around her object. Is this a good exemplar for your own work? If the focus is on practices, what is the role of a ‘local contexture’? Given the increased mediation of knowledge practices since the time of Knorr-Cetina’s fieldwork, how would useful boundary-making look like today?

Longino, Fate of Knowledge

- “A knowledge society is not simply a society of more experts, more technological gadgets, more specialist interpretations. It is a society permeated with knowledge cultures, the (page 8 begins) whole set of structures and mechanisms that serve knowledge and unfold with its articulation (page 8).” How does Knorr-Cetina’s work help to foreground ‘knowledge as practice’, rather than knowledge as a set of statements? And how would you situate the work of Longino and of Leonelli in relation to this distinction?
- In her work, Longino offers a dynamic conception of knowledge whose content changes steadily. ‘Local epistemologies’ with contrasting models, explanations and methods offer partial but complementary accounts of nature. ‘Local epistemologies’ do not conform to ‘some higher-level set of rules or principles but the ability of an epistemology to help a community to achieve the understanding it seeks.’ Do you agree with her?
- What would Trump think of ‘local epistemologies’?

1.3 Lecture, “Race” based health care: Past, present, and future, Alana Helberg-Proctor

Inclusion and diversity are currently topical subjects in health research, care, and policy in Europe. In recent years there have been calls at national and EU levels for health care professionals, health researchers, and policymakers in Europe to attend to diversity and inclusion. Here, in addition to gender, migration history, sex, religion, language, education, and sexuality, ethnicity and ‘race’ have become focus points within this so-called inclusion paradigm. ‘Race’ is, however, a highly

contested social construct of which the use in research and medicine has been highly debated, especially in the United States the use of this social category as a flawed marker of biological difference has been problematized. In this lecture I will discuss the history of the use of ‘race’ in medicine, the contemporary and particular uses of ‘race’ in health in Europe, and lastly, I will discuss how we might attend to diversity, racism and inequity in health without calling upon the concept of biological ‘race’.

Required readings:

- Cerdeña, J. P., Plaisime, M. V., & Tsai, J. (2020). From race-based to race-conscious medicine: how anti-racist uprisings call us to act. *The Lancet*, 396(10257), 1125-1128.
- Helberg-Proctor, A., Krumeich, A., Meershoek, A., & Horstman, K. (2018). The multiplicity and situationality of enacting ‘ethnicity’ in Dutch health research articles. *BioSocieties*, 13(2), 408-433.
- Krieger, N. (2021). Structural racism, health inequities, and the two-edged sword of data: structural problems require structural solutions. *Frontiers in public health*, 9, 301.

1.4 Open science, Skills training, with Maud Radstake and Sabina Leonelli

In this session we will reflect on the aspects PhD candidates find most challenging or puzzling in current Open Science policies and practices, with the aim to discuss their potential impact on your everyday work as well as more broadly on the future outcomes of your PhD. Sabina Leonelli will set up the session by providing background and initial thoughts on some of the key topics that PhDs have highlighted in preparation for the session. Maud Radstake will coordinate the session helping us to address questions that have specifically to do with Dutch Open Science mandates and infrastructures. In order to prepare for this session, please add to this mural ([→ LINK](#)) one week prior to the start of the summer school (=15th of August) some reactions to the aspects of open science listed on the mural. We expect to see one to three reactions per participant, preferably not longer than a paragraph or two. Your reactions can be related to **a]** the requirements that you have to fulfil (either from your funder or from your local institution and/or research group), **b]** the broader implications of those requirements, including both those you welcome and those you worry about, **c]** how you will go about fulfilling these requirements and **d]** which obstacles you face.

Tuesday, 23 August: Practices and institutions: Diversity and scientific change

2.1 PhD presentations 1

Please see PhD Presentation Guidelines in this programme.

Presenter: YingYin Han Respondent: Olga Temina

Presenter: Carla Greubel Respondent: Eliana Bergamin

2.2 Lecture: Repertoires - The making and unmaking of epistemic diversity, Sabina Leonelli

This lecture considers the ways in which specific ‘ways of doing’ within research become recognised and entrenched as models for ‘best practice’, with significant consequences for the logics of inclusion and the understanding of what counts as ‘relevant’ and ‘significant’ enforced within any scientific domain. I discuss the notion of repertoire, which Rachel Ankeny and I have introduced as a possible framing for such phenomenon, and the ways in which this notion relates

to other important STS notions such as platforms, knowledge-control regimes and paradigms. I then exemplify the ways in which specific repertoires police and constrain epistemic diversity by considering how data science has been deployed in aid of the pandemic response in the US and the UK, particularly during the first year of the COVID-19 pandemic. This case brings starkly to the fore the dominant role that entrenched research repertoires tend to have in situations of ‘emergency’, when the research community finds itself under enormous pressure to deliver actionable insights to policy-makers. This, in turn, raises questions around whether and how dominant repertoires may be challenged, particular at this time of great environmental and political instability, when many research domains may credibly be viewed as operating under ‘emergency’ conditions.

