# Marijn Alexis Keijzer, PhD

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# 1 Academic positions

Research fellow 2021 - present

Institute for Advanced Study in Toulouse University of Toulouse 1 Capitole, France

Postdoctoral researcher 2021

Chair of Sociology and Computational Social Science Karlsruhe Institute of Technology, Germany

# 2 Education

PhD in Sociology 2016 - 2021

Cum laude

University of Groningen & Interuniversity Center for Social Science Theory and Methodology (ICS)

Research Cluster for the study of Norms and Networks, Department of Sociology

Thesis: Opinion Dynamics in Online Social Media [doi: 10.33612/diss.196882523]

Promotors: Andreas Flache, Michael Mäs (KIT, Karlsruhe, Germany)

Committee: Kathleen Carley, Arnout van de Rijt, Rineke Verbrugge, Guillaume Deffuant, Ming Cao, Francesca

Giardini

MSc in Sociology 2014 - 2016

Cum laude

Utrecht University & Interuniversity Center for Social Science Theory and Methodology (ICS)

Thesis on socioeconomic status, reputation and interpersonal trust (under supervision of Rense Corten)

BSc in Sociology 2009 - 2013

Utrecht University

Thesis on social capital and intergenerational mobility (under supervision of Rense Corten)

Minor in Aesthetics at the Faculty of Humanities | One semester at University of Mannheim (Germany)

# 3 Teaching

#### Co-lecturer 'Sozialforschung: Wann und warum entsteht Meinungspolarisierung?'

2021

Karlsruhe Institute of Technology

Students of this research course were introduced to agent-based modeling approaches for understanding opinion polarization using NetLogo. [link]

#### Co-lecturer 'Theorizing Change'

2020

University of Groningen

In this research master's course on how to use rigorous theory to solve societal problems I teach the part on the diffusion of information and social influence in networks. [link]

# Lecturer and coordinator 'Opinion Dynamics on the Internet' (ODIN)

2019 - 2021

University of Groningen

Third year's bachelor elective course (2.5 ECTS) embedded in the minor 'Data Wise: Data Science in Society'. I designed, coordinated and co-taught the course in the first two years it was held. The course addressed challenges and opportunities of computational social science through looking at the case of opinion dynamics in online (social network) settings. [link]

#### Supervisor 'Collaborative Data Projects'

2019 - 2021

University of Groningen

Third year bachelor course embedded in the minor 'Data Wise: Data Science in Society'. In this course small and interdisciplinary groups of students work with an external project partner on a real problem the partner has. The teams have 15 weeks to complete a task like building an application that visualizes data, solving a practical problem with statistical analysis, or another project that is in some way related to data science. [link]

#### Supervision of various internships

2018 - 2020

On multiple occasions I have supervised students from our own or different faculties in their internships in the Norms and Networks research Cluster at the Department of Sociology.

2018: Dorian Hevesi (MSc social networks in a sustainable society student) on one-to-many interaction in continuous opinion models.

2018: Bauke van der Kooij (BSc sociology honors student) on qualitative evidence for repulsion and attraction in online social media discussions.

2019-20: Anton Laukemper (MSc computing science student) on developing a framework for opinion dynamics models in Python.

## Teaching Assistant 'The Municipality and its Citizens'

2017 - 2019

University of Groningen

First year's bachelor course (orig: "De Gemeente en Haar Burgers") where I tutored multiple research projects and taught some group lectures.

#### **Supervisor Bachelor Theses**

2017 - 2019

University of Groningen

Supervision of ten students' theses on social consequences of the use of online social network platforms and on the consequences and antecedents of social trust. 2017-18:

Barkmeijer. "Wat is het effect van het gebruik van online sociale netwerken op maatschappelijk succes en in hoeverre is dit effect verschillend voor SES-groepen?"

Bolhuis. "De echokamers en filterbubbels van sociale media"

Boschloo. "Hoe internetgebruik kan leiden tot sociale isolatie"

Kugel. "Wat is de relatie tussen het gebruik van sociale media op sociaal vertrouwen?"

Roosma. "Hoe sociale media gebruik burgerparticipatie bevordert"

2018-19:

De Vries. "Sociaal vertrouwen en politieke betrokkenheid"

Dollekamp. "Vertrouwen als katalysator"

Roosma. "Waarom hebben niet-westerse migranten een lagere mate van sociaal vertrouwen dan westerse mensen?" Sennema. "Hoe ver reikt de sociale ladder?"

