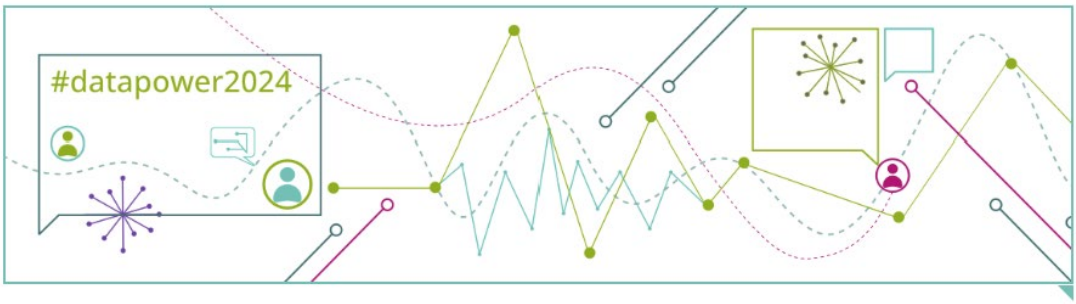
DATA POWER 2024

Situating Data Practices Beyond Data Universalism



International Institute of Information Technology Bangalore (IIIT-B)
University of Graz Austria
Online
4th - 6th September 2024

Webpage: https://datapowerconference.org/data-power-2024/about-2024/
Email: DataPower2024@gmail.com

University of Sheffield
iiit-b ज्ञानमुत्तमम्
UNI GRAZ
Carleton University School of Journalism and Communication

Contents

Welcome from the Hosts

Dear participants,

We welcome you to the 5th Data Power Conference in Bangalore, Graz, and online. Since 2015 the Data Power Conferences have hosted critical reflections on data power and the social, political, economic, and cultural consequences of the increasing presence of data in our lives, workplaces, and societies. *Data Power 2024* focuses on situating data practices and looking 'beyond data universalism' (Milan and Treré, 2019). We have received 170 submissions for individual papers, closed panels and making & doing sessions that followed our call. These submissions now form 32 panels and six Making and Doing Sessions. In addition, we have invited four keynote presentations. Collectively these contributions aim to:

- Situate data practices in the power relations that shape their creation and use in the world
- Explore the importance of place, space, time and context in the making of data and the effects of data power
- Examine the centres of data power and their infrastructures

In addition, the contributions ask:

- What constitutes rigorous methods when it comes to researching data power locally and globally?
- To what extent does critical data power research need to focus on specific instances of data power in action?
- What generalised critiques can be made from our field?

As always, the Data Power Conference remains concerned with in/equalities, discrimination, questions of justice, rights and freedoms, agency and resistance. To facilitate dialogues across disciplines and with stakeholders, the conference features papers, panels, making and doing sessions from interdisciplinary teams including disciplines incorporating aspects of data science, and papers which incorporate non-academic collaborators from a range of sectors. We are also running the conference in a hybrid mode for the second time in order to increase accessibility and further dialogue between scholars between different world regions.

We look forward to three exciting and thought-provoking days and are delighted to welcome an excellent range of delegates from Asia, the Pacific, the Americas, and Europe. As in other years, we will record the presentations and make them available afterwards.

We wish you all a fantastic conference and look forward to stimulating presentations and discussions!

Janaki Srinivasan & Amit Prakash, IIIT-Bangalore (India)
Juliane Jarke, Thomas Zenkl & Gwendolin Barnard, University of Graz (Austria)
Jo Bates & Helen Kennedy, University of Sheffield (UK)
Tracey P. Lauriault, Carleton University (Canada)

Contact: DataPower2024@gmail.com

General Information

Bangalore, IIIT-B

- **Location:** R109, R305, R306 within the IIIT-Bangalore campus located at 26/C Electronics City, Hosur Road, Bangalore 560100. Electronics City is located about 20km south of the MG Road area of Bangalore, and is reachable by private transport, cab or bus. Please account for traffic and avoid the peak hours of 8.30-10.30 am and 5.30-7.30pm in traveling to or from Electronics City
- **Local Contact:** Janaki Srinivasan (janaki.srinivasan@iiitb.ac.in) and Amit Prakash (amitprakash@iiitb.ac.in)
- **Refreshments:** The IIITB campus has two shops that serve tea, coffee, packaged snacks and light eats. In addition, the conference days will include a number of coffee/tea breaks, that are included in the fee.
- **Lunch:** Lunch will be served on Sep 5th and 6th at the venue, and is included in the fee
- **Dinner:** We will host a conference dinner in Electronics City on Sep 4th. Dinner will also be served on 5th of September at the conference venue between sessions. Both dinners are included in the fee.

Graz, Uni GRAZ

- **Location:** University of Graz, **ReSoWi** (rooms HS15.02, HS15.03, LS15.01, LS 15.02, LS 15.03), Universitätsstrasse 15, 8010 Graz.
- **Local Map**: with information about conference location, bicycle rentals, gender neutral toilets, ice cream spots and much more Local Map
- **Local Contact:** Juliane Jarke (juliane.jarke@uni-graz.at), Gwendolin Barnard & Tom Zenkl (datapower@uni-graz.at)
- **Refreshments:** (coffee, tea and water) will be served during the breaks.
- **Lunch** will be provided to participants and is included in the fee. All meals and snacks will be vegetarian with a good range of vegan options. Our caterer 'Die Speiß' focuses on cooking with hyper-regional, seasonal and if possible, organic produce.
- **Dinner** on the 5th of September, 6.30 pm will take place in the Castle of Graz upon invitation by the Governor of Styria. Address: Grazer Burg, Hofgasse 15, 8010 Graz (see also map above). No formal dress code. **Please make sure you bring your invite** (included in the welcome pack). You can join a walk to the castle from the conference venue starting at 6pm just outside the conference rooms.
- **Farewell** on the 6th of June will take place after the closing of the conference and in front of the building with sparkling beverages.

Online

- **Location:** All the keynotes, the book launch and sessions will be broadcast and hosted through Zoom. You will be emailed a **FINAL Programme at a glance** a few days prior to the conference with the links. Audio-visual recordings will be rebroadcast and archived for future access.
- **Participation in panels:** All online panels will be chaired by someone who keeps track of time and moderates the Q&A. We also have conference technical assistants who will host the Zoom sessions and keep an eye on the chat. We will try to facilitate Q&As in which you can ask questions directly via audio. However, we all know that technology sometimes refuses to cooperate. So please be prepared to raise questions via the chat.

Program-at-a-Glance

LINK to Program-at-a-Glance

*** Disclaimer: In case there are any differences between timings and/or room locations of the full program and the program-at-a-glance, please note that the program-at-a-glance is the most up-to-date version.

Keynote Biographies and Abstracts

DAY 1 Keynote 1 In-Person Bangalore, B-RM: R109 G-RM: HS 15.03 Wednesday September 4

Time:	Bangalore 17:00-18:15	Graz 13:30-14:45

"Leaving no one behind": Data gaps and exclusion agenda

Anita Ghai, Professor and Dean (retd), Ambedkar University, Delhi, India

Abstract: I take the epistemic location of an academician with visible mobility impairment for my keynote. My life, and that of my fellow disabled, is interwoven with data, beginning from prescription, diagnosis, medical assessment and finally certification. Digital transformation creates a data ecosystem with data on every aspect of our world. However, for people with disabilities, data gaps are inescapable from our past, present and future. While every human being requires a number of documents, such as voter identification card, social security card, driving license etc., disabled people also have to be "certified" for any of their requirements. Though increasing volumes of diverse data from multiple sources create significant opportunities for drawing out valuable knowledge, for the disabled data is often disaggregated. My objective would be to share the lived realities of disabled people, and weave this reality with issues such as certification, inclusion in census data, Aadhar (UDID) and exclusion in policy networks. My submission is on how disabled bodies are rendered into digitized information through quantification but also on how different kinds of value is attached to government, big NGOs and perhaps communities.

In today's digital era, big corporations need not own big armies, as companies are protected by nation-states and bailed out when required. The neocolonial project runs on digital platforms, while the popular narrative of bridging the digital divide between "able bodied" and disabled by giving internet access to millions of people resembles the idea of the "able, white upper-class saviour" liberating the "noble savage" through modern Western education. Social media's grand plan of providing access to all can be best understood as a neocolonial strategy to mine the data of billions by equating it with water and land. Therefore, nations endorsing democratic values should be especially wary of the trap of neocolonialist forces, as such nations are particularly vulnerable to their project. I will conclude by underscoring the fact that counting the disabled has to be seen as separate from the issue of counting disabled people, when seen in terms of their quality of life and their participation in society, as even those who do not have benchmark disability may face different forms of discrimination.

Biography

Anita Ghai retired as Dean and Professor in School of Human Studies, Ambedkar University Delhi, which she had joined in 2015. Anita was earlier an Associate Professor in the Department of Psychology in Jesus and Mary College, University of Delhi. Her interests are in critical disability studies and issues of sexuality, care, psychology and gender. As a former fellow at the Nehru Memorial Museum Library, Teen Murti Bhavan, New Delhi, Anita has researched on issues of care of disabled women recipients and providers of care with leanings towards feminist and disability theory. Anita has been the former President of the Indian Association for Women's Studies. She has authored Re-thinking Disability in India, Routledge, New Delhi (2015), (Dis) Embodied Form: Issues of Disabled Women (2003), coauthored The Mentally Handicapped: Prediction of the Work Performance with Anima Sen and edited Disability in South Asia: Knowledge and Experience (2018). She is also an editor for the journals Disability and Society, Scandinavian Journal of Disability Research and Indian Journal of Gender studies.

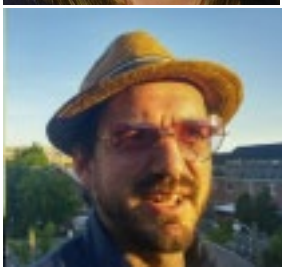
DAY 2, Keynote 2 In-Person Graz: RM: HS15.03 B-RM: R109 Thursday September 5

Time:	Graz 13:00-14:15	Bangalore 16:30-17:45

Tales from the Data Swamp: older adults speak

Kim Sawchuk, Research Chair in Mobile Media Studies, Concordia University

Eric Craven, Community Development Librarian, Atwater Library and Computer Centre Montreal



Abstract: The datafication of later life is fraught with real world ramifications for those living in situations of precarity. This presentation addresses our complementary experiences of doing community-engaged, participatory research, in various digital literacy projects with older adults over the past 15 years. These projects have largely been oriented towards empowering older adults, many from marginalized communities, to not only access digital culture, but to transform it. This culture has changed within the past 10 years. Increasingly participation in a digital world is no longer an option, but obligatory. Likewise, increasingly engagement is not always a clear choice, given the deep imbrication of ordinary everyday devices in routine corporate information-gathering and deep data mining. Offering literacy training within this context is fraught with a variety of challenges and risks, including legitimate concerns about privacy, cybersecurity, or the potential of identity theft. How, in this world where data is power, can we provide digital literacy training in good faith? How might we ethically reassure our participants that they should participate, when WE don't really trust these information systems? This keynote will discuss the desires and dilemmas identified by the older adults we have worked with, and discuss the creative strategies developed to confront data power in this realm. In particular, we focus on what an attention to age, considered not as a variable, but as a critical lens, has to tell us. The older adults we have worked with have lived a lifetime of technological change, and thus have a complex tale to tell of their relationship to this datasphere. We also highlight a commitment to "research-creation" as an approach. In the first instance we question what constitutes data from this perspective, and allows us to express this ambivalence and our desire to navigate this territory collectively and creatively. Rather than understanding data as a pristine, clean universe of swirling ones and zeros, we instead offer the image of the swamp as a central metaphor for our discussion. Swamps can be fetid pools of putrid, stagnant water- at least representationally- but they are also rich ecosystems that can nourish and sustain life.

Biographies

Kim Sawchuk is the Director of engAGE: Centre for Research on Aging Montreal and the ACTLab (Aging + Communication + Technology), Concordia University is the Director of the Aging in Data project. She holds a Concordia University Research Chair in Mobile Media Studies, which focuses on how older adults engage with digital technologies in their everyday lives (www.actlab.ca) as well as critical disability studies. Dr. Sawchuk has written articles, book chapters, policy reports and edited books and special journal issues on aging with technology. Her research often involves participatory action methods, and finding creative collaborative solutions to shared social issues, in the name of social justice. Kim is an active member of the Board of RECAA: Respecting Elders Communities Against Abuse. Most recently she has co-developed an escape room on older adult mistreatment with community organizations and experts in older adult mistreatment. Kim will be presenting with Eric Craven.

Eric Craven is a creative digital media facilitator who has worked with many community groups and educational institutions in Montreal. For 12 years, he was the Community Development Librarian at the Atwater Library and Computer Centre. Eric's work focuses specifically on using digital media to disrupt normative expectations and perceptions in the community. As coordinator of Atwater Library's Digital Literacy Project, he has created programming that directly responds to community needs, creating spaces for participants to express themselves, find new ways to talk about things important to them and to help them build their own communities and work towards their own goals through creative digital media projects. Eric has worked with a wide range of academic and community stakeholders bringing different groups of people together, ages 6 through 96, to express themselves through digital art and media including many community new media projects focusing on seniors and digital music and video. Eric will be presenting with Kim Sawchuk.

DAY 2, Keynote 3 Online: B-RM: R109 G-RM: HS 15.03 Thursday September 5

Time:	Graz 16:20-17:35	Bangalore 19:50-21:05

Open Worlds and the Limits of Datafication

Lucy Suchman, Professor Emerita Anthropology of Science and Technology, Lancaster University

Abstract: This talk is in conversation with Science and Technology Studies (STS) and kindred research that works to denaturalise data by attending closely to the systems of categorisation, labour, interests, and erasures that enable datafication. I take as my case in point projects in the automation of targeting, both in its more literal operations in the context of militarization and armed conflict and the broader sense of multiple practices of discriminatory profiling. Central to the analysis is close attention to the elision of closed worlds of data with the open worlds from which data are derived. Fixed and labelled within datasets, images of things and traces of lives stand as proxies suitable for computational analysis. Investigations informed by STS can help to recover the complex histories, ambivalences and multiplicities that escape these operations, opening spaces in which to consider the political economies of datafication and the possibilities of knowing otherwise.

Biography

Lucy Suchman is Professor Emerita of the Anthropology of Science and Technology at Lancaster University in the UK. Before taking up that post she was a Principal Scientist at Xerox's Palo Alto Research Center (PARC), where she spent twenty years as a researcher. Her current research extends her longstanding critical engagement with the fields of artificial intelligence and human-computer interaction to the domain of contemporary militarism. She is concerned with the question of whose bodies are incorporated into military systems, how and with what consequences for social justice and the possibility for a less violent world.

DAY 3, Keynote 4 In-Person Bangalore, RM: 109 RM: HS 15.03 Friday September 6

Time:	Bangalore 14:15-15:30	Graz 10:45-12:00

Aiming for a marathon and not a sprint: Critical reminders for the current AI moment

Vidushi Marda, Director of Ecosystem Building, AI Collaborative

Abstract: In 2024, we are at the pinnacle of AI hype, investment and development. While mainstream narratives about this current moment of tech development emphasize scale and speed of “innovation”, Vidushi’s work has found that a deliberate understanding of the infrastructures, datasets, assumptions and institutional realities that surround and underlie AI systems serve true growth and innovation much better in the long run.