Required readings:

- Ankeny, Rachel A and Sabina Leonelli. 2016. Repertoires: A Post-Kuhnian Perspective on Scientific Change and Collaborative Research. *Studies in the History and the Philosophy of Science: Part A* 60: 18-28.
- Leonelli, S. (2021) Data Science in Times of Pan(dem)ic. *Harvard Data Science Review* 3(1) <https://doi.org/10.1162/99608f92.fbb1bdd6>
- Hilgartner, Steven. 2017. *Reordering Life*. Chicago University Press. Introduction.

2.3 PhD Presentations 2

Please see PhD Presentation Guidelines in this programme.

Presenter: Joost Kuijper	Respondent: Stefan Galliard
Presenter: Windson Lin	Respondent: Marta Sienkiewicz
Presenter: Eliana Bergamin	Respondent: Yingying Han

2.4 Exercise, *What could go wrong? (part 1)*

At the start of the summer school, you will be asked to note **one sentence** which you consider as the biggest risk of your research with respect to ‘diversity’ on a post-it note. This can be something to do with the content of your research, methods, personal background and/or institutional set-up. Based on your input, our anchor teacher will form groups of PhDs with broadly similar concerns, and spur a constructive discussion within each group.

2.5. Exercise, *What could go wrong? (part 2)*

In the second part of this exercise, groups report back to the entire group. Our anchor teacher will comment on your reflections.

Wednesday, 24 August: Power dynamics and openness: Diversity and injustice

3.1 Lecture, *Diversity and injustice: The case of Open Science, Sabina Leonelli*

This lecture looks in more detail at the relationship between epistemic diversity and epistemic injustice. I first provide a characterisation of epistemic injustice, following the work of Miranda Fricker and others with similar views. I then discuss the implications of epistemic injustice in

relation to data quality assessment, which is arguably a fundamental aspect of all research, insofar as it establishes the norms for what counts as reliable and trustworthy evidence. Finally, I link existing concerns with epistemic injustice with the institutionalisation of Open Science, which has become a central feature in science policy discourse over the last ten years, particularly in Europe. I analyse some of the reasons for such a turn and the problems it may generate unless concerns around epistemic diversity and injustice are taken seriously.

Required readings:

- Fricker, Miranda. 2007. *Epistemic Injustice: Power & the Ethics of Knowing*. Introduction (pp.1-8).
- Leonelli, Sabina. 2018. Global Data Quality Assessment and the Situated Nature of “Best” Research Practices in Biology. *Data Science*. 16(32): 1-11.
- Levin, Nadine and Leonelli, Sabina. 2016. How Does One “Open” Science? Questions of Value in Biological Research. *Science, Technology and Human Values* 42 (2): 280-305. DOI: 10.1177/0162243916672071

3.2 Lecture, *Epistemological diversity*, Jeannette Pols

The striving for diversity in scientific practices has two promises. The first claim is political in the sense that the goal is to achieve equal possibilities for people to obtain an academic position. It is about representation. The second claim is epistemological: a greater diversity in science would imply a greater variety in methods and objects of research, and different sets of questions. This claim has to do with the *content* of scientific work. It seems that diversity can be dealt with well, if the assumption is that it concerns different perspectives on the same reality. But what happens if reality itself is seen as being multiplied through different ways of knowing it? In this presentation I explore the relationship between diversity and scientific work on the basis of ethnographic work that we conducted in research groups within 5 scientific disciplines, and new work on our study on replication research. What did we learn about diversity, particularly in relation to epistemological assumptions?

Required readings:

- Derksen, M., & Morawski, J. (2022). Kinds of Replication: Examining the Meanings of “Conceptual Replication” and “Direct Replication”. *Perspectives on Psychological Science*, 17456916211041116.
- Rachel A. Ankeny, Sabina Leonelli (2016) Repertoires: A post-Kuhnian perspective on scientific change and collaborative research, *Studies in History and Philosophy of Science Part A*, Volume 60, Pages 18-28.