Wilts. "Hoe beïnvloedt religiositeit sociaal vertrouwen?"

# 4 Experience

Visiting Associate 2020

University of Pennsylvania

Computational Social Science group of Duncan J. Watts in the Department of Computer and Information Science As a member of the Project Ratio team I worked on estimating diversity of social media users' news diets using a large dataset containing longitudinal, observational, digital trace data.

Research Assistant 2011 - 2016

Utrecht University

Involvement in various research projects, including:

- Programming automated reports with statistical models and visual reports of employee satisfaction for the Sustainable Workforce project
- Data handling and data analysis for the EU Labor Force Study of Bram Lancee
- Qualitative data gathering and analysis for a study on differences in educational trajectories of ethnic minorities

Intern 2015

Netherlands Institute for Social Research ('Sociaal en Cultureel Planbureau'), The Hague, The Netherlands. Estimating the selection bias of convenience samples of transgender individuals

Intern 2013 - 2014

Trajectum

Mental healthcare organization in Zwolle, The Netherlands.

Validation of measurement models for reporting of patients' aggressive behavior in a mental healthcare organization

# 5 Publications

# 5.1 Publications in peer-reviewed journals

- 2022 Keijzer & Corten (2022). Socioeconomic status, reputation, and interpersonal trust in peer-to-peer markets: Evidence from an online experiment. *Rationality & Society* [doi: 10.1177/10434631221131771]
- 2022 Keijzer & Mäs (2022). The complex link between filter bubbles and opinion polarization. *Data Science* [doi: 10.3233/DS-220054]
- 2021 Keijzer & Mepham (2021). Een pandemie van polarisatie? [A polarisation pandemic?]. *Mens & Maatschappij* [doi: 10.5117/MEM2021.2.003.KEIJ]
- 2021 Keijzer & Mäs (2021). The strength of weak bots. *Online Social Networks and Media* [doi: 10.1016/j.osnem.2020.100106]
- 2018 Keijzer, Mäs & Flache (2018). Communication in online social networks fosters cultural isolation. *Complexity* [doi: 10.1155/2018/9502872]

## 5.2 Book chapters

- forthcoming Flache, Keijzer & Mäs (forthcoming). Agent-based models and networks. In Yasseri (Ed.). Handbook of Computational Social Science: Volume I
- Flache, Mäs & Keijzer (forthcoming). Computational approaches in rigorous sociology: agent-based computational sociology and computational social science. In Gërxhani, De Graaf & Raub (Ed.). Handbook of Rigorous Theoretical and Empirical Sociology [doi: 10.4337/9781789909432.00011]

## 5.3 Other publications

- Preprint Keijzer, Golan, Coiciu, Burgerhof, Llulla & Faber. CovidTube: Mapping information segregation on YouTube. [doi: 10.31235/osf.io/5u2zk]
- 2022 Keijzer (2022). If you want to be cited, calibrate your agent-based model: Reply to Chattoe-Brown. *Review of Artificial Societies and Social Simulation*. [link]
- De Matos Fernandes & Keijzer (2021). No one can predict the future: More than a semantic dispute. Review of Artificial Societies and Social Simulation. [link]

#### 5.4 Invited talks

- 2023 Keijzer (03/16/2023). The complex link between filter bubbles and opinion polarization. Presented in the *International roundtable on Computational Social Science* at the Institute for Analytical Sociology, LIU (Norrköping, Sweden)
- 2022 Keijzer (12/15/2022). The complex link between filter bubbles and opinion polarization. Presented in *IRIT* external seminar at University of Toulouse 1 Capitole (Toulouse, France)

