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# Advanced Trajectory

## **Critical Data Studies**

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*This booklet provides information about the advanced trajectory (verdiepingspakket) Critical Data Studies within the BA programme Media and Culture. An advanced trajectory is a coherent selection of four courses. In the trajectory Critical Data Studies all four courses are in English and train students to analyze the assemblages that produce, circulate and utilize data in diverse ways empowering them to raise critical questions about how datafication shapes and interacts with culture and society. Having completed both basic trajectories (basispakket 1 and 2) it is now time to further deepen your knowledge and skills. This booklet describes what is on offer in this trajectory, how the programme is composed, and what knowledge and skills you will develop. After completion of this trajectory you then take the Research Seminar (Onderzoekseminar) and finally write your BA thesis on a topic in line with this trajectory.*

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## FOR WHOM?

This advanced trajectory is meant for students interested in raising critical questions about how datafication shapes and interacts with society and culture. Inspired by the field of Critical Data Studies, the aim of this advanced trajectory is to train students to analyze the assemblages that produce, circulate and utilize data in diverse ways.

Digitalization and datafication now take place at the core of our culture and social organization. In the current environment 'big' data are surrounded by misleading claims of objectivity and accuracy. Yet the translation of the social and cultural world into data involves abstraction and reduction into computational symbols. These data are then processed for diverse objectives by computational tools that have their own built-in biases and assumptions. This raises questions about how data are constructed, represented and operationalized. As humanities scholars we understand knowledge to be partial and situated and engage in cultural criticism. Together with our understanding of processes of mediation, media scholars are well positioned to explore the limitations, biases, ethics and materialities of data analysis and its role in reproducing social hierarchies and injustices. It enables us to make important contributions to debates about data and datafication.

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## PROGRAMME

The Advanced Trajectory Critical Data Studies consists of the following courses:

### **Infrastructures of Digital Cultures** (block 1)

You explore the uneven distribution and conditions that characterize digital media, their environmental impact, and the labor, maintenance, and care needed to support them.

### **Data as Media** (block 2)

You explore - through various cases linked to gender, performance, new media and film/television studies - how the media and performance studies

perspective on data is productive to discussions about the role of data and algorithms in our culture and society.

### **Digital Methods** (block 3)

You explore the basics of data collection and analysis using various digital methods (no prior experience is required) and use this practical know-how to critically engage with how interpretive decisions and digital tools impact knowledge production

### **Rhetorics of Data Visualization** (block 4)

You explore how data visualizations and dashboards communicate arguments and perspectives, how design is used to that end and in what ways this configures the production of knowledge.

## **TOPICS AND CONCEPTS**

### **Infrastructures of Digital Cultures**

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This course examines the socio-technical networks that support digital cultures and addresses how they reframe traditional questions of media production, circulation, access, consumption, and policy and regulation. More specifically, it raises questions about the uneven distribution and conditions that characterize digital media, their environmental impact, and the labor, maintenance, and care needed to support them.

### **Data as Media**

This course approaches datafication as a process of mediatization and demonstrates the valuable contribution that media and performance studies can make to the field of data studies. Inspired by the idea of data as situated and principles from the ethics of care, it promotes a critical engagement with data that is also responsible, affective and material (cf Loukisass 2019). More concretely, it examines - through various cases linked to gender, performance, new media and film/television studies - how the media and performance studies perspective on data is productive to discussions about the role of data and algorithms in our culture and

society. Students furthermore learn to conduct a situational data analysis, analyzing how data are produced, circulated and/or operationalized.

### **Digital methods**

In this course, students are introduced to the most relevant digital methods in the humanities and their paradigms. We explore the basics of data collection and analysis using various digital methods (no prior experience is required) and use this practical know-how to critically engage with how interpretive decisions and digital tools impact knowledge production. Importantly, students learn how to manage themselves ethically in doing digital research.

### **Rhetorics of Data Visualization**

In this course, as a starting point, students learn which cognitive processes are involved in interpreting visual information and how this shapes the techniques used in the design of data visualizations. We then focus on the representational character of data visualizations and study how they operate as rhetorical devices. We also explore how visuals can communicate an argument or perspective, how design is used to that end and what role this plays in the production of knowledge. Finally, students put theory into practice by learning how to create a data visualization that conveys a key message (software independent) and to critically assess data visualizations created by others.

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### **KNOWLEDGE AND SKILLS, PERSPECTIVES AND APPROACHES**

It has been argued that data can be considered as media, in that they are characterized by their expressivity and material conditions. Subsequently, media scholars are particularly well suited to analyze how data function in the world. This specialization track is informed by the field called *Critical Data Studies* in adapting a critical approach to data, engaging with its biases and assumptions and materiality, but it integrates lessons from media and performance studies.

The first two courses of the trajectory explore data and the conditions through which they emerge and are articulated. This provides the

theoretical clout enabling the critical examination of data practices and knowledge production central to the final two courses.

The course **Infrastructures of Digital Cultures** provides tools to understand and identify the various components of infrastructures (incl. hardware, labor, policy, waste etc.). Students develop an understanding of the complexity of infrastructures as socio-technical networks, their environmental impact and the labor, maintenance and care needed to support them.