3.3 Lecture, *Archives and epistemic injustice*, Susan Legêne

In our research in the NWA project [Pressing Matter: Ownership, Value and the Question of Colonial Heritage in Museums](#) (2020-2025) we grapple with the complex notions of epistemic injustice and epistemic violence. Big words are used: transitional justice, redress... But where does the injustice, the violence, reside and where/how should it be countered: *literally* in the archives, the institutions, the musealized objects; *academically* in the historical academic underpinnings of physical and cultural

anthropology, ethnography, photography and its documentation standards; *societally* in historical and contemporary understandings of inequality, racism, exclusion; *globally* in a reset of international cooperation? This session understands archives in the broadest sense – from document collections to cultural archive, and invites all participants to help the “Pressing Matter project” to better understand what we mean by epistemic injustice and what it actually means for all involved. Our discussion starts from the following observation by Carollina Lauriano: ‘Sometimes, there is a lack of deep understanding when handling archives so that what is an experiment to some, is sacrilege to others. Sometimes, we talk about things that should not be talked about vainly.’ (“In Conversation: On the ethics and contradictions of the archive”, Hendri Badaröh, Carollina Lauriano and Stephanie Ribeiro, in: *Foam – International photography magazine* vol. 59, Histories – The Archival Issue, pp. 98-112).

Required readings:

- “In Conversation: On the ethics and contradictions of the archive”, Hendri Badaröh, Carollina Lauriano and Stephanie Ribeiro, in: *Foam – International photography magazine* vol. 59, Histories – The Archival Issue, pp. 98-112 [PdF will be made available. For those interested: just buy a copy of this issue #59, it is a very rich issue, and will play an important role in our session]
- Nicky Rousseau, ‘Preface’, in: [*Itineraries. A return to the archives of the South African truth commission and the limits of counter-revolutionary warfare*](#), PhD thesis, Amsterdam 2019, pp. 1-17.
- Gloria Wekker, ‘White innocence in the Netherlands,’ In: Melissa F Weiner and Antonio Carmona Báez (eds) *Smash the pillars : decoloniality and the imaginary of color in the Dutch Kingdom*. Lanham, Maryland : Lexington Books, an imprint of The Rowman & Littlefield Publishing Group, Inc., 2018, pp. 137-148.

3.4 Session on Future of WTMC, session organised by PhD reps

Thursday, 25 August: Boundaries and classification: diversity and the limits of knowledge systems

4.1 Lecture, Process-sensitive naming: The matter of classification, Sabina Leonelli

This lecture considers one of the elements of research that most blatantly affects understandings of - and responses to - epistemic diversity and epistemic injustice: classification. I discuss the role of semantic systems in shaping knowledge production, which has become ever more prominent within data-intensive research. Classifications provide essential conceptual structure to research outputs and materials, thereby imposing specific forms of meaning. At the same time, they can and often do exemplify and perpetuate specific forms of epistemic injustice. Given the inevitability of using classifications in our work, I reflect on the importance of interrogating the normative import of the keywords and concepts we use to order and present our own research; the challenges involved in collaborating with existing, yet troublesome, classificatory systems; and the opportunities presented by public engagement around classification, such as performed by communities of practice informing the management of plant data collected around the world, to mitigate epistemic inequities and injustice.

Required reading:

- Bowker, G (2000) Biodiversity Datadiversity. *Social Studies of Science* 30:5, 643-683.
- Leonelli, S. (2016) *Data-Centric Biology: A Philosophical Study*. University of Chicago Press. Chapter 5 (pp.114-140).
- Dupré, J and Leonelli, S (2022) Process Epistemology in the COVID Era: Rethinking the Research Process to Avoid Dangerous Forms of Reification. *European Journal for the Philosophy of Science* 12:20 <https://doi.org/10.1007/s13194-022-00450-4>

4.2 Lecture, *Perspectival realism and scientific cosmopolitanism, Michela Massimi*

In recent decades there has been an important movement among academics, stakeholders and the public to foster a culture of open science. This trend has stressed the need to make more transparent norms and procedures of knowledge production and to increase public accessibility to data and research outcomes. In this lecture, I discuss some of the underlying assumptions that however this model has often left untouched: e.g. assumptions about the nature of scientific knowledge and scientific progress. Drawing on my work on perspectival realism, I suggest a different epistemology of science that places centre stage a plurality of scientific perspectives and I show its promise in catering to the needs of a scientific world citizenship.

Required readings

- Massimi, M. (2021) *Perspectival Realism*, OUP, Ch 11 “Multiculturalism and cosmopolitanism in science” **(this will be OA available from late June)**

Optional readings

- Harding, S. (2015) *Objectivity and Diversity: another logic of scientific research*, OUP, Ch 4 “Do Micronesian Navigators Practice Science?”.
- Harding, S. (1998) *Is Science Multicultural?* Indiana University Press. Ch 9 “Borderlands Epistemologies”.
- S.H. Kellert, H.E. Longino, and C.K. Waters (eds) (2006), ‘Introduction: the pluralist stance’, in *Scientific Pluralism*. Minneapolis: University of Minnesota Press.