Drawing on a decade of work on data, technical infrastructures, human rights and data driven systems, Vidushi will highlight critical pathways for expanding and strengthening our understanding of the societal and contextual impact of data-driven systems, with a focus on asymmetric power relations.

Biography

Vidushi Marda is an internationally recognised human rights lawyer with over a decade of experience working on technology policy, law, and infrastructure across multiple jurisdictions. She investigates the societal impact of artificial intelligence systems and has been actively involved in shaping AI policy and regulation in India, the EU and at the UN level.

Vidushi has consulted with a wide range of actors from civil society, government, industry and academia. She is a prolific author and guest lecturer. Her work has been published in various peer reviewed academic journals, cited by multiple authorities including the Supreme Court of India, the United Kingdom House of Lords, and several UN Special rapporteurs. Her thought leadership has featured in outlets like The Guardian, The Financial Times, Time Magazine, among others.

Vidushi is currently Director of Ecosystem Building at the AI Collaborative, where she establishes and sustains relationships and partnerships with key stakeholders who share a common goal of regulating AI in the public interest. Prior to this, she co-founded REAL ML, a global network that aims to empower and support interdisciplinary practitioners from a wide range of sectors and geographies to challenge the unjust application of technologies. Between 2017 and 2023, Vidushi developed and led ARTICLE 19’s inaugural international AI portfolio. Through research and advocacy, Vidushi helped A19's global and regional

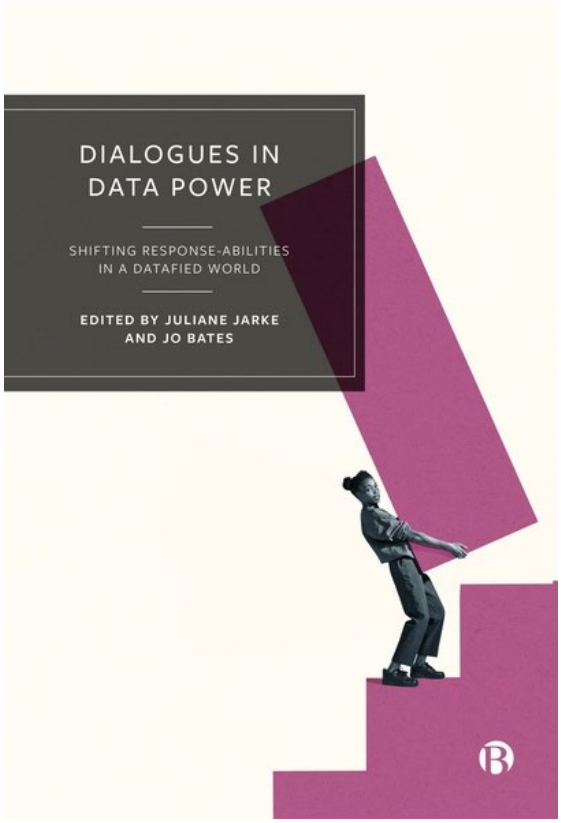
teams engage with constituencies in a contextualized, relevant manner, and she regularly provided counsel and input into draft UN resolutions on privacy, biometrics, and AI. She is an advisor at Data and Society, a member of the IPIE Scientific Panel on Global Standards for AI Audits, and the UN Global Pulse Expert Group.

DAY 3 Book Launch: Dialogues in Data Power In-Person Graz and Online: RM: HS 15.03 RM: 109 Friday September 6

Time:	Graz 12:00-12:30	Bangalore 15:30-16:00

Welcome and introduction by the editors, Juliane Jarke and Jo Bates **& Introduction to one of the book's chapters** and the collaborative writing process by Karen Louise Smith, Lyndsay Grant, Priya C. Kumar, and Lorenzo Giuseppe.

The book is an experiment in facilitating interdisciplinary dialogue and collective scholarship among 80 researchers through nine collectively authored chapters. Contributors to each chapter were invited based on their presentations at the 4th Data Power conference which attracted 175 participants and took place in June 2022 simultaneously in Canada, Germany, the UK, and online. In a series of workshops for each of the chapters, the invited contributors explored their various perspectives, experiences, and responses to the chapter's theme. They then collectively wrote a joint introduction to the chapter, as well as individual sections that provide their own perspective. This responsive process led to what authors in different chapters refer to as a 'kaleidoscope' or 'braid' of scholarly engagement. The process, hence, did not aim to provide a conclusive view on any given theme but allowed for a diffractive writing of multiple and also differing or disagreeing perspectives. To further increase the dialogue, we also invited scholars – mostly from outside the Data Power realm – as discussants for the individual chapters. Their task was to provide a response and situate the arguments in their own research. Through this form, we have created a space for dialogue and mutual encounter that is difficult to find otherwise in such an interdisciplinary field.



About the Book: This Open Access book presents emerging themes and future directions in the interdisciplinary field of critical data studies, loosely themed around the notion of shifting response-abilities in a datafied world.

In each chapter an interdisciplinary group of scholars discuss a specific theme, ranging from questions around data power and the configuring of data subjects to the intersection of technology and the environment.

The book is an invaluable dialogue between disciplines that introduces readers to cutting-edge arguments within the field. It will be a key resource for scholars and students who require a guide to this rapidly evolving area of research.

Editors

Juliane Jarke is Professor of Digital Societies at the University of Graz.

Jo Bates is Professor of Data and Society at the University of Sheffield.

Contact: DataPower2024@gmail.com

Closing Remarks & Farewell

Day 3 Online: Friday September 6

Time:	Graz 16:45-17:00	Bangalore 20:15-20:30

Data Power 2024 Committee

Please join us in convening together from the various locations to mark the ending of the 5th Data Power Conference. If you are attending in-person in Graz, please join us for a farewell drink afterwards.

Overview Program

Day 1

Wednesday September 4

Welcome and Opening Remarks

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 14:00-14:25	Graz 10:30-10:55

Session I

Time:	Bangalore 14:35-16:00	Graz 11:05-12:30

In-Person Panel BP1 Situating data in welfare infrastructures (Bangalore)
B-RM: R305 **G-RM:** HS 15.03 **(Chair:** Amit Prakash**)**

- **Datafied Bodies and Emerging Governmentalities: The Rise of Data Power in the Case of Health ID in India,** Faheem Muhammed M. P
- **Nurturing Data: Keeping data alive and well to become and stay powerful,** Meera Muthukrishnan
- **MIS-sing Rights: The Case of India's Employment Guarantee Programme,** Laavanya Tamang
- **Addressing Food Security, Escalating Precarity and Informal Employment : Digital Public Infrastructure and Emergent Welfare Frameworks in post-COVID India,** Veena Ranna Naregal

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Online Panel OP1: Data Sharing and Connectivity **(Online)**
G-RM: HS 15.02 **(chair:** Itzelle Medina Perea**)**

- **Power struggles and the makings of interoperability in archaeological data (work),** Isto Huvila
- **"Biobanks are for sharing": Power-knowledge relationships mediated by biological and clinical data,** Brígida Riso
- **A data journey perspective on the Taiwanese #MeToo movement,** Mei-Hua Chen, Yuwei Lin, Yi-Chia Tsao
- **Examining Hierarchies of Literacy and Connectivity: Community Libraries and Data Justice,** Zoya Chadha
- **Data's Legal and Material Technicalities,** Jennifer Raso, Nofar Sheffi

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Keynote 1

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 17:00-18:15	Graz 13:30-14:45

BANGALORE KEYNOTE: "Leaving no one behind": Data gaps and exclusion agenda, Anita Ghai

Session II

Time:	Bangalore	Graz 15:05-16:30

Online Panel OP2 Data, Health and Education **(Online)**
G-RM: HS 15.03 **(chair:** Chris Till**)**

- **The question of 'ancestry' in educational genomics: Race and IQ Redux?,** Dimitra Kotouza
- **Spotify as a technology for integrating health, exercise and wellness practices into financialised capitalism,** Chris Till
- **Piña Colada for Breakfast: a practice-focused analysis of power in a health and ageing innovation pilot,** Carla Greubel
- **Situating Sphere Transgressions: navigating public-private relationships from Danish a app-market,** Eva Otto
- **Disability Justice And/As Data Justice: Datafying and Governing the Body in Urban India,** Kimberly Fernandes

Online Panel OP3 Data Harms and Perceptions **(Online)**
G-RM: HS 15.02 **(chair:** Doris Allhutter**)**

- **The Problematic Data Power of Online Vigilante Initiatives: Critical Approaches toward Governmental and Internet Platform Support for Digilantism,** Jo Ann Oravec
- **Examining the Datafication of African Consumers through Digital Microlending,** Chinasa T. Okolo
- **Platforms on trial. Mapping the Facebook Files/Papers controversy.,** Matías Valderrama Barragán
- **Turkish young adults' perceptions and experiences of platform surveillance,** Ozge Girgin
- **The Ears of Data Power: A Case Study of Crisis Text Line,** Stephen Neville

M&D Session

Time:	Not hybrid	Graz 15:05-18:15

*** Please note that you need to book the Making & Doing Sessions (free of charge, up to 25 places per session): https://business-analytics.uni-graz.at/en/data-power-conference/

In-Person Making and Doing GMD Situating Data Practices through Data Walking **(Graz)**
G-RM: LS 15.03

- **Situating Data Practices through Data Walking,** David Hunter, Katja Mayer, Katrin Amelang, Juliane Jarke

In-Person Making and Doing GMD Performing Power **(Graz)**
G-RM: LS 15.02

- **Performing Power: Workshop in speculative dialogue and roleplay as artistic tools for (re)crafting data storytelling strategies,** Joan Somers Donnelly

In-Person Making and Doing GMD The Joy of Sets **(Graz)**
G-RM: LS 15.01

- **A visual arts workshop exploring the role of data practices in sex tracking apps, sexual consent apps and smart sex toys,** Rebecca Saunders

Session III

Time:	Bangalore	Graz 16:50-18:15

Online Panel OP4 Data Power in National Contexts **(Online)**
G-RM: HS 15.03 **(chair:** Monika Fratczak**)**

- **Datafing the poor: from techno-solutionism to algorithmic neoliberalism,** Henry Chavez, Alexandra Gualavisí
- **Digital surveillance of work in Brazil: Unveiling the imaginaries from Brazilian employers,** Fabricio Barili
- **Data Power in China: A Critical Assessment,** Prabhat Mishra
- **Open government in Latin America: promises, imaginaries and techno-optimism,** Daniel Vizuete
- **A situational analysis of Independent Sage: data practices and data politics of situating the Covid emergency in society,** Noortje Marres, Oihane Etayo

Online Panel OP5 Data Justice and Inclusion **(Online)**
G-RM: HS 15.02 **(chair:** Itzelle Medina Perea**)**

- **Towards Inclusive Data Governance? The Role of Affected Communities in Public Engagement Initiatives,** Arne Hintz
- **Ageism and the digital exclusion loop: The role of (limited) data,** Mireia Fernández-Ardèvol
- **Ms: Take a data walk with me! Datafication in the Smart City,** Cora van Leeuwen, An Jacobs
- **Diversity, Inclusion and Equity in data-driven translational research,** Li Zheng
- **A Six-Month Ethnography to Understand Articulation of Risk and Power Relations in India and US,** Sucheta Lahiri

Session IV

Time:	Bangalore	Graz 18:35-20:00

Online Panel OP6 Theorising Data Power & Governance **(Online)**
G-RM: HS 15.03 **(chair:** Tracey Lauriault**)**

- **Localizing AI Governance: Combatting Techno-solutionism in the Smart City,** Laine McCrory
- **A river of data runs through it: Examining urban circulations in the digital age,** Ryan Burns

- **(Dis)affective Datafication: The Affective Terrain of Human-Data Relations,** Rohan Grover, Josh Widera, Mike Ananny
- **Understanding data controllers' strategic interests and reluctance to share their power over data,** Alexandre Humain-Lescop
- **Follow the Thing: Situating Data vs. its Universalisation,** Azadeh Akbari

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Online Panel OP7 Gathering and Communicating Data **(Online)**
G-RM: HS 15.02 **(chair:** Monika Fratczak**)**

- **Civil-Society Monitoring of Nuclear Activities and the Entrenchment of the Nuclear Order,** Sara Al-Sayed
- **Questioning "Ground Truth" Data: Addressing Bias and Consent Challenges in Artificial Intelligence Development,** Mykelle Pacquing, Jonathan Obar, Pirathayini Srikantha, Ian Stedman
- **The Power of Data Storytelling: Creative Stories for Data Protection Advocacy,** Alejandro Alvarado Rojas
- **Digitalizing Sewage: the politics of producing, sharing, and operationalizing data from wastewater-based surveillance,** Josie Wittmer, Carolyn Prouse, Mohammed Rafi Arefin

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Day 2

Thursday September 5

M&D Session

Time:	Bangalore 10:30-12:00	Not hybrid

In-Person Making and Doing The Divide That Is Multiplying Fast: Experiencing digital divide to understand it **(Bangalore)**
B-RM: R305

- **The Divide That Is Multiplying Fast: Experiencing digital divide to understand it,** Meera Muthukrishnan

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In-Person Making and Doing Design your own feminist server **(Bangalore)**
B-RM: R305

- **Design your own feminist server,** Padmini Ray Murray

In-Person Making and Doing Visualising citizen generated data for solutions on safer cities **(Bangalore)**
B-RM: R305

- **Visualising citizen generated data for solutions on safer cities,** Elsa Marie DSilva

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Session VI

Time:	Bangalore 12:30-13:55	Graz 09:00-10:25

In-Person Panel GP1 Data Power in Motion and Transformation: Confronting Theoretical and Methodological Challenges **(Graz)**
G-RM: HS 15.02 **(chair:** Anu Masso**)**

- **Data Power in Motion and Transformation: Confronting Theoretical and Methodological Challenges**, Anu Masso
- **Exploring Perceived Transformations in Police Work through Story Completion Technique,** Tayfun Kasapoglu
- **Decoding (Super)diverse cities: A Cognitive Exploration of Data Diversity and Perception in Autonomous Vehicle,** Mergime Ibrahimi
- **Mobile Safety App and Global South: Crowdsourced Data and Mobility Transformation,** Pauline Baudens
- **Bridging Urban Divides: Enhancing Access to Shared Mobility Services through Public-Private Data Collaboration,** Anniki Puura
- **Navigating AI Literacies: Insights from In-depth Interviews with Generation Z,** Jevgenia Gerassimenko, Kateryna Lobanova

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In-Person Panel GP2 Situating Care-full Data Studies **(Graz)**
G-RM: LS 15.03 **(chair:** Irina Zakharova**)**

- **Careful Validation in Environmental Data Arenas: Thinking Through Dilemmas of Data Universalism in Air and Biodiversity Datafication,** Bartosz Ślosarski
- **Between data-territories and embodied urban experiences: Uber, drivers, and**

platformised ways of knowing the city, Abel Guerra

- **Between local and generalizable: Organizations as typical contexts reconfiguring data power,** Stefanie Büchner
- **Digital Citizenship as care: perspectives from UK secondary schooling,** Ted Palenski

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In-Person Panel GP3 Situating Participation, Co-design and Co-creation **(Graz)**
G-RM: LS 15.02 **(chair:** Yana Boeva**)**