## 5.5 Conference presentations

- 2022 Keijzer (09/15/2022). The strength of weak bots. Presented at *ESSA Social Simulation Conference* (Milan, Italy)
- 2021 Keijzer (09/17/2021). Micro-foundations of polarization in online social media. Presented at *Annual Conference for Experimental Sociology* (Ascona, Switzerland)
- 2021 Keijzer (03/16/2021). Micro-foundations of polarization in online social media: A model In the lab fed back into the model. Presented at ESSA's SocSimFesT 2021 (online)
- 2019 Keijzer (09/01/2019). Validating models of opinion polarization on the micro-level. Presented at the *European Symposium Series on Societal Challenges in Computational Social Science, 2019: Polarization and Radicalization* (Zürich, Switzerland)
- 2019 Keijzer (05/02/2019). Designing social influence experiments. Presented at *Sixth International Meeting on Experimental and Behavioral Social Sciences* (Utrecht, The Netherlands)
- 2018 Keijzer, Mäs & Flache (08/13/2018). Communication in online social networks fosters cultural isolation. Presented at 2018 Annual Meeting of the American Sociological Association (Philadelphia PA, USA)
- 2018 Keijzer, Mäs & Flache (06/26/2018). Communication in online social networks fosters cultural isolation.. Presented at XXXVIII Sunbelt Conference 2018 (Utrecht, The Netherlands)
- 2017 Keijzer, Mäs & Flache (07/07/2017). Isolation in online social networks. Presented at the *Interdisciplinary Workshop on Opinion Dynamics and Collective Decision* (Bremen, Germany)
- 2017 Keijzer, Mäs & Flache (06/09/2017). Cultural heterogeneity under one-to-many communication in online social networks. Presented at the 9th International Network for Analytical Sociology conference (Oslo, Norway)
- 2016 Keijzer & Corten (06/04/2016). In status we trust: A vignette experiment on socioeconomic status and reputation explaining interpersonal trust in peer-to-peer markets. Presented at the 8th International Network for Analytical Sociology conference (Utrecht, the Netherlands)

#### 5.6 Software

2019 Laukemper, Keijzer & Bakker (2019). defSim: The discrete event framework for social influence models. [GitHub: github.com/defSim/defSim]

# 6 Competitive grants and scholarships

- Multidisciplinary grant for the project 'Understanding the formation and success of groups through game theory and network science' as a co-PI with Péter Bayer, Marion Hoffman & Maria Kleshnina. Awarded by the Institute for Advanced Study in Toulouse [total: €16,750]
- Travel fellowship for Complexity science winter school. Awarded by the Complexity Institute at Nanyang Technological University (Singapore)
- 2017 **Scholarship** for Computational social science summer school (Sardinia, Italy). Granted by the Gesis Leibnitz-Institut für Sozialwissenschaften

# 7 Service to profession

## 7.1 Reviewing

I have reviewed manuscripts for Nature Human Behaviour, Rationality & Society, the Journal of Artificial Societies and Social Simulation, Online Social Networks and Media, Frontiers in Physics, Applied Network Science, PLOS Sustainability and Transformation, Quality & Quantity, the Conference on Autonomous Agents and Multiagent Systems, Artificial Life, the Journal of Cleaner Production, and Data Science.

# 7.2 Committees and memberships

# Organizing Committee of the 7th Pyrenean Interdisciplinary Research Event (PIREN)

2022

Institute for Advanced Study in Toulouse, France

Together with two colleagues, I organized the yearly internal conference that took place on October 19-21, 2022 in Argelès-sur-Mer

#### **Expert Committee Strategic Multi-Annual Plan**

2020

The Netherlands Institute for Social Research ('Sociaal en Cultureel Planbureau', The Netherlands)

Together with a handful of social science scholars I was invited to review the strategic five-year plan that will be the basis for the research agenda for this government research agency.

## **Committee Data Transparency**

2018 - 2020

University of Groningen, The Netherlands

The committee is appointed to stimulate a careful approach to handling research data, harmonize and monitor Data Management Protocols on the institute and faculty level, advising the Faculty Board on all matters related to handling research data, and submitting a yearly report on these matters

# Program committee for 'Summer School Series on Methods for Computational Social Science'

2018 - 2019

The program committee advises the organizers on invitees for the summer school.

# 7.3 Workshops organized

- 2021 'Social Influence Modeling in Python Using defSim' with Dieko Bakker and Anton Laukemper at the European Social Simulation Association's SocSimFest
- 2019 'Validating Models of Opinion Polarization in the Digital Era' with Jan Lorenz, Andreas Flache and Michael Mäs at the European conference for Computational Social Science [link]

# 8 More information and references

For a detailed CV and references, please email me at marijn.keijzer@iast.fr.