4.3 Lecture, *Shamed into good science, Bart Penders*

Open science and scholarship, as one of the goals in the ongoing scientific reform agenda is not equally attainable nor equally desirable for researchers across the globe or across their epistemically plural communities. Part of the reform agenda, as well as open science ambitions, are assumptions about what constitutes science and scientific practices and prescriptions about how *good* science is done, organised and governed. This imagined good science knows no, or least only few and small, hurdles on the road to reform and openness. The existence of plural and situated manifestations of science and scientific practices does not always align with imagined good science. When it does not, it is often not the reform or openness agenda that is questioned, but the integrity of scientists or the value of deviating epistemic communities. Educating deviants on the etiquette of empirical scholarship bundles internal and external pressures to pathologise some epistemologies and reform them into proper science.

Required readings:

- Peterson, D., & Panofsky, A. (2020). Metascience as a scientific social movement. Preprint, at: <https://doi.org/10.31235/osf.io/4dsqa> [33 pages]
- Nelson, N. (2021). Understand the real reasons reproducibility reforms fail. *Nature* 600, 191 <https://doi.org/10.1038/d41586-021-03617-w> [1 page]

Optional readings:

- Field, S. M., & Derksen, M. (2021). Experimenter as automaton; experimenter as human: exploring the position of the researcher in scientific research. *European Journal for Philosophy of Science*, 11(1), 1-21. <https://link.springer.com/article/10.1007/s13194-020-00324-7> [21 pages]

4.4 PhD presentations 3

Please see PhD presentation guidelines in this programme.

Presenter: Olga Temina Respondent: Windson Lin
Presenter: Maud Oostindie Respondent: Hugo Peeters

4.5 Exercise, How do you WANT to implement diversity in your work

Based on our prior discussions we will use this exercise to collect and discuss strategies for implementing diversity in your work. We encourage you to think about what this would mean for you, what would and wouldn't make sense for your project, what is realistic and achievable within your research setting, and what systemic changes such strategies could require and/or help to bring about.

Friday, 26 August: What makes a good scholar? Diversity in your own research

5.1 Socratic walk

5.2 Lecture, Epistemic monocultures and the move to open research - what can STS contribute?, Sarah de Rijcke

Performance indicators and other technologies for accountability have become deep-rooted in everyday academic life and have substantially changed institutions and cultures of knowledge production. This lecture will focus on the impacts of indicators and the move to open, reproducible research. We will discuss some of the epistemological effects of accountability measures on how research is planned, done and communicated, and how STS as a field deals with these dynamics in its own practices.

Required readings:

- Müller, R. & De Rijcke, S. (2017). Thinking with indicators. Exploring the Epistemic Impacts of Academic Performance Indicators in the Life Sciences. *Research Evaluation*. doi: 10.1093/reseval/rvx023.

- Penders B, Holbrook JB, de Rijcke S. (2019). [Rinse and Repeat: Understanding the Value of Replication across Different Ways of Knowing](#). *Publications*; 7(3): 52.

5.3: Discussion Session, Intervening in science policy: The debate on reproducibility, Sabina Leonelli

In this final lecture, I consider the implications of concerns around diversity and openness for our own practice as STS scholars. Among the various ways in which we may conceive of the social significance of our research, there is the opportunity to intervene in science policy. Just as there are different politics and political systems, there are different models of relating STS research to policy debate, wherever it may take place. It is a central part of research training to be able to reflect on where we stand as individuals and researchers, what publics we are communicating with, and with which aims and implications for our choice of topics, methods and outputs. In order to exemplify this, I shall reflect on some of the challenges and dilemmas involved in shaping one's research towards a policy intervention, whether this happens through a speech, a response to a consultation, the drafting of a policy brief or collaboration towards shaping an actual policy. Such exercises expose us to real-world pressures that can transform our research: both positively, through the provision of feedback and an increased understanding of the socio-political conditions for any one decision, and negatively, through the distortion, misunderstanding or instrumentalization of our perspective or even our very participation as a legitimising factor for whatever initiative is being developed. I provide some examples from my experience in working with the European Commission and various national governments on the problem of research assessment – in other words, ‘what makes a good researcher’. I shall focus in particular on the ongoing debate around the so-called ‘reproducibility crisis’ and an ongoing consultation on the significance of this debate for research practice that I am carrying out, together with Professor Steve Lewandowsky, on behalf of the Belgian Academy of Science.