- **Visualising the school?! A critical study on co-designing data-based interfaces of learning management systems,** Nina Brandau
- **Experiences with participatory design of entity-relationship models,** George Fletcher, Julia Stoyanovich
- **Computing the Student: Co-developing a research agenda for higher education surveillance with students,** Lyndsay Grant, Jessica Ogden, Kuba Jablonowski
- **Citizen data projects. Between consumerism, amateurism and empowerment,** Marten Knol, Mirko Tobias Schäfer, Albert Meijer

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In-Person Panel GP4 Situating Data Power in Data Ecosystems and their Governance **(Graz)**
G-RM: LS 15.01 **(chair:** Fariba Karimi**)**

- **The dark age of social media data access,** Jana Lasser
- **Data Power in Food Systems: A Decolonial Critique,** Aditya Singh
- **A genealogy of EU data governance,** Gijs van Maanen, Charlotte Ducuing, Tommaso Fia
- **Who Speaks When the Data Speaks for Itself: Surveying Grammars of Graphics,** Gabby Resch

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Session VII

Time:	Bangalore 14:10-15:35	Graz 10:40-12:05

In-Person Panel BP2 Data as power, power as data **(Bangalore)**
B-RM: R305 **G-RM:** HS 15.03 **(chair:** Janaki Srinivasan**)**

- **Unravelling Data Power Dynamics in a Food Delivery Platform A Perspective on Labour Management,** Nimmi Rangaswamy, Tanmay Goyal
- **India Stack: The Public-Private Roads to Data Sovereignty**, Jyoti Panday
- **Data Body of the Digital Citizen: A Case of Indian Citizenship Laws,** Kenny Bhatia, Anushree, Gurpreet Kaur
- **The eQuality Project Youth Summit: Using Deliberative Dialogue Methodology to Enable Young People to Challenge the Use of their Data in Education,** Valerie Steeves, Jane Bailey, Jacquelyn Burkell

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In-Person Panel GP5 Data Harms and Aging in Canada **(Graz)**
G-RM: HS 15.02 **(chair:** Joanna Redden**)**

- **Data Harms and Aging in Canada**
- **Data Harms in Canada and the Significance of Age,** Joanna Redden, Kim Sawchuk, Constance Lafontaine
- **Age and Data Harms in Canadian Francophone News Media,** Francis Léveillé

- **Data Harm as Social and Affective Harm,** Meghan Voll, Janelle Allan

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In-Person Panel GP6 (Un)desirable Bias and Responses to Data Power **(Graz)**
G-RM: LS 15.03 **(chair:** Thomas Zenkl**)**

- **Complicating the call for more diverse datasets in four dimensions,** Paola Lopez
- **Data Universalism or Infrastructural Perspectivism? Challenges in the Wikimedia Abstract Project,** Nathalie Casemajor
- **Who controls my gender? Power dynamics in Wikidata's representation of gender,** Daniele Metilli, Beatrice Melis, Marta Fioravanti, Chiara Paolini
- **Big Data, Precision Medicine, and Sex/Gender: From "Desirable Bias" to Binary Sex Essentialism,** Kelsey Ichikawa, Marion Boulicault, Sarah Richardson

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In-Person Panel GP7 (In)visibilities in environmental and spatial **(Graz)**
G-RM: LS 15.02 **(chair:** Bartosz Ślosarski**)**

- **Horsepower = Data Power? Data labor and power in the context of Verkehrswende politics in Frankfurt, Germany,** Janine Hagemeister, Catharina Dietrich
- **Entangled Atmospheres: Gaslighter 727 - Speculative Design of Air Pollution Sensing,** Khadisha Dabayeva, Fabian Fischer
- **"The actual project data is not integrated into this model": Contextualizing data power in digital urban planning,** Yana Boeva
- **Power of data imageries and materiality of borders in times of crisis,** Sanna Valtonen, Kaarina Nikunen

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In-Person Panel GP8 Situating Data Power in Data Brokers and their Infrastructures **(Graz)**
G-RM: LS 15.01 **(chair:** Nikolaus Pöchhacker**)**

- **News from Yesterday: Private job agencies - data broker in labor markets in the 19th century,** Joern Kleinert, Wiltrud Moelzer
- **Data Sales: Mapping the Procurement of Data and Data Products in Dutch Public Management,** Mirko Tobias Schäfer, Sofie De Wilde De Ligny, Iryna Susha
- **Sphere Transgressions in Medical Research: Tactical Engagements with Apple's ResearchKit,** Marthe Stevens
- **Uneven data flows, contested sovereignties and the emergence of Southern European interconnection hubs,** Finn Dammann

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Keynote 2

G-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 16:30-17:45	Graz 13:00-14:15

GRAZ KEYNOTE: Tales from the Data Swamp: older adults speak, Kim Sawchuk & Eric Craven

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Session VIII

Time:	Bangalore 18:05-19:30	Graz 14:35-16:00

In-Person Panel GP9 To code or not to code: Is this the question? **(Graz)**
G-RM: HS 15.02 **(chair:** Juliane Jarke**)**

- **To code or not to code: Is this the question? Introduction to low code and no code plattforms.** Stefan Thalmann, Thomas Gremsl, Stefan Storr, Bettina Kubicek, Reinhold Esterbauer, Christoph Spöck, Simon Grob, Laura Kunz, Magdalena Eder, Clemens Lauermann, Benjamin Gigerl

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In-Person Panel GP10 Critical Data Literacies **(Graz)**
G-RM: LS 15.03 **(chair:** Lyndsay Grant**)**

- **"Make it colourful and fun!" – Strategies and challenges for fostering critical datafication literacy in practice,** Ina Sander
- **Is 'AI textbook' good for education?,** Saemi Jung
- **Global South perspectives on privacy education for children: Examples from the Philippines and Saudi Arabia,** Priya Kumar, Hongyi Dong, Fatimah Albargi
- **The influence of DWP organisational culture on the adoption of algorithmic bias mitigation practices,** Hadley Beresford

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In-Person Panel GP11 Situating Data and Data Work **(Graz)**
G-RM: LS 15.02 **(chair:** Katrin Amelang**)**

- **'Everyday' data power: Ethnomethodology and the pre-emption of social need in UK welfare services,** Jess Brand
- **The 'doings' behind data: an ethnography of police data construction,** Isabelle Fest
- **Perpetual repair of public sector algorithmic systems,** Minna Ruckenstein, Tuukka Lehtiniemi
- **Bad patients, good tech: new infrastructures of medical knowledge production,** Sofie Kronberger

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In-Person Panel GP12 Situating Data Power in the Public Sector **(Graz)**
G-RM: LS 15.01 **(chair:** Stefanie Büchner**)**

- **Data power, inequality and the welfare state,** Kaarina Nikunen, Karoliina Talvitie-Lamberg, Sanna Valtonen
- **Datafied Welfare: Promises and expectations of data power in regulatory discourses,** Irina Zakharova
- **Where technology leads, the problems follow: Technosolutionism and the Dutch contact tracing app,** Lotje Siffels, Tamar Sharon
- **The Fog of Transparency: A Critical Inquiry of Algorithm Registers,** Mirko Tobias Schäfer, Iris Muis, Julia Straatman

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Keynote 3

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 19:50-21:05	Graz 16:20-17:35

ONLINE KEYNOTE: Open Worlds and the Limits of Datafication, Lucy Suchman

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Day 3
Friday September 6

Session IX

Time:	Bangalore 12:30-13:55	Graz 09:00-10:25

In-Person Panel BP3 Reimagining data **(Bangalore)**
B-RM: R305 **G-RM:** HS 15.03 **(chair:** Janaki Srinivasan**)**

- **Rediscovering Interoperability: A Vital Tool to Unlock the Future of Social Media,** Sachin Dhawan, Fawaz Shaheen, Jhalak Mrignayani Kakkar
- **Another future is possible: Reimagining data ownership and stewardship with and for communities,** Padmini Murray, Siddhant Shinde
- **Redefining Data Practices: A Data Feminist Perspective on Privacy as Infrastructure,** Shipra Yadav

Online Panel OP8 Data Infrastructures **(Online)**
G-RM: HS 15.02 **(chair:** Arne Hintz**)**

- **A New Wave of Data Power?: Data Integration and Analysis Platforms between desilosation and interoperability,** Simon Egbert
- **Dataism II as a strategy against data colonialism: Divergences in digital twinning in Germany's and Japan's COVID-19 pandemic responses,** Harald Kümmerle, Johannes Thumfart
- **Data power in the public sector. How data are used to exercise power in public health insurance,** Astrid Mager, Doris Allhutter
- **Data Power and National Security,** Miah Hammond-Errey
- **Centring Indigenous and queer perspectives on Google's AI/ML,** Bronwyn Miller

Keynote 4

B-RM: 109 **G-RM:** HS 15.03

Time:	Bangalore 14:15-15:30	Graz 10:45-12:00

BANGALORE KEYNOTE: Aiming for a marathon and not a sprint: Critical reminders for the current AI, Vidushi Marda

BOOK LAUNCH

B-RM: 109 **G-RM:** HS 15.03

Time:	Bangalore 15:30-16:00	Graz 12:00-12:30

DATA POWER BOOK LAUNCH: Dialogues in Data Power, Juliane Jarke, Jo Bates, Karen Louise Smith, Lyndsay Grant, Priya C. Kumar, and Lorenzo Giuseppe

Session X

Time:	Bangalore 17:00-18:25	Graz 13:30-14:55

In-Person Panel GP13 Growing Old With and Through Data: Situating Data Practices in Later Life **(Graz)**
G-RM: HS 15.02 **(chair:** Unmil Karadkar**)**

- **Growing Old With and Through Data: Situating Data Practices in Later Life**
- **Digital Civics and ageing,** Arlind Reuter
- **"It's like I am throwing my data into a black hole" - How older adults make sense of algorithms and (big) data,** Vera Gallistl, Katrin Lehner
- **"I don't know what you mean by that": Seeking a common vocabulary around data in later life,** Nicole Dalmer, Cal Biruk
- **"Understanding perceptions of online surveillance among older adults: A six-country perspective",** Unmil Karadkar

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In-Person Panel GP14 Situating user perspectives and lived **(Graz)**
G-RM: LS 15.03 **(chair:** Gwendolin Barnard**)**

- **Putting trust to the test: Everyday negotiations of digital surveillance on TikTok,** Andreas Schellewald
- **Data-intensive Technology Systems for Women Safety: Lessons from Bengaluru's AI-powered CCTV Network,** Udipta Boro, Fran Meissner, Karin Pfeffer
- **Centring student agency in the analysis of datafication in higher education,** Joe Noteboom
- **Personalising technology governance: the case for researching affective safety,** Linnet Taylor

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In-Person Panel GP15 Situating Data Power in Risks and Securitization **(Graz)**
G-RM: LS 15.02 **(chair:** Minna Ruckenstein**)**

- **Sharing, Caring and Breaking Silos - Ethics Shopping for Health Data Interoperability,** Petter Falk
- **Navigating the Technoscape: Spatial and Temporal Strategies of At-Risk Tech Users,** Christian Eichenmüller
- **Emergent Framings of Risk in Data Weaponization: Real, Imagined, Relative and Modal,** Jethani Suneel
- **Risk refusal: strategies to resist the logics of risk-driven surveillance regimes,** Becky Kazansky

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In-Person Panel GP16 Situating Open Data Practices **(Graz)**
G-RM: LS 15.01 **(chair:** Jo Bates**)**

- **Open Access Data, Data Capitalism and Urban Planning,** Juliette Davret, Carla Maria Kayanan, Samuel Mutter, Rob Kitchin
- **The territorial imbalances of urban open data,** Ana Maria Bustamante Duarte, Diego Fabian Pajarito Grajales, Manuel Portela
- **Navigating the Data Seas: Identifying Power Dynamics in Data Practices from a Transnational Comparative Perspective,** Alejandra Manco
- **Open Data Platforms and Governance Intricacy,** Mahardika Fadmastuti

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Session X

Time:	Bangalore 18:45-20:10	Graz 15:15-16:40

In-Person Panel GP17 Transforming Data Paradigms at the Interfaces of Open Science and AI **(Graz)**
G-RM: HS 15.02 **(chair:** Katja Mayer**)**

- **Transforming Data Paradigms at the Interfaces of Open Science and AI**
- **Re-assessing "open" in Open Science and AI,** Katja Mayer
- **Insights from Social Media Research for AI research for public interest,** Jürgen Pfeffer
- **Generative AI, reproducibility and trust in scholarly work,** Tony Ross-Hellauer
- **A glimpse into the LLM rat race,** Jana Lasser, Joao Pinheiro Neto

In-Person Panel GP18 Situating Data Activism **(Graz)**
G-RM: LS 15.03 **(chair:** Nicole Dalmer**)**

- **From power centres to peripheries: Communities confronting data injustices,** Semeli Hadjiloizou, Smera Jayadeva, Shyam Krishna
- **Diversity and Inclusion in Data Activism: Frame Resonance and the Barrier of Problem Recognition,** Jared Wright
- **Empowering Grassroots Resistance to Data-Centrism: Navigating Epistemological Ambiguity and Generatively Refusing Data-Driven Epistemologies,** McKane Andrus, Sucheta Ghoshal, Sayamindu Dasgupta
- **Collaborative methodologies for critical data power research,** Nanna Würtz Kristiansen

In-Person Panel GP19 Situating Extractive Data Practices **(Graz)**
G-RM: LS 15.02 **(chair:** Priya Kumar**)**

- **Data simulation as centers of data power,** Victoria Kontrus, Roger von Laufenberg, Vera Gallistl
- **Curious techno-hope in prison data labor,** Tuukka Lehtiniemi, Minna Ruckenstein, Sonja Trifuljesko
- **Translation, Communicative AI and Data Power,** Stefan Baumgarten
- **Critical datafication of violence: Reflections and contributions on critical data studies from Latin American contexts,** Victor H Abrego

In-Person Panel GP20 Data-In-Flux: Conceptual and Methodological Challenges in the Study of Data On Move **(Graz)**
G-RM: LS 15.01 **(chair:** Anu Masso**)**

- **Data-In-Flux: Conceptual and Methodological Challenges in the Study of Data On Move; Bridging E-Diasporas and E-Residence Governmental Programmes: Navigating Data-In-Flux in an AI-Intensive Globalized World,** Anu Masso, Igor Calzada, Mahardika Fadmastuti

Closing Remarks

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 20:15-20:30	Graz 16:45-17:00

Full Program with Abstracts

Day 1

Wednesday September 4

Welcome and Opening Remarks

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 14:00-14:25	Graz 10:30-10:55

Session I

Time:	Bangalore 14:35-16:00	Graz 11:05-12:30

In-Person Panel BP1 Situating data in welfare infrastructures (Bangalore)
B-RM: R305 **G-RM:** HS 15.03 **(Chair:** Amit Prakash**)**

- **Datafied Bodies and Emerging Governmentalities: The Rise of Data Power in the Case of Health ID in India,** Faheem Muhammed M. P

Abstract: The Indian state's move towards the digitalisation of the health sector has serious implications for how health services and rights are availed and experienced by the people, especially the poor. When biometric identity systems are put in place for authorisation and verification, people are forced to meet the demands of technical systems for accessing healthcare. This paper will look into the rise of data power in the context of datafication of health and body in India and the modes of governmentalities emerging from it. It offers a critical analysis of the making of data-based health identity systems in India with the case of the Ayushman Bharat Digital Mission (ABDM) and the subsequent Ayushman Bharat Health Account (ABHA). The ABHA number is a 14-digit identifier designed to distinguish individuals within India's digital healthcare system. It serves as a unique identity linked to Aadhaar, which facilitates enrolment in Personal Health Records (PHR) applications, including for Pradhan Mantri Jan Arogya Yojana (PM-JAY), further streamlining health data sharing.