The course **Data as Media** provides an understanding of how a media and performance studies perspective can be productive for data studies. Students learn to identify and explain cultural data practices, based on the relevant academic concepts developed for approaches to datafication and mediatization.

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The course **Digital Methods** provides students insight into the basic premises, their paradigms and forms of relevant digital methods (e.g. Cultural Analytics and Digital Methods) in the humanities. Students carry out a small-scale data-driven study in a group, reflect on the impact of digital tools on knowledge production and think critically about data ethics in research practice.

The course **Rhetorics of Data Visualization** provides an understanding of the basic concepts and methods of data visualization practices. At the end of the course students are able to identify and review the rhetorical devices of data visualization and dashboard and explain how they are used in professional settings. They conceptualize and critically assess a mock-up of a data visualization within a professional setting.

### **BESIDES?**

Next to two *basispakketten* and a *verdiepingspakket* (like this advanced trajectory **Critical Data Studies**), each bachelor programme entails a *profielingsruimte* (profiling space) of 60 ects. Half of this space is needed for a mandatory *profielingspakket*, a profiling trajectory, which may

consist of

- a minor programme – a package of four thematically related courses – within Utrecht University *or*
- studying abroad (a valuable option for those who would like to live abroad for a while and get a sense of the international orientation of academic life) *or*
- a second “verdiepingspakket” within *Media and Culture*.

In exceptional cases the student may choose a combination of four courses not entailed in the options above as their profiling trajectory. For this option the student needs the permission of the exam committee in advance.

The other half of the profiling space may consist of

- an [internship](#) (7,5 of 15 ec)
- a [workshop](#) (only in Dutch) (one or more)
- an [honours programme](#)
- a (second/third) *verdiepingspakket* within *Media and Culture*
- free courses

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We recommend students following this trajectory to choose an internship and/or a practicum. Both are relevant for professional orientation, learning by experience, and developing a deeper understanding of how theory and practice could relate to one another.

### **AND THEN?**

With the knowledge and skills mentioned above you should be well prepared at the end of this advanced trajectory of four courses to write – in combination with the *onderzoekseminar* – a BA thesis on a topic that in one way or another relates to the many issues addressed and discussed during the programme. Ideally, the BA thesis is of such a quality that you would meet the standards of admission for the two-year programme of the research master [Media, Art and Performance Studies](#). You could of course also choose a one-year academic master’s programme offered by the

Department of Media and Culture Studies, namely [New Media & Digital Culture](#), or [Film and Television Cultures](#).

### **MORE INFORMATION?**

Coordinator of the Advanced Trajectory in Critical Data Studies: Karin van Es ([k.f.vanes@uu.nl](mailto:k.f.vanes@uu.nl)).

### **REFERENCES**

Here you find a list of useful references. It contains both titles that are being used and discussed in the courses of this track and suggestions for extra reading if you want to deepen your knowledge.

- Beer, David. 2016. *Metric Power*. Palgrave Macmillan.
- Berry, David M. and Anders Fagerjord. 2017. *Digital Humanities*. Polity Press.
- Blauw, Sanne. 2020. *The Number Bias: How Numbers Lead and Mislead Us*. Hodder & Stoughton.
- Bowker, Geoffrey and Susan Leigh Star. 2000. *Sorting Things Out: Classification and Its Consequences*. The MIT Press.
- Cubitt, Sean. 2017. *Finite Media: Environmental Implications of Digital Technologies*. Duke University Press Books.
- D'Ignazio, Catherine and Lauren F. Klein, 2020. *Data Feminism*. MIT Press.
- Engebretsen, Martin and Helen Kennedy (Eds). 2020. *Data Visualization in Society*. Amsterdam University Press.
- Eubanks, Virginia. 2019. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. Picador.
- Kitchin, Rob. 2020. *The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences*. 2nd Edition. Sage.
- Lindgren, Simon. 2020. *Data Theory: Interpretive Sociology and Computational Methods*. Polity Press.
- Loukissas, Yanni Alexander. 2019. *All Data Are Local: Thinking Critically in a Data-Driven Society*. The MIT Press
- Noble, Safiya Umoja. 2018. *Algorithms of Oppression: How Search Engines Reinforce Racism*. NYU Press.



- O’Neil, Cathy. 2017. *Weapons of Math Destruction: How Big Data Increase Inequality and Threatens Democracy*. Crown.
- Parks, Lisa and Nicole Starosielski (Eds). 2015. *Signal Traffic: Critical Studies of Media Infrastructures*. University of Illinois Press.
- Rogers, Richard. 2013. *Digital Methods*. The MIT Press.
- Schäfer, Mirko Tobias and Karin van Es (Eds). 2017. *The Datafied Society. Studying Culture Through Data*. Amsterdam University Press.

## JOURNALS

Many texts on ‘big data,’ datafication and using computational methods are published in journals. Either Open Access or via the University Library you will have access to journals like:

- *Big Data & Society*
- *Social Media + Society*
- *New Media & Society*
- *Media, Culture & Society*
- *European Journal of Communication*
- *Information, Communication & Society*
- *Convergence*
- *Computational Culture*
- *Cultural Analytics*
- *Digital Humanities Quarterly*