Required reading

- Leonelli, S. (2018) Re-Thinking Reproducibility as a Criterion for Research Quality. *Research in the History of Economic Thought and Methodology: Including a Symposium on the Work of Mary Morgan: Curiosity, Imagination, and Surprise*. Volume 36B, 129-146. DOI: [10.1108/S0743-41542018000036B009](https://doi.org/10.1108/S0743-41542018000036B009) Open Access version: <http://philsci-archive.pitt.edu/14352/>

5.4 Rounding off & farewells

About the speakers

Sabina Leonelli is professor in Philosophy and History of Science, the Co-Director of the Exeter Centre for the Study of the Life Sciences ([Egenis](#)) and theme lead for the "Data Governance, Openness and Ethics" strand of the Exeter Institute for Data Science and Artificial Intelligence ([IDSAI](#)); and Turing Fellow at the [Alan Turing Institute](#) in London. In the academic year 2021-22, Leonelli is based in Berlin as a Fellow of the Wissenschaftskolleg zu Berlin, working on "[Excellence and Diversity in Global Scientific Practice](#)". Her research spans the fields of history and philosophy of biology, science and technology studies and general philosophy of science, and currently focuses on four interrelated strands: [1] the philosophy, history and social studies of data-intensive science, especially the impact of Big and Open Data on research and wider society, responsible data management, data infrastructures and the construction of semantics to enable data linkage for automated mining in the plant sciences and biomedicine; [2] the philosophy of Open Science, and the scientific and social implications of implementing Open Science policies and procedures in a highly unequal world; [3] the philosophy and history of organisms as research models, with a focus on experimental organisms; [4] the history and epistemology of the plant sciences, especially the global circulation of plant data, its relation to biological materials and agricultural development strategies, and its significance for understanding 21st century biological research beyond the lab. She also has a strong interest in science policy and served as expert advisor for many national and international bodies including the European Commission.

Alana Helberg-Proctor is a post-doc fellow at the Life Sciences & Society Lab at KU Leuven. In her work, she focuses on diversity and inequality in healthcare and medical science, where she investigates how 'race' and 'ethnicity' appear in biomedical research, health policy, and healthcare in the Netherlands and Europe. In 2021 she was awarded the prestigious Marie Curie Sklodowska grant, with which she will conduct research at the Life Sciences & Society Lab at KU Leuven in the coming years. Her research project RaceCareEurope is the first comparative study between European countries into the introduction of 'race-based' diagnostics in health care and policy. Alana started her academic career and education at The New School in New York City, where she obtained her BA and MA. Upon completing her MSc and Ph.D. at Maastricht University in 2017, she was appointed as an assistant professor at Maastricht University in the Department of Health, Ethics, and Society. In addition, she was a post-doc in the RaceFaceID project and guest lecturer at the University of Amsterdam Faculty of Social and Behavioral Sciences.

Maud Radstake (PhD) is head of the Public Programs department at the Centre for Science Communication and Culture, at Utrecht University. The department develops public programmes at the interface of science/scholarship and society, for audiences of various ages and backgrounds, together with partners inside and outside the university. It is responsible for the programmes of [Studium Generale](#) and the [Wetenschapsknooppunt \(Science Hub\)](#), the [Betweter Festival](#) and many other [public engagement activities](#). The Public Programs Department also offers advice and training to UU academic and support staff who (want to) do public engagement. She is also active as one of the track leaders for [Public Engagement](#) in the university's [Open Science Programme](#). Maud has been trained as a cultural anthropologist at the University of Amsterdam (1999) and got her PhD in Arts and Social Sciences at Maastricht University in 2007. She then worked as project-

and programmemanager on societal research and public engagement at the Centre for Society and the Life Sciences (Radboud University) and as policy advisor patient participation (Radboudumc).

Jeannette Pols (1966) is Socrates Professor at the department of Sociology and Anthropology, Faculty of Behavioral & Social Sciences, at the University of Amsterdam. The chair is established on behalf of the Socrates Foundation. The name of the chair is ‘Social Theory, Humanism & Materialities’, or more colloquially: empirical ethics in care. She works as associate professor at the section of Medical Ethics, Department of General Practice at the Academic Medical Centre in Amsterdam. She studied Social Philosophy and Clinical Psychology in Groningen and received her PhD from the University of Twente, for an award winning study in empirical ethics. The study ethnographically unravelled what ‘good care’ is by studying how nurses and patients shaped care ‘in action’. At the time of this study, Pols worked with the Trimbos-institute in Utrecht. Since 2006, Pols works with the staff of the section of Medical ethics, Department of General Practice in the Amsterdam Medical Centre. Here, she studied the development of telecare in the Netherlands by ethnographically studying how patients use telecare technologies at home, and nurses in the hospital. She shows how both people and devices attempt to ‘tame’ one another, but also ‘unleash’ new possibilities. Recently, she is working on a book with the working title: ‘On the empirical study of values. Aesthetic values in daily life and care’.