With a case study of the South Indian states of Kerala and Puducherry, the paper investigates the norms of governmentalities embedded within datafication by looking into the requirements for entering the databases for health services and welfare. The study traces the actors -including socio-technical systems- formatting people into datasets and the inclusion and exclusion mechanisms of this health ID system. With a Foucauldian approach, the paper looks at the rise of datafication as a technique for population management, and problematise how enrolment into health identity systems becomes a condition for citizen rights to healthcare.

- **Nurturing Data: Keeping data alive and well to become and stay powerful,** Meera Muthukrishnan

Abstract: "Data are ephemeral creatures that threaten to become corrupted, lost, or meaningless if not properly cared for."

Data Bite Man: The Work of Sustaining a Long-Term Study, (Ribes and Jackson, 2013)

While debates about the varying types and degrees of data's power are on the increase in the last few decades, scholarship in Critical Data Studies motivates us to also look at the interests, actors and events that lead up to the capturing of data; or more appropriately capta (Latin capere - to take). From among a larger potential set, fuelled by the intent of the actors and shaped by the various tools used, the cooked data is carefully produced (Strauss, 1970). The preparatory actions leading to data production are not a one-time endeavor, but a dynamic, sustained and continuous effort as reported by Ribes and Jackson, from their experience of following the practices of

scientists and technicians involved in a long-term ecological research (2013). They find that a "complex assemblage of people, places, documents, and technologies must be held in place to produce scientific data." While they were presented with challenges of maintaining a data repository over large temporal distances between measurements, I argue that similar challenges exist even for repositories for which data production happens at very short temporal distances. In the setting of the COVID-19 pandemic in India, in which data was used extensively to understand (reproductivity rate, sero-prevalance etc.), to manage (daily confirmed cases, fatality rate etc.) and, to govern (hotspot locations, internal and external travel restrictions etc.), I use the findings from four empirical studies – a) primary field work based research on a district level application used to manage the shifting of patients amongst health care facilities almost real-time, b) secondary research about state level pandemic status data published on a daily basis, c) data visualizations subsequently produced by citizen efforts, and d) the effort of producing the Oxford Covid-19 Government Response Tracker (OxCGRT) dataset, a project that collected information on policy measures to tackle COVID-19 (2020 to 2022) in various countries to show the challenges in producing data consistently in short time frames where a change in the methods and semantics cannot be suddenly introduced without disrupting many other aspects about the data repository. The stories of the hidden and invisible efforts of numerous people (regular staff, volunteers and new recruits) reveal the amount of nurturing that data repositories demand before they can be put to use. They also suggest that any discussion about the power that the data in such repositories may claim to possess, must acknowledge the people and politics behind its production.

- **MIS-sing Rights: The Case of India's Employment Guarantee Programme,** Laavanya Tamang

Abstract: The National Rural Employment Guarantee Act (NREGA), India's rural employment guarantee programme, provides 100 days of work on demand to each registered household. NREGA also has an extensive, real-time Management Information System (MIS) that acts not only as a database of the programme's transactions, but also as the system through which the programme is implemented and monitored. The NREGA MIS was seen as heralding a new era of transparency in government programmes. It maintains an extensive public record of every aspect of the programme, from worker registration to work demand, attendance, payments, assets created, and more. However, the MIS has become a tool to subvert the rights of workers. For instance, the MIS considers a wage payment as 'complete' once the payment order has been processed by the local administration, not when it actually gets credited into workers' accounts.

This paper uses a data justice framework to analyse the MIS along three dimensions: ontological (how NREGA's reality is constituted), semantic (the technicalities of the MIS), and accessibility (does the design of the MIS clarify or obfuscate). Using thorough report analysis and supplementing it with fieldwork conducted across 2 years in Jharkhand, the paper argues that the Indian state has brought about transparency in NREGA only in name - the MIS in fact obfuscates reality and absolves the state of accountability. The paper adopts a rights-based approach: does the MIS do justice to workers' rights and strengthen the NREGA?

- **Food Security, Digital Public Infrastructure and Emergent Welfare Frameworks: Contextualising Emerging Data Frameworks in post-COVID India against the Legacies of Public-Private Partnership [PPP] Models,** Veena Ranna Naregal

Abstract: Ongoing digital transformations have at once been the outcome, basis and site of the reimagination of the state-market relations, straddling domains of governance and economy. Such re-configurations of state-market dynamics have been enabled through convergences put in place, 1990s onwards: of the discourse of 'targeted' [not universal] entitlements to 'beneficiaries' [not all citizens], of increased deployments of private agencies and IT/digital platforms in the design and implementation of developmental agendas and of PPP governance models and welfare delivery. Arguably these convergences were the crucial context enabling changes in Indian social policy grounded in an extended fundamental rights to work, to food, to education] framework through the 2000s. Paradoxically, however, the emergence of the digital state has gone hand in hand with an ongoing dismantling over the last decade, of existing agencies, repositories, national survey exercises and procedures developed for the gathering of national and

state level data through the post-1947 decades. How then do we think about and analyse emerging data frameworks with respect to social security welfare entitlements in contemporary India?

Embedded in an interdisciplinary approach, this paper offers a critical analysis of contemporary data systems and practices through a focus on measures to establish a digital national grid enabling inter-state portability in the drawing of food rations, the One Nation One Ration Card [ONORC] scheme. Launched in 2017 but expedited in the aftermath of India's internal migrant workers' crisis induced by the 2020 COVID lockdowns, data collected through the e-PDS network has emerged as a new strand of sketchy data on internal migration at a time when reliable data on India's rapidly rising levels of internal migration is notoriously lacking, with the state particularly resistant to publish in-migration data collected in previous NSSO rounds.

Using mixed-methods, the paper tracks patterns of local, intra-state, inter-state and total volumes of transactions as reflected on the Ae-PDS websites of two migrant-sending states and three migrant-receiving states, Bihar and Uttar Pradesh, and Delhi, Karnataka and Maharashtra, respectively. This quantitative data is read in conjunction with qualitative analyses of i] key decisions, notifications, policy statements pertaining to the roll-out and management of ONORC operations ii] interviews with personnel monitoring the e-PDS system across 9 Delhi districts and in departments of Food and Civil Supplies of the Delhi government and Government of India iii] fieldwork interviews with officials from the Ministry of Electronics and information Technology [MEITY] and its subsidiary agencies responsible for the design, maintenance, monitoring and supervision of the digital welfare and governance portals such as IMPDS/e-PDS.

This mixed methods exercise to interpret the variable volumes of usage and portability transactions reflected across these state e-PDS websites raises several questions on what ONORC and IMPDS have meant for the provisions of the NFSA [2013]: how does the efficacy of the e-PDS system within the IMPDS match levels of efficacy attained by respective state PDS systems prior to 2020? What does the data on proportion and patterns of authentication success and failure as recorded in the e-PDS websites for these states indicate about the improved efficacy in welfare delivery claimed through the digitalisation of food security entitlements? In what ways does the e-PDS data on including new beneficiaries/cancelling members or cards reflect, endorse or contra-indicate claims of prioritised efforts to improve levels of access and targeted delivery to poor and vulnerable beneficiaries such as informal and migrant labour? In what ways can intra-district, intra-state and inter-state transaction patterns discernible through e-PDS data be examined to correlate with known patterns of inter-state migration flows and intra-state labour mobility patterns?

Online Panel OP1: Data Sharing and Connectivity **(Online)**
G-RM: HS 15.02 **(chair:** Itzelle Medina Perea**)**

- **Power struggles and the makings of interoperability in archaeological data (work),** Isto Huvila

Abstract: Archaeological investigations produce large amounts of data on annual basis around the world. The material is extremely heterogeneous. It differs by country, region, investigation project and the age of documentation. It consists regularly of textual, visual and numeric information and is generally standardised to a highly varying degree. A lot of effort and resources have been invested to make this heterogeneous material accessible and available for research and public use — and to make local information systems and individual datasets interoperable with each other as a part of national and international data infrastructures, what has been said, to allow larger-scale analyses and to promote trustworthy and transparent processing of the data as a public good. The posited outcomes are not, however, given nor what "large-scale analyses", "trustworthiness", "transparency", or "public good" means and implies.

This presentation inquires into the power struggles of making of the interoperability of archaeological information systems and datasets to happen on the basis of empirical research conducted in the context of a larger ERC-funded research project CAPTURE on the documentation of archaeological and scholarly informationmaking. The findings suggest that (the

lack of) interoperability is a product of techno-politics of a much large constellation actants than a mere struggle of establishing and negotiating appropriate data standards and developing and deploying technical infrastructures for archaeological data. While much of the contemporary efforts focus on advancing the interoperability of data infrastructures and datasets by harmonisation and standardisation, much of the issues relating to their perceived lack of interoperability can be traced back to the (lack of) hospitality of different varieties of archaeological datawork—in different countries and regions, in different times, epistemologies, thought-collectives, stages of archaeological information process and beyond—and their underpinning techno-politics.

- **"Biobanks are for sharing": Power-knowledge relationships mediated by biological and clinical data,** Brígida Riso

Abstract: Biobanks are still being established in Portugal. The discourse among biobank coordinators often states that biobank samples' collection is to be shared among researchers. However, the way the samples' sharing process is organized evidence that this is more a rhetoric than a practice.

Based on an ethnographic approach, I traced the samples' path in a medical research centre, from the university hospital to the biobank. By following the samples and the actors that allow their circulation, it was possible to highlight not only the sharing practices among medical doctors and biomedical researchers.

Thus, the organization of science and medical work is quite diverse, as so is their focus and interests and the way they granted the production of knowledge. In this setting, medical doctors are in a key position to request samples to patients, and to decide which clinical data is go be collected and sent to the biobank. On the other hand, researchers control the laboratory work having the necessary resources to perform research.

This implies specific arrangements between doctors and researchers, varying from strategies of cooperation to strategies of closure, to impose access control over the biological samples' collection, by establishing specific sharing criteria with other researchers, as mandatory scientific collaborations, or co authorships, firming the exchanging value of data. Nevertheless, medical doctors' power still grants their authority to maintain the production of knowledge on the human body, health, and illness.

This study contributes to clarify the logics beyond the production of biovalue – demonstrating the relevance of the tacit and momentary agreements among science and medicine, which are key to sustain the biobank value chain in the fabrication of samples and, simultaneously, the bridge between medicine and science. Moreover, it has clarified how medical doctors manage to limit the possibilities of scientists in the medical production of knowledge.

- **A data journey perspective on the Taiwanese #MeToo movement,** Mei-Hua Chen, Yuwei Lin, Yi-Chia Tsao

Abstract: #MeToo movement which went virtal in 2017 has been influential in terms of awareness raising (Brunner & Partlow-Lefevre 2020, Horeck et al. 2023). In some countries, it also leads to the change of laws (e.g., Williams and Tippett 2022, Ng and Lu 2023). #MeToo can be seen as one of most powerful campaigns that have happened in the last decade; the social media data (e.g., Tweets / Facebook posts) that depicted a victim's painful memory of what happened and shared by thousands on the internet are definitely acquiring new powers and playing an important role in making meaningful reforms for women in societies.

However, how do the millions of data scattered on social media become so powerful? This paper adopts the 'data journey' framework (Bates et al. 2016) to understand various data practices, frictions, conflicts, values of different actors in the Taiwanese #MeToo campaign.

Based on virtual ethnography of the #MeToo movement in Taiwan (on Facebook mainly), 4 semi-structured interviews with campaigners, and a focus group with a mix of campaigners and victims, this paper looks into how social media sites (the Wikipedia, Twitter, Facebook, online archives) are appropriated for different purposes, how technological intervention (e.g., archiving) blurs the line between the private and the public in dealing with sexual harrassment and abuse, the short-term and long-term impacts of using digital technologies, different values, beliefs and narratives

expressed and inscribed into the use of the technologies.

For example, some Taiwanese campaigners have been enthusiastically collecting and documenting #MeToo posts on social media. The interviewees revealed how they felt morally obligated to 'do something' when #MeToo movement started in Taiwan in 2023. They quickly created a list of #MeToo cases (which named and shamed the perpetrators) on Facebook pages, or using Google excel worksheets and blockchain to 'keep a record' (forever). There was also a comprehensive well-documented Wikipedia page about #MeToo in Taiwan. These well-compiled, well-curated and well-documented #MeToo lists navigated the realities and experiences of victims and campaigners from a myriad of online platforms/digital spaces. They had been used publicly (by journalists, social workers, judges) and privately. The internet has been treated as a 'public sphere' where alternative justice could be sought for individuals.

The data journey framework is appropriate for investigating the Taiwanese #MeToo movement as it allows us to trace how #MeToo data are used at 'different sites of practices' (Bates et al. 2016) and to understand #MeToo as a socio-technical assemblage for social change. Through tracking the journey of the data and the actors who created and used the data (how people wrote, shared, re-shared, authenticated, checked, archived), those who involved in the #MeToo performed their ideal justice, different interpretations about what #MeToo is and means.

This paper resonates with the conference themes about how #MeToo campaigners and victims reclaim some form of data-based power and autonomy & advance data-based technological citizenship and how we may envisage a just data society.

- **Examining Hierarchies of Literacy and Connectivity: Community Libraries and Data Justice,** Zoya Chadha

Abstract: In recent discourse around digital access and connectivity, 'information centres' or public libraries are increasingly suggested as infrastructural solutions for increasing the 'reach' of Internet connectivity and digital literacies in India. At the same time, a growing free library movement led by community library workers across the country is advocating for free libraries as community spaces that actualize equitable access to reading, information, and digital technologies. The present paper explores the free, community-owned library as a space to organise to shift power, particularly against unjust and discriminatory data practices, to challenge the hierarchies of literacy and connectivity, and to forge alternatives of digital justice. Historically, privacy and access are core components of librarianship and the notion that library workers must be seen as stakeholders in conversations and advocacy on and around data and digital justice is increasingly being emphasised by library activists across the world. I consider these ideas through the lens of critical librarianship, acknowledging the various social and political contexts of library work and rejecting the idea of a 'universal' library patron or a 'universal' librarian.

My study is guided by my fieldwork with free community libraries in India where I led the development of digital information resources, digital learning curricula, digital library policies, and digital access programs that include supporting young people to navigate online, universalised, and data-driven university admission systems. In this paper I do two things: first, I analyse the contemporary discourse around libraries and digital technologies, particularly as it has recently shifted in India, and second, I share examples of instances from my fieldwork in libraries that allow us to locate data practices in the context of power and historical oppression, and open up larger questions about digital justice and the potential of shifting power through library work.

- **Data's Legal and Material Technicalities,** Jennifer Raso and Nofar Sheffi

Abstract: This paper critically engages with notions of "data" and "databases" as they exist within legal scholarship and discourse, focusing on the growing interdisciplinary field of law and technology studies.