Susan Legêne is a historian, thinking about critical heritage studies, as well as diversity and inclusion in colonial and postcolonial nation state formation. Between 1985 and 2008 she worked at the Royal Tropical Institute in Amsterdam, as a publisher, editor, and head of the curatorial department of the Tropenmuseum. It made her a bit more familiar with the deep impact of the colonial and imperial past in today's world. Since 2008 she works at the Vrije Universiteit in Amsterdam (VUA), as professor of political history and, since 2020, as dean of the faculty of humanities. Together with Wayne Modest (National Museum of World Cultures and VUA) and Rosalie Hans (VU) she leads the *Pressing Matter* project.

Michela Massimi is Professor of Philosophy of Science at the University of Edinburgh. She has written extensively in the area of history and philosophy of science, especially of modern physics, and Kant's philosophy of nature. She was the PI of an ERC Consolidator Grant (2016-2021) entitled *Perspectival realism. Science, knowledge and truth from a human vantage point* and she is the author of *Perspectival Realism* (OUP, 2022). She currently serves as President-Elect of the *Philosophy of Science Association*.

Bart Penders is Associate Professor in Biomedicine and Society, currently researching and teaching at Maastricht University, the Netherlands. His research deals with scientific collaboration, in which I focus mainly, but not exclusively on biomedicine and nutrition science. He studies how scientists collaborate to create knowledge, how they render such knowledge credible and how non-scientists are involved in knowledge production and credibilisation.

Bart Penders obtained his PhD from Maastricht University in 2008 and after being a post-doctoral fellow at Radboud University Nijmegen, Institute for Science, Innovation & Society, Centre for Society & Genomics, 2008-2012 and an Edmond J Safra Network Fellow in 2013-2014, he now holds a faculty position at Maastricht University, and has also been a visiting scholar at the Institute

of Science and Technology Studies at Bielefeld University, Bielefeld, Germany (2008), at the Social Science Research Centre at Canterbury University, Christchurch, New Zealand (2010) and a guest researcher at the Dept. of Science Studies at the University of Vienna, Austria (2011). He teaches in multiple curricula, highlighting that science is a cultural practice, which makes it relevant to focus on, amongst other things, the study of how science and technology are made, by whom they are made, and how the making and using of knowledge, interacts with its societal context. In both research and teaching, this involves the inclusion of actors who were previously considered to be mere audience or recipients of knowledge and technology but of whom we have realised that they are true co-creators of technoscience: patients, publics, users and affiliates.

Sarah de Rijcke is Professor in Science, Technology, and Innovation Studies & Scientific Director at the [Centre for Science and Technology Studies](#) (CWTS) in Leiden. She is also Co-chair of the [Research on Research Institute](#) (RoRI), founded by Wellcome Trust, University of Sheffield, Leiden University, and Digital Science. Sarah specialises in social studies of research evaluation.

Laurens Hessels is a professor by special appointment of the societal value of science. This chair was established on the initiative of the Rathenau Instituut and is also funded by the Rathenau Instituut. Hessels' research focuses on the best way for researchers to work with practitioners (co-creation) so that their research is of maximum benefit to society. He also investigates how research and innovation can help tackle major societal problems. In addition, he contributes to the development of methods for improving the evaluation of the societal value of research. He also works as senior researcher at the Rathenau Instituut, where he carries out research on science and innovation policies. Laurens completed his PhD in 2010 at Utrecht University with a study into how university researchers deal with the practical applications of their work. He has also worked as a researcher with KWR Watercycle Research Institute and as a policy advisor at the Ministry of Education, Culture and Science.

About the coordinators

Anne Beaulieu is professor of Knowledge Infrastructures and director of the Data Research Centre at the University of Groningen. At Campus Fryslân, she works on creating knowledge infrastructures for sustainability and is responsible for the major Responsible Planet in the programme Global Responsibility and Leadership. She has co-edited the books *Virtual Knowledge: Experimenting in the Humanities and Social Sciences* and *Smart Grids from a Global Perspective*. 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. Her book *Data and Society: A Critical Introduction* with Sabina Leonelli will appear in November 2021.

Andreas Weber is an assistant professor in the [research group of Science, Technology and Policy Studies \(STePS\)](#) at the University of Twente. Most of his research and teaching examines the relationship between **Science, Technology and Culture (=STC)** from a long-term and global perspective. Andreas has a special interest in the histories of natural history and chemistry in insular Southeast Asia and Europe. This includes research into how computational technologies can be used to learn from the cultural bias of biodiversity heritage collections gathered in former colonial areas. Andreas holds a MA degree (2005) and a PhD, both from Leiden University (2012). He is editor of the Brill book series *Emergence of Natural History (ENH)* and associate editor of the journal *Itinerario: Journal of Global and Imperial History*. In 2015-2016, Andreas was a John C. Haas fellow of the [Science History Institute](#) in Philadelphia.