While lawyers are infamously attentive to codes and technicalities, contemporary law and technology literature tends to sidestep technicalities to instead analyse issues in the abstract. In this literature, ""data"" is assumed as a given, treated as a given, and largely conceptualised as text or numbers. The question of what data ""is,"" technically speaking, is not considered material: that is, as having real importance or great consequences and as relating to a material and situated

practice. This leads scholarship in the field to assume that what regulates, and what ought to be regulated, is ‘code’, and code is conceptualised as distinct from ‘data’.

Law and technology scholars have thus largely underexplored not only data practices, but also the mechanics of ""databases"" and their governance. Evoking notions of government archives as centralised and organised sets of records, scholars in this field tend to envision digital databases as organised spreadsheets populated by numbers and other information, stored in a single place (for instance, in the ephemeral “cloud” or in material “data farms”), and created by anonymous masses of data inputters working for a single entity.

Our paper challenges this tendency to consider data in the abstract rather than as a material practice. In doing so, it highlights the socio-legal consequences of abstracted studies of data, including how they entrench a dichotomy between code and data, and how they undertake code-centric investigations of governance and power. Drawing on technical literature and standards, this paper then proposes a novel analytical framework for critically engaging with data as a material and situated mode of governance and for interrogating the consequences of data power and datafied governance.

Keynote 1

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 17:00-18:15	Graz 13:30-14:45

BANGALORE KEYNOTE: “Leaving no one behind”: Data gaps and exclusion agenda, Anita Ghai

Abstract: I take the epistemic location of an academician with visible mobility impairment for my keynote. My life, and that of my fellow disabled, is interwoven with data, beginning from prescription, diagnosis, medical assessment and finally certification. Digital transformation creates a data ecosystem with data on every aspect of our world. However, for people with disabilities, data gaps are inescapable from our past, present and future. While every human being requires a number of documents, such as voter identification card, social security card, driving license etc., disabled people also have to be “certified” for any of their requirements. Though increasing volumes of diverse data from multiple sources create significant opportunities for drawing out valuable knowledge, for the disabled data is often disaggregated. My objective would be to share the lived realities of disabled people, and weave this reality with issues such as certification, inclusion in census data, Aadhar (UDID) and exclusion in policy networks. My submission is on how disabled bodies are rendered into digitized information through quantification but also on how different kinds of value is attached to government, big NGOs and perhaps communities.

In today’s digital era, big corporations need not own big armies, as companies are protected by nation-states and bailed out when required. The neocolonial project runs on digital platforms, while the popular narrative of bridging the digital divide between “able bodied” and disabled by giving internet access to millions of people resembles the idea of the “able, white upper-class savior” liberating the “noble savage” through modern Western education. Social media’s grand plan of providing access to all can be best understood as a neocolonial strategy to mine the data of billions by equating it with water and land. Therefore, nations endorsing democratic values should be especially wary of the trap of neocolonialist forces, as such nations are particularly vulnerable to their project. I will conclude by underscoring the fact that counting the disabled has to be seen as separate from the issue of counting disabled people, when seen in terms of their quality of life and their participation in society, as even those who do not have benchmark disability may face different forms of discrimination.

Session II

Time:	Bangalore	Graz 15:05-16:30

Online Panel OP2 Data, Health and Education **(Online)**
G-RM: HS 15.03 **(chair:** Chris Till**)**

- **The question of 'ancestry' in educational genomics: Race and IQ Redux?,** Dimitra Kotouza

Abstract: The massive expansion of genomic databases and technological advances in sequencing and genomic analysishave enabled Genome-Wide Association Studies (GWAS) of educational outcomes, using samples of millions of individuals. A methodological controversy concerns the exclusion of 'non-European ancestry' DNA from study samples — a conscious choice to sidestep problems of data availability and ancestry-related population stratification. Yet, this exclusion undermines the portability of findings and thus their application in educational practice, which many policy-orientated behaviour geneticists are promoting. Based on textual analysis and interviews, I look at how behaviour geneticists, in collaboration with policymakers and ethics-promoting organisations, have sought to address this question. I find that, although the racist history of eugenics and genetics of intelligence is acknowledged, and scientists can often clearly articulate how GWAS findings reflect social stratification and discrimination, there is no consensus on how, or even whether, to prevent the re-emergence of a new ancestry-science of human cognitive abilities. I argue that the 'reality' assumed of the quasi-racial categorisations ofcontinental 'ancestry' derived from genomic data no longer simply biologises and molecularises race (Gannett, 2001; Fullwiley, 2007; Bolnick, 2008; Smart et al., 2008; Lee, 2015,Reardon, 2017), but threatens to enable new forms of scientific racism, figured as 'inclusivity' in science, in a similar way to new forms of racialisation in medical genomics research (Bliss, 2012; Duster, 2015). This paper forms part of the Leverhulme Trust funded project 'Biology, Data Science and the Making of Precision Education' (PI: Ben Williamson; CoIs: Jessica Pykett and Martyn Pickersgill).

- **Spotify as a technology for integrating health, exercise and wellness practices into financialised capitalism,** Chris Till

Abstract: Spotify dominates the audio streaming industry and offers an almost limitless library of music and other 'sounds'. They have recently made various interventions into health, exercise and wellness with the development of curated and personalised playlists focused on activities such as running, weightlifting and meditation and guided workouts interspersed with algorithmically generated playlists. This article suggests that the company are developing new means of datafying health, exercise and wellness practices such as monitoring activities, heart rate, mood and broadly the rhythms and tempos of their lives. While this is presented as beneficial to users to provide a more personalised experience, analysis of patent applications, financial statements and promotional materials targeting advertisers and investors suggest other objectives. Audio consumption is combined with the newly datafied activities to 'bundle' users into 'audience commodities' to be sold to advertisers. Furthermore, such innovations, and the potential to attract advertisers, form the materials through which Spotify construct stories to potential investors about the future profitability, or at least growth in market value, of the company essential for firms integrated into 'financialised capitalism'. This represents a further opening up of aspects of everyday lives to commercial exploitation through datafication and contributes to an attempt to reposition health-related practices as assets which can be packaged for investment portfolios. The publications analysed in this paper demonstrate some of the ways in which Spotify seek to both monitor and shape practices of users to make them more amenable to financialisation.

- **Piña Colada for Breakfast: a practice-focused analysis of power in a health and ageing innovation pilot,** Carla Greubel

Abstract: Promises of improving quality of life through datafication technologies and processes that render healthcare more efficient abound in health and care research and implementation initiatives. These references to efficiency have been subject to critical investigation about the ways in which they affect power relations. An important concern is the increasing presence of big

consumer technology companies in the sphere of health and care, potentially reshaping it in line with their values and interests, including efficiency. A practice-focused, STS making & doing case study of power in a project that involves a large consumer technology company in piloting digital health prevention innovations for older adults indicates that big tech companies indeed reshape health and care in line with an industrial logic of efficiency. However, this is not a linear and predetermined process but part of a dialectic interplay of power and counterpower, in which not only humans play a role but also algorithms, infrastructures, data curation processes, time, or geographical and cultural closeness/distance. Moreover, potentially harmful consequences of the growing presence of big tech companies in health and care can result not only from an increase in the company's power and control, but also from an indirect and self-accepted lack of power and control. The empirical case, then, questions the widespread image of the especially high level of digital expertise on side of big tech companies, which underlies many critical perspectives but does not (always) hold in practice.

- **Situating Sphere Transgressions: navigating public-private relationships from Danish a app-market,** Eva Otto

Abstract: Within critical data studies, the growing importance of Big Tech and digital markets in sectors such as health, education and beyond has recently been framed as one of sphere transgression (ie. Sharon 2021, Taylor 2022). With such sphere transgressions, advantages actors might have in one field – such as within the sphere of digital goods and markets – translate into advantages in other spheres, such as health or education, giving specific digital actors an unfair amount of power and destabilizing the dominant values inherent to different societal spheres.

This paper sets the framework of sphere transgressions in conversation with the situated practices of app-makers in Denmark. As Flensborg and Lomborg (2023) point out there is a need to contribute empirical material to conceptual conversations datafication. To bridge this schism, this paper draws on long-term ethnographic fieldwork over 12 months with a Danish mobile app company, as well as a broader mapping of the Danish mobile app market.

Local Danish app companies embody a crucial link by building data infrastructures which connect private sector Big Tech actors and local Danish markets with Danish public organizations. In doing this they traverse traditional boundaries of public and private sector spheres in Denmark.

Turning to situated practice, the idealized public-private partnership of Danish policy becomes a multi-layered space, with both local boundary negotiations and routinized practices that go under the radar. How to situate spheres thereby becomes a local power contestation, as well as a matter of perspective, refocusing questions on what becomes the transgression, and who has the power to define spheres.

- **Disability Justice And/As Data Justice: Datafying and Governing the Body in Urban India,** Kimberly Fernandes

Abstract: This paper thinks with data on disability from India to ask: how does data shape both disabled peoples' experiences of the present and the imaginaries of disabled futures? Drawing on virtual and in-person ethnographic work conducted with disabled people seeking to be identified and enumerated as such through the process of certification, the paper will attend to one kind of future-making: the worlds that numbers build. By ethnographically attending to the range of steps involved in obtaining a paper-based disability certificate (or, more recently, a digital unique disability ID/UDID), I demonstrate that seeking certification requires disabled people to develop a range of different kinds of temporal attunements that shape their status as citizens, their relationship to the state, and their embodied experiences of time.

For disabled people seeking certification, this paper focuses on what it means to wait to be counted, working to outline how time is not a given; instead, the process of being counted through certification can - and often does - dispossess people of their time. Focusing in particular on the promises embedded in the rollout of the unique disability ID (as a replacement to the disability certificate), I attend to the kinds of imaginaries of the future that it makes possible and the ones that it erases for disabled communities. The article engages with the place of storytelling in building decolonial data futures for disabled people, asking how the everyday experiences of living with data-driven systems shape – and are shaped by – the disabled relationalities that emerge

during the process of seeking certification. By locating storytelling within community as a significant way through which disabled people make sense of both presents and futures, this paper demonstrates the centrality of crip narratives as a way of (re-)shaping both embodied experiences of datafication and the contours of data trajectories.

Online Panel OP3 Data Harms and Perceptions **(Online)**
G-RM: HS 15.02 **(chair:** Doris Allhutter**)**

- **The Problematic Data Power of Online Vigilante Initiatives: Critical Approaches toward Governmental and Internet Platform Support for Digilantism,** Jo Ann Oravec

Abstract: This presentation explores the social impacts of online vigilante initiatives sponsored by governments, which provide a kind of data power in public spheres. Some emerging forms of vigilante behavior are facilitated by Internet connectivity, social media, and artificial intelligence (AI)-enhanced analytical tools (often known as “digilantism”). The apparent motivations of the vigilantes involved have extended beyond the specific social issues or concerns at hand, including financial incentives (or “bounties”) and feelings of heroism, along with the demonstrations of technical mastery that vigilante initiatives can often engender. Members of the public are delegated to enact certain forms of investigatory initiatives pertaining to complex social issues such as locating child predators, identifying drag shows, and tracking women who seek abortions. This presentation outlines a set of case studies of online vigilantism, along with analysis of how the affordances of various Internet platforms have served to support the activities and involve dimensions of trust on the part of vigilantes and of subjects. For example, platforms that allow for anonymous or fabricated identities can foster vigilante activity, yet they are often slow to respond to the complaints of individuals who are unfairly victimized by vigilante actions.

The methodology for the presentation’s research is qualitative, building a comprehensive typology of online vigilantism approaches. It analyzes a diverse range of case studies of vigilante initiatives, identifying salient commonalities and variations. It categorizes various types based on actions, motivations, and outcomes. The presentation also examines the social and moral statuses of online vigilante initiatives, addressing the various rationales for these activities that are engendered by governmental agencies and Internet platform administrators. Many movies and novels as well as historical studies of the waning days of civilizations include descriptions of vigilante action, often as a support for diminished police and security capabilities. Heroic vigilantes who work to identify (possibly through “doxing”) and bring to justice supposed societal miscreants are common figures in film and television entertainment productions. The modes through which such governmentally-sanctioned initiatives (either fictional or real life) produce considerable impacts for communities are explored in this presentation.

- **Examining the Datafication of African Consumers through Digital Microlending,** Chinasa T. Okolo

Abstract: The expansion of digital platforms across Africa, particularly those offering financial services to African consumers in countries such as Nigeria and Kenya, has led to an increase in datafication, impacting the privacy and well-being of users. Although touted as a way to enable greater financial autonomy of users, these platforms entrap users through exorbitant loan terms and employ “debt-shaming” tactics, which involve harassment, doxxing, and blackmail, to aid loan repayment. This paper incorporates phenomenological and critical data perspectives to elucidate how African consumers encounter and resist datafication in their everyday lives through digital platforms such as microlending apps.

This work involves a landscape analysis of digital microlending platforms (operational geographies, ownership structures, business models, etc.), leveraging prior understanding from historical data practices to understand how these platforms exert power over users and extend colonial ideals. This paper will also analyze strategies consumers have used to subvert harmful practices from these platforms and explore how indigenous African philosophical frameworks can guide grassroots-driven justice measures amid intensifying datafication and algorithmization. Finally, this paper will examine the broader implications of datafication in African contexts, referencing efforts by big tech and prominent non-governmental organizations to “bridge” the data

gap within Africa.

The approach to this work critically examines the technological infrastructures of digital microlending platforms in Africa, sociodigital changes that occur as a result of the adoption of these systems by African users, and how African indigenous philosophies can enable consumers to counteract the adverse effects of datafication and regain agency from digital platforms. By examining the colonial histories of African countries and indigenous philosophies, this paper aims to contribute a novel understanding of how African consumers are currently datafied through digital platforms and the colonial ideologies perpetuated through these technologies.

- **Platforms on trial. Mapping the Facebook Files/Papers controversy.,** Matías Valderrama Barragán

Abstract: Big Tech companies have been involved in numerous platform controversies in recent years. Data leaks, whistleblowers, and social experiments have raised alarms about the dubbed toxic and unaccountable power of platforms and, more broadly, about the increasing crisis of accountability in digital societies (Khan, 2018; Marres, 2021; Nissenbaum, 1996; Suarez Estrada et al., 2022). Situated at the intersection of Digital Sociology, Media Studies, and Science and Technology Studies (STS), this research inquiry into how actors in journalism, activism, politics, and research make and unmake connections between social media platforms and societal harms to contribute a better understanding of how platforms are put on trial. The study focuses on mapping a specific platform controversy: the Facebook Files/Papers, a leak in 2021 of internal documents from Facebook (now Meta) by the former employee Frances Haugen. The disclosures exposed how Meta was aware of several harms caused by its products, revealing how platform data, designs, and algorithms were designed to prioritise user engagement over (Hendrix, 2021; Horwitz, 2021; Pierce & Kramer, 2021). By combining digital and ethnographic methods, I am 'following the disclosures' through various media settings to analyse how the disclosures were made public and which actors and issues gained prominence during the controversy, affecting the connection between Meta platforms and societal harms. As I will show, critics promoted a 'strategic causalism' to solidify the connection between platforms and harms, countered by Meta's 'strategic ambiguity' to undermine such claims. This production of ambiguity would be crucial for platforms power that seek to disperse their responsibility. In this way, platform leaks can allow us to examine how Meta's data power is put into action and how it is sustained by the corporate control of information and capacities to study and intervene in social life. I will also show that some harms gained more prominence than others in the controversy, and a kind of highly US and EU-centric trial was promoted that does not allow for more plural forms of platform accountability from and for the Global South.

- **Turkish young adults' perceptions and experiences of platform surveillance,** Ozge Girgin

Abstract: This presentation examines the surveillance experiences of Turkish young adults and how they understand, experience, assess and engage with surveillance of global platforms (e.g. Google and Facebook). It shares the findings of one-to-one and focus group interviews conducted with young adults in Turkey. The research reveals a disjuncture between the data that young adults consider important and the data in which corporations are interested.

Many interviewees trust apps by global or local platforms more concerning retainment of their data. Moreover, even though the Cambridge Analytica scandal raised awareness about the significance of the data collection, for many users, Mark Zuckerberg's testimony to Congress following Cambridge Analytica reinforced their imaginaries that global companies would be held accountable for unethical business conduct, thus strengthening their trust in these platforms in keeping their data safe.

Convenience communication platforms create in users' everyday lives, the perceived unavoidability of data collection, local ways of conceptualizing dataveillance, enthusiasm for the development of technology, inconsequential perception of platform' data analysis, the intensity of surveillance by other parties (peers, colleagues, family, employees, government) shape users' perception surveillance by global platforms.

Moreover, users encounter and engage with various feedback as products of personalized

algorithms. Interviewers reveal that users develop expectations about how personalization should work and how their data should be utilized, sometimes applying tactics (de Certeau 1984) to craft the suggestions, contributing to their own profiles. They consider surveillance as a service. Thus, users' algorithmic imaginaries (Bucher 2017) contribute to and feed their understanding and perception of platforms' surveillance practices.

The presentation will explore users' nuanced and contextual interpretations of platform surveillance. It will shed light on the normalization of platform surveillance and the users' less critical attitudes towards these companies in Turkey, expanding our understanding of the growing power imbalance between users and corporations.

- **The Ears of Data Power: A Case Study of Crisis Text Line,** Stephen Neville

Abstract: Data power consistently sacrifices or mediates individual privacy via surveillance in service of a 'greater good' at the level of a population. Moreover, increasingly this trend is inflected by biopolitical rationality that recuperates the "communicative traces" (Kneese 2023) of those facing a life-threatening crisis as a resource – something to learn from, profit from, and expand political control with – in the name of saving lives. This problem is explored through a case study of the Crisis Text Line data scandal in which it was revealed that the suicide-prevention platform repurposed anonymized conversation data for economic ends. The scandal exemplifies a blatant abuse of data power, yet as a board member for the organization, dana boyd (2022) has contextualized the problem within an ethically ambiguous space. How can this feel so wrong yet continue to resonate as a quandary?

I argue that this problem stems from the way data power can reproduce an ideological doctrine of communication: I develop this in terms of sanctimonious sonicity, whereby listening is posited as an inherently life-affirming and ethical panacea to the grave problem of communication breakdown. Although Crisis Text Line is a SMS text-based service, it operationalizes principles of "active listening" (Rogers and Farson 1957) to claim that volunteers really 'hear you' in times of dire need.

The perspectives of Crisis Text Line volunteers are explored through interviews triangulated with online archival research and qualitative content analysis of news articles, press releases, website information, patents, and research articles and reports. This offers a critique of a doctrine of sanctimonious sonicity by showing how those who listen to help those in crisis can become unknowing and innocent actors within a biopolitical technological assemblage. In doing so the paper will discuss how data power can exploit the efforts of volunteers as caring listeners to commit harms and injustice.

M&D Session

Time:	Not hybrid	Graz 15:05-18:15

In-Person Making and Doing GMD Situating Data Practices through Data Walking **(Graz)**
G-RM: Resowi-Zentrum

- **Situating Data Practices through Data Walking,** David Hunter, Katja Mayer, Katrin Amelang, Juliane Jarke

Abstract: This workshop introduces participants to data walks as a conceptual and methodological tool for exploring the situatedness and locality of data. Participants will be introduced to data walking by the conveners, conduct a data walk themselves and then collectively reflect on their experiences.

To do so, we will utilize web apps developed by David that facilitate open-ended data collection on mobile devices. These apps enable participants to capture open-ended geolocated and time-stamped data such as categorical data, continuous data, text, audio, and machine learning-based object detection from the device camera.

Datasets will be collected by participants on topics such as surveillance infrastructure, density of people, noisiness of environment, or purpose of area (commercial, residential, industrial, etc). With

the multi-layered data we will map and explore potential relationships between tangible power structures, spaces and temporalities revealed through data. This workshop invites participants to confront, challenge, and discuss our expectations and bias about locations, data, collection methods, and stakeholders.

Acknowledgements: This workshop is kindly supported by the FWF Project: Politics of Openness: Open Data Practices in the Computational Social Sciences, Grant Nr. V699-G29 as well as the BANDAS-Center at the University of Graz.

In-Person Making and Doing GMD Performing Power **(Graz)**
G-RM: LS 15.02

*** Please note that you need to book the Making & Doing Sessions (free of charge, up to 25 places per session): https://business-analytics.uni-graz.at/en/data-power-conference/

- **Performing Power: Workshop in speculative dialogue and roleplay as artistic tools for (re)crafting data storytelling strategies,** Joan Somers Donnelly

Abstract: I am a performance artist and a member of the Data Stories team at Maynooth University Social Sciences Institute. The Data Stories project focuses critical attention on the underlying evidence base for planning and property activity in Dublin. We are currently in Phase 2, working more closely with sector stakeholders in the data ecosystem to conduct in-depth case studies. This involves using traditional social sciences methods, but it also utilises research-creation methods drawing from artistic practice to produce a set of data stories with and about the planning and property data.

One of the case studies I am working on is with a citizen-led advocacy group that uses publicly available data from the planning system to tell counter narratives to those espoused by the property sector, which have been successful in lobbying for reforms in the planning system favourable for developers but seen by many others as a partial de-democratisation of the planning system.

Part of my engagement in the case study involves bringing approaches I have developed around role play, subjective and embodied mapping, and scores for conversation, to lead a collaborative research-creation process with the citizen-led group that facilities them examining their strategies in telling stories with the data, and questions they have around tactically re-positioning themselves in relation to local government narratives in order for the stories they are trying to tell with the data to be heard.

This Making & Doing session will introduce practices of subjective and embodied mapping, speculative dialogue writing, conversation scores and roleplay that can facilitate citizen-led groups in reflecting critically and creatively on the power structures of the data ecosystem they are trying to act within and the effectiveness of the strategies they are using to tell counter narratives with the data to try to affect change at a policy level. I will shortly present the work myself and my colleague Juliette Davret have been doing on the case study and then facilitate a series of interactive exercises, ending with a group discussion on the challenges and potentials of these kinds of tools.

In-Person Making and Doing GMD The Joy of Sets **(Graz)**
G-RM: LS 15.01

- **A visual arts workshop exploring the role of data practices in sex tracking apps, sexual consent apps and smart sex toys,** Rebecca Saunders

Abstract: This session explores the growing interpolation of data practices in contemporary sexual culture.

It first establishes the role of emergent technologies such as sex tracking apps, sexual consent apps and smart sex toys, which gather data directly from people's bodies and/or require the manual inputting of data about sexual partners, sensations and emotions. These technologies raise important questions about the perception of data as offering definitive truths of the – often particularly female – body. They also raise questions about the relationship between data power

and the biopolitics of sexuality in the twenty first century, as the sexual data produced through these technologies are often used in commercial and medicalised contexts.

The session then briefly sets out the findings of my pilot research project (2023) which collected analogue diaries from users of the Lioness, a smart sex toy which generates data about women's bodies using biosensors. Participants described unexpected, agential and meaningful ways of engaging with their sexual data. However, the analogue diary methodology was also used to encourage reflection on the impact of data practices on people's sexual subjectivity, at a remove from the digital media where datafication takes place.

The making and doing session will use analogue data drawing to explore in a tangible way the impact of datafication on how people conceptualise their body and how they think about sexual experiences and interactions. Participants choose an aspect of interaction to focus on. There are options provided or participants can choose their own. They then remember and count the instances of, for example, eye contact that they have had with their partner in the last week, and the differing circumstances in which it took place: over dinner; during argument; a kiss; laughing; during a tv programme etc. Participants are then guided to express these numbers through particular aesthetic forms which are provided. They create a key and an analogue data visualisation to express their chosen aspect of interpersonal interaction. At the end of the workshop, participants can choose to share their data visualisations and interpret each other's keys and drawings if they wish. The session will be carefully facilitated, with different data drawing options provided; no one will be required to disclose anything sensitive with which they are not comfortable. The goal of this making session is to consider the often uncritical celebration of data – of the numerical, the categorizable and of data visualisations – as providing more important insights into our intimate lives than we can get from subjective and embodied knowledge. It will also ask session participants to reflect on the socio-cultural impact of counting and quantifying that is becoming an increasingly dominant aspect of contemporary sexual culture in the global North.

Session III

Time:	Bangalore	Graz 16:50-18:15

Online Panel OP4 Data Power in National Contexts **(Online)**
G-RM: HS 15.03 **(chair:** Monika Fratczak**)**

- **Datafing the poor: from techno-solutionism to algorithmic neoliberalism,** Henry Chavez, Alexandra Gualavisí

Abstract: Based on a neoliberal approach to poverty and public spending, in the late 1990s, Ecuador created a system of targeted aid for the country's poorest people. This system, conceived as a substitute measure to swallow the elimination of a series of universal subsidies that used to benefit the whole population, has since evolved into the largest monitoring system of the country's poor and lower-middle class which represent more than 60% of the entire population. This system collects and analyses not only data on income and consumption, but also online traces on employment, health, education, housing, traffic offences, disabilities, among others. Furthermore, following COVID19 the government opens the door for this system to interoperate with other public institutions that collect data on this population. All this data is processed and analyzed by algorithm-based allocation systems that decide who is poor enough to receive public aid and who is not. This paper delves into the history of the socio-technical trajectory of this system which, despite the changes of governments and their political and ideological orientations, has ended up institutionalizing and embodying a particular vision of the world. This vision promotes the permanent and massive surveillance of the majority of the population to reduce public spending and at the same time hides the fact that it would be much more technically and financially efficient to monitor and control the richest minority to pay their taxes and distribute that wealth through universal access to public services and benefits. Based on an analysis of the media, public documents, archives and interviews with policy-makers, engineers and other officials who have helped to set up this system over the last 20 years, we explore how techno-solutionism has helped neoliberal ideology to become embedded in these algorithmic systems of mass

surveillance.

- **Digital surveillance of work in Brazil: Unveiling the imaginaries from the brazilian employers,** Fabricio Barili

Abstract: This summary aims to present and delve into the methodological journey, initial findings, and insights made available through the Observatory on Digital Surveillance at Work project, focusing on the landscape of digital surveillance among Brazilian workers. The project grapples with the challenges of identifying control elements, surveillance mechanisms, and digital monitoring in the workplace.The research corpus revolves around employer reviews of various platforms and software solutions adopted to achieve diverse objectives such as enhancing production, ensuring employee productivity, preventing internal malpractices, among others. More than 1000 reviews were meticulously gathered from a wide spectrum of sectors including technology, outsourcing, healthcare, and telecommunications. The theoretical framework of the study draws upon the concept of algorithmic imaginaries (BUCHER, 2017, 2018) to comprehend how these practices manifest and are portrayed through the accounts provided by workers. Initial findings indicate a growing tendency among outsourced service providers to implement surveillance practices, including the usage of cameras or mandating employees to work continuously with webcams throughout their workdays. This preliminary investigation anticipates the potential emergence of new research initiatives centered on the gathering and analysis of similar information. It's apparent that certain employers are integrating these solutions as novel components within the workspace, having found satisfaction in the results obtained. Moreover, this paper serves as a significant tool for comprehending the acquisition and utilization of such information, enabling a better understanding of a burgeoning market that is on the rise not only in Brazil but also in other countries, particularly those where outsourcing holds substantial prominence.

- **Data Power in China: A Critical Assessment,** Prabhat Mishra

Abstract: This paper critically examines the concept of data power within the context of China's ambition for global dominance in artificial intelligence (AI).

Focus of the Study: Employing a multifaceted and multidisciplinary approach, the study delves into various dimensions of data power in China's AI landscape, transcending simplistic binaries such as innovation versus risk and economic development versus social order preservation. Through a thorough analysis of controversies surrounding AI adoption, policy directives, and public perceptions, the study aims to provide a comprehensive assessment of data power dynamics in China. The research focuses on the aftermath of the global rollout of OpenAI's ChatGPT in November 2022, which catalysed scholarly discourse and public debate on AI risks and opportunities in China. Subsequent regulatory and technical developments, including the emergence of Chinese AI bots and policy directives governing generative AI, are scrutinised to elucidate the evolving landscape of AI governance in China.

Methods Used: The research methodology entails a combination of qualitative approaches, complemented by a thorough literature review of academic literature, policy documents, and regulatory frameworks. Case studies of AI initiatives and content analysis of media coverage provide empirical insights, while an interdisciplinary approach draws upon insights from diverse fields such as computer science, sociology, and political science.

Data Power as a Concept: Data power is used as an analytical tool to reorient critical inquiries about data in the Chinese context. The study advocates for looking at data as national and transnational actors, with economic, political and societal facets that need to be theorised and explored further. While acknowledging existing literature on data-driven surveillance, particularly concerns related to the social credit system and targeted facial recognition, the study highlights the need to connect this discourse with China's broader AI ambitions. By critically analysing the implications of current AI products and services, the study aims to unveil the multifaceted aspects of data power in China and its political, cultural, and social ramifications. In essence, this paper contributes to the academic discourse by providing a nuanced understanding of data power in China's AI landscape, emphasising its significance in shaping global AI dynamics and the need for comprehensive governance frameworks.

- **Open government in Latin America: promises, imaginaries and techno-optimism,** Daniel Vizuete

Abstract: Since the Open Government Initiative was launched in 2009 by Barack Obama's administration (USA), principles, policies and processes based on the open government (OG) paradigm have been promoted, whose pillars are transparency, participation and collaboration for the effectiveness of public action and proximity to citizens thanks to the advances and facilities of ICTs. The main vehicle for promotion is the Open Government Partnership, an international organization that, through its activity, facilitates the mobility of various imaginaries to build deliberative, open, pluralistic and consensual institutions and practices.

Through the analysis of the 1133 action commitments contained in the 62 national action plans of the 15 Latin American countries that have adhered to the Open Government Partnership, it is observed that the primacy of some imaginaries over others has concentrated the actions implemented in the pillar of transparency over participation and collaboration. It is shown how the type of initiatives promoted in this pillar, which conceive transparency as a technical, desirable, transplantable and positive attribute, promotes processes of datification, adoption of computer systems and adaptation of regulations without considering the risks for citizens and organizations.

In this sense, although open government brings with it the promise of strengthening democracy, when implemented from a techno-optimistic vision, on the contrary, it can generate practices and institutions that may jeopardize human rights and institutional development processes. Is open government, then, an institutional development methodology that underpins development processes? An opportunity for institutional innovation? Or a new process of institutional transplantation opposed to social development?