Participants

No	First name	Surname	University/Organisation	What is the topic of your research (5 lines)?
1	Annemarie	Horn	Vrije Universiteit Amsterdam	I conduct action research into inter- and transdisciplinary collaboration and knowledge integration. We design and continuously evaluate master level courses in which students from diverse backgrounds collaborate to work on complex societal issues. I study how they develop and can be supported to develop competencies for inter- and transdisciplinarity. This includes epistemic awareness, reflectivity, and the ability to engage in dialogical communication.
2	Margot	Kersing	Erasmus University	The use of big data in the local social domain, focus on the work practices of street-level bureaucrats.
3	Joost	Kuijper	University of Twente	Already known (see: Spring Workshop)
4	Windson	Lin	University of Groningen	History of Psychiatry; History of Science; Science and Technology Studies; Transcultural Psychiatry
5	Lea	Loesch	VU Amsterdam	My PhD research centers around innovating the inclusion of citizens', patient's and health professionals' values and experience-based knowledge in vaccination guidelines by using automated text analysis methods.
6	Maud	Oostindie	Maastricht University	This thesis aims to empirically understand online communication and conflict. In doing so, I look specifically at cultural scripts of conflict escalation and de-escalation. Through digital ethnographic fieldwork I will analyze how different communities of practice regulate conflict, and how they respond to strategies of de-escalation as employed by other users or by bots.
7	Nada	Akrouh	Erasmus University Rotterdam	My PhD research focuses on how citizen science can play a role in the development and use of AI and Big Data in healthcare. It will look at the role of citizens and patients in the application of AI and it will experiment with new forms of data analysis in which qualitative analyzes are combined with Big Data and AI using Citizen Science.
8	Jacqueline (Jackie)	Ashkin	Leiden University	Numerical models play an increasing role in what is known about the ocean and consequently how it is managed. My research explores the social and epistemic relations that make small-scale and coastal models of the ocean possible. I look at the tensions between the governance of the contemporary science system (e.g. funding constraints) and impending climate breakdown, as experienced by ocean modelers themselves. My research is part of the ERC project FluidKnowledge.
9	Eliana	Bergamin	Erasmus University Rotterdam	My research aims at investigating how the introduction of Artificial Intelligence is changing the role moral emotions play in the development of human moral character when applied in the field of healthcare, and how should this change be approached in order to understand the role of AI in societal development. This connects to the way AI is modifying and mediating the moral and emotional engagement of human beings in the world. My interest is particularly focused on emotions such as empathy, sympathy, and compassion, which are central in the domain of healthcare.

10	Michiel	Bron	Maastricht University	The involvement of oil companies in the development of nuclear energy in the age of scarcity, focussing on the 1970s.
11	Efe	Cengiz	University of Groningen	Investigation of production and mobilisation of knowledge/power in Aegean olive orchards through naturecultural connections, mapping of environmental shifts in the orchards over time, and noticing more-than-human actors within such processes; to critique existing knowledge infrastructures and help produce better ones
12	Selen	Eren	University of Groningen	I am studying how bird ecologists create knowledge claims in contemporary knowledge infrastructures where the emerging and longstanding data collection and analysis techniques are used at the same time, as well as how to contribute to such knowledge infrastructures to make them more credible in a less positivist sense.
13	Stefan	Gaillard	Radboud University	Exaggerated claims within the field of nanobiology, specifically overpromises and exaggerated novelty claims.
14	Carla	Greubel	Utrecht University	In my dissertation, I study enactments of 'good ageing' in and across three contexts: (1) the European ageing and innovation policy discourse, (2) small and large-scale initiatives on digital innovations for ageing in place, and (3) the everyday lives of older citizens living in pilot regions in Italy, Spain and the UK. Drawing on empirical ethics of care, I investigate how among different ideas and practices of 'good' ageing, some come to (temporarily) matter more while others are marginalized.
15	Yingying	Han	Radboud University	Validity in scientific practices
16	Wytske	Hepkema	Radboud University	I study controversy in nanobiology. Some researchers claim that a specific nanoparticle - SNA - has special properties, among others the ability to cross the cell membrane. If these particles can indeed cross the cell membrane this has huge potential for all sorts of medicine, among other cancer medication. However, other scientists contest this claim. I am interested in different players in this debate, the opinions of the silent majority, and the arguments used to support and contest this claim.
17	Joyce	Hoek	University of Groningen	Before a new medicine can be used by patients, it needs to be approved by a regulatory authority. They assess the clinical evidence and determine if the benefits of the drug outweigh its risks. I am studying how this decision-making works in practice through observations and interviews.
18	Hugo	Peeters	Erasmus University Rotterdam	In my research I investigate the epistemologies, normativities and practices through which the early onset human life is constituted as an object of preventative intervention.
19	Nina	Schwarzbach	University of Groningen	Scientist practitioner gap in clinical psychology
20	Marta	Sienkiewicz	Leiden University	I study new evaluative tools used in research assessment, particularly those which aim to implement 'Recognition & Rewards' ('Erkennen en Waarderen') and broaden what is visible and valuable in academic assessments. I aim to understand, through a study of these tools, how the dominant valuation regime of excellence is being modified and with what effects.
21	Jenske	Bal	University of Liege	The topic of my research is the epistemic infrastructure of genomics in cattle livestock reproduction and selection. I look at how certain societal values such as biodiversity, health and the environment get translated into bovine bodies, and through which techniques and practices.

22	Hanna	Stalenhoef	Erasmus Universiteit	The role of values and valuation processes in regional elderly care collaboration in the Netherlands.
23	Anastasia	Stoli	Maastricht University	My subproject's objective is to investigate how public participation is produced in the practices employed by DIY developers to create medicines globally outside the state-regulated space, and to gain an understanding of how informal and formal means interact and are configured in the process.
24	Olga	Temina	Maastricht University	My research focuses on practices that lead to construction of access to medicines for patients with oncological and rare diagnosis in Russia. I pay special attention to role that patient organizations play in this process and their political epistemic projects. Theoretically my research is drawing from the STS literature and informality studies.
25	Natascha	van Bommel	Eindhoven University of Technology	Justice in the energy transition, and the role that local energy solutions can play in that.
26	Monica	Vasile	Maastricht University	My research focuses on the history of reintroducing endangered species. I am looking in particular at three case studies - the Przewalski's horse, the Vancouver Island marmot and the takahe rail of New Zealand. My approach is at the intersection of history of conservation, history of science and animal history.
27	Martijn	van der Meer	Erasmus University Rotterdam / Erasmus MC	I investigate the history of Dutch preventive child health care throughout the 20th century. Based on a combination of archival and digital research, and inspired by actor-network theory I aim to show how medical "prevention" can best be understood as a social activity in which the boundaries between healthy children and those at risk are shaped and sustained. By doing so, I am specifically interested in the role played by scientific knowledge and how this knowledge interacts with specific practical preventive contexts.
28	Tessel	Wijne	Universiteit Utrecht	Digital innovations for animal-free safety testing of pharmaceuticals and chemicals.
29	Nikki	Theeuwes	Utrecht University	I currently study the role of knowledge in the politics of SDG policy coherence, focus on India. I look into the political processes of policy coherence and I research the SDG India Dashboard, consisting of a large set of indicators meant to monitor the SDGs such that No One is Left Behind. I study the role of knowledge in this respect and consequences for social equality. Also very much interested in what I can personally do in my work with respect to diversity (methods, collaborations etc).
30	Niko	Wojtynia	Universiteit Utrecht	I try to better understand the transition to a sustainable agri-food system in the Netherlands. Both on the level of perspectives for actors (how can farmers, consumers etc change their behavior) and structural conditions (what institutional logics, cultural aspects etc lead to such behavior).
31	Ivonne	Lujano Vilchis	Arizona State University	My dissertation focuses on the gender and geographical diversity of the editorial board (EB) of four science mega-journals. I intend to study how the disparities in the composition of the EBs might affect minority populations (e.g., women and scholars from the Global South), as it prevents them from participating in the decision-making processes and reinforces the current biases in the global scientific production and distribution.
32	Ana Paula	Moritz	University College Dublin	My research topic is about how the development of Artificial Intelligence and its technologies replicate colonial patterns of extrativism and exploitation in the global south.

PhD Presentation guidelines

For presenters

- Send the title & summary of your presentation to the discussant assigned to you at least 1 week before the summer school.
- 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

- Make sure you receive the title & summary of the presentation at least 1 week before the summer school. Contact the presenter if needed.
- After the presentation: join the presenter in the front of the room
- Present your comments in **5 minutes** max.
- 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

- Listen carefully and attentively to the presentation.
- Please fill in a **feedback form** for each presentation. They can be found at the end of the reader. They will be collected and given to the presenter. We will bring spare copies for people who don't print out the reader.
- 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 on Presentations

This is to help you give feedback to your fellow participants, some of whom will be presenting their research during this event. Feedback forms will be available at Soeterbeeck. Use 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
- Time management