- **A situational analysis of Independent Sage: data practices and data politics of situating the Covid emergency in society,** Noortje Marres, Oihane Etayo

Abstract: This paper presents a situational analysis of Independent Sage (IS), an independent scientific advisory group that formed in the UK in response to the Covid-19 pandemic emergency. We will present an analysis of three critical situations that IndieSage sought to intervene in: test & trace, inequalities, and ventilation. Loosely drawing on Clarke, Friese, and Washburn (2018) we define a situation as a problematic composition of heterogeneous elements at varying scales, and make it our objective to understand how the data practices of “independent scientific advice” made and did not make a difference in the situations of Covid-19. To analyse this, we composed situational corpi for each of the three situations identified above: heterogeneous data collected from different media settings and communications channels in which IS was active, including transcripts from YouTube videos, media articles, documentation published by Independent Sage, web and social media posts. Next, we built a situated lexicon for each of the situations, composed of categories and query terms which served as indicators of elements composing specific situations, and a lexicon that applied to the overall situation of Covid-19 for Independent Sage. In presenting this lexicon analysis, we will discuss the various ways in which IndieSage’s expert advice involved situating the Covid emergency in society, with a special focus on the role of expert data practices in this. Finally, we will reflect on the potential for and challenges of a digital approach to situational analysis, asking: to what extend does situational analytics enable the surfacing of historical and situated power relations that shape data processes but are also part of the situation?

Online Panel OP5 Data Justice and Inclusion **(Online)**
G-RM: HS 15.02 **(chair:** Itzelle Medina Perea**)**

- **Towards Inclusive Data Governance? The Role of Affected Communities in Public Engagement Initiatives,** Arne Hintz

Abstract: The increasing roll-out of data analytics and automated decision-making in government and public services can have severe implications for communities that are reliant on services (such as social benefits) or specifically targeted by data-based monitoring (e.g., ethnic minorities and migrants). However their voice is rarely heard in decision-making processes regarding the

deployment of data systems.

In some places, methods of public engagement and deliberation have been used to inform such decisions and influence policy. Citizen juries, citizen councils and similar initiatives have explored opportunities and challenges of applying AI and data systems in the health sector, criminal justice, and other areas. Grounded in ideas of 'democratic innovation' (Smith, 2009) and the concept of 'mini-publics', they typically seek to bring together a cross-section of society to represent a range of citizen voices and perspectives.

While these practices have given citizens new and much-needed possibilities to both learn about and influence the deployment of AI and data systems, data justice research has highlighted that specific (e.g., racialised and impoverished) communities are disproportionally affected by datafication (e.g., Dencik et al., 2022). This raises the question whether methods aiming at wider societal representation are able to address the more severe impacts of datafication.

This paper draws from a series of interviews with both organisers of, and participants in, deliberative initiatives in the UK between 2020 and 2024. Building on research on the breadth, impact and democratic quality of these practices (e.g., Hintz et al, 2022), it explores whether they can account for the specific impacts on affected communities, and it asks what methods and organisational innovations would be necessary to do so. It thus investigates questions of data power regarding their specific effects and possibilities for agency and control by those most affected.

- **Ageism and the digital exclusion loop: The role of (limited) data,** Mireia Fernández-Ardèvol

Abstract: This paper illustrates the need for critical data power research in later life and digitization using the imposition of online banking as an example.

The banking sector might produce and reproduce ageistic practices —for instance, the odds of obtaining a loan decrease among older adults. In this paper, I delve into another form of ageism fostered by the COVID-19 pandemic lockdowns and nurtured by the restructuring policies of this particular sector: the accelerated and abrupt generalization of online banking since 2020. Online banking has already become the primary client-bank interaction channel in several European countries. Rapidly recognized as the most affected citizens, public policies focused on improving older adults' digital skills. However, the fault is not (only) the digital divide older adults face - meaning their lack of digital skills. In fact, older adults were initially ignored in the design of digital banking platforms but eventually forced to digitize. So, the fault is on the design side and the resources it relies on, among which is the limited empirical evidence of the digital lives of older adults.

Of relevance here is to what extent ageism shapes the creation of empirical data and how it eventually results in digital exclusion. I will discuss the roots and dynamics of a vicious circle that exacerbates the digital exclusion of older populations. Its three main elements are:

1. Limited data and limited solid empirical evidence on digitization in later life;

2. Biased perceptions based on stereotypes —reinforced by the lack of data and

3. Inadequate design of digital tools —fostered by limited data and biased perceptions.

Such a detrimental circle shapes not only the design of digital services but also the public policies aimed at fighting socio-digital inequalities.

- **Ms: Take a data walk with me! Datafication in the Smart City,** Cora van Leeuwen, An Jacobs

Abstract: The Smart City as a place of data driven solutions relies on the participation and datafication of all its citizens. Studies have shown that the datafication of the daily lives of older adults is unreliable due to both a lack in representation in the data and in the design teams making decisions during the creation of data driven solutions. To ensure that the urban space is age friendly in the future it is necessary to understand how older adults experience the datafication of the urban space, and to comprehend their awareness of both the datafication and

the effect that a lack of data might have. Creating awareness of an opaque concept and situating it within your daily activities is a difficult task. To this end we adjusted and applied the data walk method to older adults. This research aims to answer the following question: how do older adults experience the Smart City's data practices when they are made aware of it? We will first discuss the adjustments of the data walk and then present as a use case the results of a series of data walks organized in Flanders, Belgium. The use case will discuss how the older adult perceives artificial intelligence, their role in data collection, the experience of the walk shop, and finally if they intent to change their behavior towards data collection and data processing. The results show that by providing older adults a means to connect with a relatively obscure and incomprehensible technology it is possible to have discussions about implications of those gaps in data collection and processing concerning their age category. The awareness ensures that they can make an informed choice of participating in data collection activities.

- **Diversity, Inclusion and Equity in data-driven translational research,** Li Zheng

Abstract: As data-driven algorithms and artificial intelligence (AI) show the potential of transforming healthcare, there are rising concerns on how to promote ethical and fair use of data. Specifically, the collection and interpretation of data have downstream impact on biomedical research and clinical applications. There is a pressing need for translational biomedical research to address diversity, equity, and inclusion (DEI) issues and promote health justice in practices (Ferryman, 2023; Tsosie, 2021). However, there is a lack of research which questions the configuration of DEI in data-driven translational research: who defines the interpretation of DEI in data, who has the expertise, and what organizational or institutional arrangement supports the integration of DEI goals? In the context of algorithm and AI-powered biomedical science, such goals call for collaborative interpretation and operationalization of health data, and the incorporation of such goals into technical capacity, to ensure its validity, reliability, and inclusivity. Drawing on Team Science and Science and Technology Studies (STS), this research situates the configuration of DEI in comprehensive sociotechnical networks of data practices. It uses empirical materials (e.g. documents and interviews) from case studies of data science consortiums and collaborative projects to evaluate the collaborative mechanisms and approaches in interpreting and processing health-related data. It dissects and analyzes the multiplicity of such practices that encompass the exchange of multidisciplinary expertise and integration of knowledge, experience, and worldviews across domains in and beyond biomedical research. It will illuminate the sociotechnical challenges and barriers in interdisciplinary data practices to define and delivery DEI goals, and provides recommendations on how to advance justice in translational research, including mitigating the entrenched biases, improving meaningful representation of data, and promoting diverse perspectives.

- **A Six-Month Ethnography to Understand Articulation of Risk and Power Relations in India and US,** Sucheta Lahiri

Abstract: Risk can have multiple interpretations including threat to health, life and fairness. For example, driverless smart cars expose risks of safety and security. The lack of recognition of people of color with faulty AI driven image recognition software poses ethical risks for disenfranchised communities. In terms of managing AI risk on a project and process level, as risk has varied interpretations, the processes of risk realization and practices around risk management vary at individual and institutional levels.

The concept of risk embodies power which can be either realized as an opportunity or as a negative event that incurs detrimental consequences. Factors influencing the legitimation or delegitimization of risk differ across practitioners of various social and cultural capital across institutions. The resulting risk management processes are contingent upon these determinations, influenced not only by the organizational culture but also by governing bodies at local and global level. In other words, within the triad of process, technology and people, another missing piece or component that influences risk is organizational culture and regional culture.

This study highlights the findings of a six-month corporate ethnography on AI workflow and AI risk conducted in three locations of India – Pune, Bangalore and Mumbai – and the US west coast. Participants include not only data science practitioners but also sales, pre-sales, legal, project management, operations, and human resources professionals responsible for onboarding and

converting the end-to-end AI opportunities to full blown projects.

The research aims at understanding how AI risk is articulated on individual and institutional level during project execution. The fieldwork explores AI risk at every phase of the workflow; right from the opportunity generation to the final sign-off. Ultimately, the goal of this research is to propose a practice-driven AI risk management framework for local and global practitioners with sociotechnical affordances and policy changes.

Session IV

Time:	Bangalore	Graz 18:35-20:00

Online Panel OP6 Theorising Data Power & Governance **(Online)**
G-RM: HS 15.03 **(chair:** Tracey Lauriault**)**

- **Localizing AI Governance: Combatting Techno-solutionism in the Smart City,** Laine McCrory

Abstract: While promises of the 'smart city' bring narratives of futurity and better days ahead, these proposals are not new. Rather, they represent the newest phase in urban revitalization, where the technocratic desire to control and manage a city manifests itself through a seemingly universal solution. As a result of the goal of understanding the city as an information processing problem, there have been increasing attempts throughout history to develop intensive data collection systems (D'Ignazio and Klein, 2020), implement cybernetic solutions to urban problems (Mattern, 2021) and integrate infrastructure with ICTs through a reliance on data driven urbanism (Kitchin, 2017). Within the modern smart city, data is proposed as a one-size-fits-all solution to complex urban problems. However, this paper challenges the universality of urban data, instead employing what Loukissas (2019) identifies as a localized viewing of data as situated, contextual interactions. In exposing and establishing data cultures, the limits of empiricist assumptions about data are revealed, demonstrating the benefit of a localized approach to data governance. This analysis utilizes the case of Sidewalk Labs' failed Quayside Project - a smart city development that was to be implemented in Toronto, Canada - to demonstrate the distinct harms of techno-solutionist narratives in the smart city. Through a critical discourse analysis of both the corporate communications and activist backlash to the project, this analysis articulates the need for a restructuring of smart city governance. A feminist lens is taken to highlight a two pronged approach to equitable governance: integrating collective engagement from the outset in the design process, and ensuring data protection through a rights-based and localized accountability strategy. Engaging with feminist theories of intersectionality in relation to technology and data collection, this presentation will explore the need to understand the broader histories of social marginalization and power that are obscured through universalist assumptions about technology.

- **A river of data runs through it: Examining urban circulations in the digital age,** Ryan Burns

Abstract: Despite a rich literature on smart cities, urban data centers, and agglomerated technology sector capital in cities, in this paper we contend that there remains a deepening need to theorize data as constitutive of, and constituted by, flows, circulations, and movement within urban contexts. Contemporary cities are marked by concentrated natural, human, and digital resources that have preoccupied scholarship of the Anthropocene, urban political ecology, smart cities, and digital labor. However, the means by which these resources accumulate, organize, and flow in and through cities remains underexplored.

Here, we bring urban political ecology (UPE) to bear upon critical data studies, to elaborate on these mutual imbrications. In short, UPE asks how society and nature are co-produced, and it does so through an analysis of the distribution of resources, and an attention to power balance in urban environments. Importantly, UPE conceives of the city not as unnatural or artificial, but as the construction of particular forms of natures and environmental relations. Drawing on Nost & Goldstein's (2022) notion of data infrastructures and Halpern & Mitchell's (2023) concept of surplus data, we unpack how data shape urban-environmental governance and ultimately

transform people and nature. Digital urban infrastructure, understood broadly, has long been conceptualized as a vessel that enables and (re)directs flows of capital, matter, energy, or living organisms like humans and vegetation. Here, we bridge these two established but disparate areas to derive deeper insights into how digital infrastructures create and control flows in cities.

- **(Dis)affective Datafication: The Affective Terrain of Human-Data Relations,** Rohan Grover, Josh Widera, Mike Ananny

Abstract: The constant collection, processing, and computation of data for grand projects like artificial intelligence and human surveillance rightly provokes profound social and political concerns. Scholars have traced and critically questioned people's experiences of datafication, documenting and normatively challenging the sociotechnical collisions and imaginaries that datafication leverages and creates. Consistent with the field's dominant trajectories, Science and Technology Studies scholars have largely built relational understandings of sociotechnical systems to better situate and contextualize datafication.

Drawing on Raymond Williams' structures of feeling, we suggest an alternative, complementary approach, interrogating datafication as an infrastructural process that convenes an affective terrain on which human-data relations are negotiated. In this paper we develop this "affective terrain" approach and unpack its ontological and normative consequences for studying datafication. In this view, datafication cultivates particular affective terrains in which certain responses from users are encouraged while others are obstructed, without ever fully predetermining a subject's position. We illustrate the analytic utility of this framework through three cases of disengaged responses to datafication: digital resignation, behavioral prediction, and privacy self-management.

Data universalist approaches run the risk of pathologizing emotional responses to datafication as individual and personal anomalies rather than as common or collective responses to shared structures of feelings. As such, a lens of (dis)affective datafication affirms other ways of knowing through and of data, which may be overlooked by universalist frameworks. For example, rather than understanding digital resignation as illiteracy, disinvestment, or carelessness, we suggest that it shows how datafication itself is an infrastructural relation. Affirming the affective dimensions of data power helps make visible the increasing influence of data over our lives in variegated ways. Our goal is to move beyond individualist or universalist understandings of datafication and to instead interrogate datafication as a sociotechnical relation imbricated in contingent power dynamics.

- **Understanding data controllers' strategic interests and reluctance to share their power over data,** Alexandre Humain-Lescop

Abstract: While the concepts of information/power asymmetry are well studied in the literature, theses phenomenon are likely to worsen as the volume of shared data increases. As the "oil of the 21st century", data is indeed the subject of many regulations aimed at encouraging its sharing for economic reasons. The European Union for example is part this trend since its GDPR, and particularly with its recent regulation wave (DGA, DMA, Data Act, etc.). The challenge, if not the promise, is nevertheless to try to place the data subject at the center and to strengthen its power of control over its data.

In this respect, part of the literature studies the ""why"", i.e. the fundamental reasons justifying data subject empowerment (philosophically and in fundamental texts). Another part of the literature studies the ""how", i.e. the mechanisms allowing data subject empowerment (rights and the tools/interfaces allowing them to be exercised).

The common denominator of these two fields is the adopted angle, which is the data subject's point of view. However, given the idea that power is never really created, but shared, we should not only study the entity to whom we wish to grant more power, but also the entity who is required to share it and therefore to give up part of it.

Therefore, this article proposes to study the reasons that can discourage (mastery of the law, loss of dominant position, counterproductive effect on trust) or on the contrary incite (fear of sanctions, loss of responsibility, competitive positioning, desire to build a relationship of trust) private data

controllers to share their power with data subjects. By studying this complementary point of view, this work expresses the hope that regulations will be able to better take into account data controllers' interest in order to implement better sharing of power over data.

- **Follow the Thing: Situating Data vs. its Universalisation,** Azadeh Akbari

Abstract: This paper uses feminist epistemology to situate data within global data flows, historicise, and politicise it against the dominant and established theories of datafication and data capitalism. The paper offers a viewpoint from the intersection of decoloniality and feminism (Akbari, 2023) by revisiting the author's research on following data from the global SouthtracDD (Akbari, 2020), where a video that failed to be published during the 2009 uprising in Iran is followed. By following data outside the common trajectories of data circulation in the global North, the research offers new geographical and data imaginations neglected by the universalised understandings of data and its political economy. Consequently, data's behaviour as a thing is thoroughly investigated in the "follow the thing tradition" by scrutinising data as a commodity, its meanings and its associations. Using actor-network-theory, the paper highlights data's open and contested character as well as the breakdowns throughout its journey. Following an uncirculated video via its traces sheds light on data's agency in evoking different assemblages and spatialities. It also reflects on the epistemological importance of not treating the Southern data as exceptional and calls for a theoretical landscape that does not leave many realities of data out in its homogenised universal narrative. The paper questions the epistemic authority of these theories from a marginalised standpoint and through embodied situated methods of scrutiny. Consequently, it criticises and problematises the claim on value-neutral objectivity of data capitalism theories. In doing so, the research argues that achieving epistemic justice in producing knowledge about data is inherently political and invites further reflections on integrating a "digital decolonial turn" (Casilli, 2017, p. 3947) in research on data geographies.

Online Panel OP7 Gathering and Communicating Data **(Online)**
G-RM: HS 15.02 **(chair:** Monika Fratczak**)**

- **Civil-Society Monitoring of Nuclear Activities and the Entrenchment of the Nuclear Order,** Sara Al-Sayed

Abstract: The nuclear status quo is characterized by reinvigorated arms racing, the modernization of the world's nuclear arsenals, a U.S.-driven fixation on the nonproliferation of nuclear materials, technology, and weapons to adversaries, and importantly, the continued deprioritization of the goal of nuclear disarmament. The reigning nuclear order is described by some as being entrenched – that is, with few to no prospects for trend reversal. Surveillance practices have historically been central to this order, where the generated data serves either the assessment of nuclear risks or the monitoring of nuclear treaties to ensure the compliance of states with their treaty obligations. However, traditionally the preserve of governments, data gathering and analysis practices today see civil society playing an increasingly important role, owing to the growth in internet connectivity, online publicly available data and tools, and cheap ubiquitous sensing from mobile cameras to commercial satellites. Based mostly in the U.S. and West, the civil-society actors work with open sources and methods and disseminate their analyses through public media channels to raise publics' awareness of high-stakes nuclear issues and shape policy responses – supposedly to achieve a safer and more secure world. In this paper, I analyze the relationship between civil-society nuclear activity monitoring and the entrenchment of the nuclear order. I use primary and secondary literature, as well as the insights gleaned from a workshop I co-organized involving diverse stakeholders, to examine the interactions between civil-society actors, governments, and publics in their engagement with the products of nuclear sleuthing as enabled by the data revolution. For the analysis, I use the concept of 'reverse adaptation' by philosopher of technology Langdon Winner, whereby human ends are adjusted to match the character of the available technical means. The paper thereby demonstrates the prevalent mechanisms of reverse adaptation in the civil-society nuclear-activity monitoring context, illustrating how global insecurity is furthered rather than contested. Furthermore, the paper draws on other areas of Winner's thinking on technology and its politics to generate new insights as to how civil-society efforts could be better shaped to propel progress towards more secure arrangements.

- **Questioning "Ground Truth" Data: Addressing Bias and Consent Challenges in Artificial Intelligence Development,** Mykelle Pacquing, Jonathan Obar, Pirathayini Srikantha, Ian Stedman

Abstract: "Ground truth" refers to a "referential database" used in the construction of algorithmic, artificial intelligence (AI) systems (Jaton, 2017). The development of ground truth (i.e. "ground truthing") can be fundamental to AI development including large language models, machine learning, and image processing. While the content of ground truth varies, its purpose remains consistent – to provide a dataset upon which to develop AI. Indeed, "the centrality of ground truths for the design and evaluation of algorithms strongly suggests that […] we get the algorithms of our ground truths" (Ibid, p. 812). Ground truth and ground-truthing raise ethical concerns due to the potential subjectivities associated with database construction, and the limitations of available data (Crawford, 2021). In terms of the accuracy of ground truth data, there are questions about how the data perpetuates biases due to problematic collection, labelling, and analysis (Henriksen & Bechmann, 2020). It is also unclear whether such data is organized with the meaningful consent of its data subjects (Crawford, 2021). Should ground truthing continue as a data science practice? Can it be improved? Can it be aligned with international AI governance frameworks - e.g. OECD AI Principles (OECD, 2024) - to help address bias and AI-related harms?This paper evaluates perspectives on ground truth as expressed by AI scientists with Canadian professorial positions. So far, 10 interviews are complete. Preliminary results suggest ground truth processes are known to be problematic, but scientists proceed onwards with AI development anyways. Some note challenges associated with biased data relating to potential harm to members of marginalized communities. Nevertheless, AI development proceeds with minimal oversight or critique of ground truthing processes. As AI innovations proliferate, a robust understanding of ground truth, and its problems, must inform AI governance efforts.

- **The Power of Data Storytelling: Creative Stories for Data Protection Advocacy,** Alejandro Alvarado Rojas

Abstract: The large availability and dimensionality of so-called big data has become a driver for government and commercial operations. This capacity to render and control subjects at scale over digital networks has been discussed as data power (Arsenault, 2017; Lynseky, 2019). While more recent conceptualizations of data power focus on control over the infrastructural aspects of datafication (Hepp et al., 2022), it remains unclear whether the ways that data is communicated are a form of data power (Papacharissi, 2015; Castells, 2009). By building on Bounegru and Gray's (2019) notion of data stories, this study situates data storytelling in relation to data power to account for the "lived material conditions" (Gabrys et al., 2016, p. 3) in which data becomes meaningful as a collective resource, topic, and relation. Importantly, this study takes as its case Privacy is Global – Voices from Africa and Latin America: Creative Storytelling for Data Protection Advocacy, an interorganizational initiative with the aim to produce data stories in form of podcasts and comic books to communicate datafication that resonate with the communities' lived experiences. Empirically, this study consisted of a content analysis of the transcripts from the launch events, audio-novellas, and the comic books. Preliminary findings suggest that data storytelling is an expression of data power vested in the communication of meaning that drawn from the cultural stock of myths and controversies about datafication. As such, the power of data storytelling lies in affording the capacity to creatively learn and critique extractive data relations (Milan & Treré, 2019).

- **Digitalizing Sewage: the politics of producing, sharing, and operationalizing data from wastewater-based surveillance,** Josie Wittmer, Carolyn Prouse, Mohammed Rafi Arefin

Abstract: Expanded during the ongoing COVID-19 pandemic, Wastewater-Based Surveillance (WBS) is now heralded by scientists and policy makers alike as the future of governing urban health and disease. The emergence of WBS reflects larger neoliberal governance trends whereby digitalizing states increasingly rely on producing big data as 'best practices' to surveil various aspects of everyday life. With a focus emanating from three South Asian cities, our paper investigates the transnational pathways through which WBS data is produced, made known, and operationalized in 'evidence-based' decision-making in a time of crisis. We argue that in South Asia, wastewater surveillance data is actively produced through fragile but power-laden networks

of transnational and local knowledge, funding, and practices. Using mixed qualitative methods, we found these networks produced artifacts like dashboards to communicate data to the public in ways that enabled claims to objectivity, ethics, and transparency. Interrogating these representations, we demonstrate how these artifacts open up messy spaces of translation that trouble linear notions of objective data informing accountable, transparent, and evidence-based decision-making for diverse urban actors. By thinking through the production of precarious biosurveillance infrastructures, we respond to calls for more robust ethical and legal frameworks in the production, translation, and sharing of WBS data and suggest that the fragility of WBS infrastructures has important implications for the long-term trajectories of urban public health governance around the world.

Day 2

Thursday September 5

M&D Session

Time:	Bangalore 10:30-12:00	Not hybrid

In-Person Making and Doing BMD The Divide That Is Multiplying Fast: Experiencing digital divide to understand it **(Bangalore)**
B-RM: R305

- **The Divide That Is Multiplying Fast: Experiencing digital divide to understand it,** Meera Muthukrishnan

Abstract: While a strong impetus to operate through the digital channel has been propelling India towards the development and deployment of numerous Information and Communication Technology (ICT) solutions, researchers also have been finding that the success of these solutions and their integration into the existing larger infrastructure like public health, education, etc. are attenuated by the presence of the digital divide due to many reasons (Oxfam, 2022). Designers of ICT many times assume certain digital capacities in their users along with cognitive and performative capacities. All these capacities that contribute to the meaningful participation by a person cannot be judged binarily as just present or absent. They are most often present in a spectrum, ranging from completely absent to completely present influenced by the dimensions of availability, accessibility, knowledge, skill, interest, need in general and age, gender, socioeconomic classes, linguistic abilities, physical and mental capabilities, in particular.

Rationale: Understanding the diverse personas that interact with the digital solutions than that are imagined and planned for during the design of ICT solutions can help designers of ICT solutions to provide multi-channel service fulfilment, ensure better Human-Computer interaction and for the decision makers to reflect upon and evaluate the ICTs for usefulness in the local/ regional contexts in which they may have to be deployed.

Method: Using the insights about digital divide observed during the empirical studies involving the study of ICT solutions deployed in the public health domain in India, we present an interactive space for the participants, to select a persona from various combinations of criteria (like age, gender, device access, network access, skill level, knowledge level, linguistic ability, physical and mental ability) to interact with ICTs to understand what enables, deters, constrains and challenges people with similar persona to participate in the digital sphere.

Intended Outcome: a) Participant becomes aware and appreciative of the various possibilities and constraints for the end-users of the ICT solution. b) Participant becomes able to identify any bridging solution that may be needed for the end-users

If designers, this can help them design the solution more appropriately to cater to the diverse personas like choosing hybrid support, offline support, multilingual support, children/ elderly support etc. Decision makers can also understand and address the gaps by supporting bridging solutions, support solutions, etc.

In-Person Making and Doing BMD Design your own feminist server **(Bangalore)**
B-RM: R305

- **Design your own feminist server,** Padmini Ray Murray

Abstract: Drawing on our collaborative project at the Channapatna Health Library where we work with community health workers (HNs) from Channapatna co-designing and building the Channapatna Health Library (CHL) – ethically sourced and locally situated audio/video content of community health knowledge and practices. These situated data practices and the community-owned, maintained and managed data infrastructures at CHL form the basis of this making and doing workshop and we invite data activists, developers, STS scholars, community members,

academics and non-academics to further build upon the case study to imagine and sketch the futures of infrastructures entailing tools, protocols, and practices that foster community-owned and managed data practices. The workshop aims to collaboratively imagine independent ad-hoc (feminist) servers hosting situated data while imagining and sketching the necessary practices and protocols for the governance, maintenance, research, and publishing of the data. The workshop aims to map the various imaginations of futures of community-owned data practices and we hope to learn from other precedents and examples from other similar contexts elsewhere. Workshop activities will include:

A description of the CHL project, and our conceptualisation of “feminist servers” which underpins our thinking on feminist autonomous infrastructures

Imagining what other versions of these infrastructures might look like (through sketching) or do look like (sharing examples of other projects with similar values)

Creating a checklist of questions to think through in order to create fair principles of community data ownership, usage and sharing

Putting together a list of resources required: these might be physical, technical, knowledge based, as well as roles and social relations.

Thinking through together how these models of infrastructures might travel to other contexts, and what are the considerations to ensure these models might succeed in other sites and situations.

In-Person Making and Doing BMD Visualising citizen generated data for solutions on safer cities **(Bangalore)**
B-RM: R305

- **Visualising citizen generated data for solutions on safer cities,** Elsa Marie DSilva

Abstract: Safecity is an anonymous crowd mapping tool for reporting sexual and gender based violence (SGBV). It was launched as an immediate response to the horrific gang rape of Jyoti Singh on a bus in Delhi in December 2012. The aim was to provide a safe space for survivors of SGBV to document their experience, break the silence and thereby bridge the data gap that exists due to under-reporting of these crimes. Since then Safecity has become the largest dataset on the issue of SGBV. The data helps us understand the violence at the hyperlocal level through patterns and trends. These insights have been used by communities and institutions to identify solutions for safer cities programming, better allocation of resources and decision making for violence reduction. Our dataset is completely anonymous by design and captures the following information -age, gender, location of the incident (google maps), type of incident (category), free text to write about the experience, time of day, date, intersectionality if any and if it was reported to the police. We would like to offer our dataset for a data hackathon where participants can identify patterns and trends by location or category or time and suggest possible solutions. For example the data could indicate solutions for safer transport or better lighting in certain areas. Depending on the time available, we can have an elaborate exercise or adjust it to suit the time.

Session VI

Time:	Bangalore 12:30-13:55	Graz 09:00-10:25

In-Person Panel GP1 Data Power in Motion and Transformation: Confronting Theoretical and Methodological Challenges **(Graz)**
G-RM: HS 15.02 **(chair:** Anu Masso**)**

- **Data Power in Motion and Transformation: Confronting Theoretical and Methodological Challenges**, Anu Masso

Abstract: This session tackles key conceptual and methodological challenges in contemporary data studies, placing particular emphasis on the crucial roles of place, space, and context in shaping data. Our inquiry goes beyond valuable comparisons of contextual and domain-specific variations in data perceptions and practices; in addition, it delves into the dialectical contradictions that emerge between the conceptual frameworks and real-world phenomena of data and movement. Moreover, we shed light on the dynamic movements of data itself, recognising it as a pivotal source and driver of power dynamics. In a theoretical sense, we advocate for a dynamic approach to examine data power, using a theoretical social transformation framework as our foundational standpoint. Methodologically, we tackle challenges in researching data power at both local and global levels, introducing innovative techniques such as large-scale online crowdsourced surveys and cognitive eye-tracking methods. These are complemented by somewhat more traditional methods like storytelling, scenarios, and in-depth interviewing approaches. Our session focuses specifically on instances of data power in action, particularly within the realms of predictive policing, security apps, data-based and algorithmic urban mobility, and AI literacies. These areas showcase visible theoretical and methodological challenges, providing a detailed and comprehensive perspective on the multifaceted, context-specific, and dynamic nature of data power.

- **Exploring Perceived Transformations in Police Work through Story Completion Technique,** Tayfun Kasapoglu

Abstract: As a part of the CUPP (Critical Understanding of Predictive Policing) project, we have utilized a wide variety of approaches to explore predictive policing and conducted multiple studies on topics such as digital identity systems, perceptions of data collection practices at the borders, and even potential futures of policing with the increasing use of DNA data. This study focuses on the story completion method used in classroom settings in Estonia and Sweden with students (n=23) who have taken critical data studies. The participants were presented with two different story prompts including a police officer and a citizen potentially targeted by predictive policing. Through analysis of the completed stories, this research investigates people's imaginaries, concerns, and expectations regarding predictive policing. The findings shed light on the observation that, in the era of data, the police are not solely perceived as an institution ensuring security or as a source of citizen apprehension related to surveillance. Rather, the transformations in police work are understood as 'distant technologies', wherein individuals, be they, citizens, or police officers, are increasingly removed from the direct application of these technologies. This article uncovers that when citizens possess low levels of trust in the police, implementing automation can further exacerbate the disconnect between citizens and the state. Furthermore, this research proposes an innovative approach to studying automated systems by utilizing the storytelling method, thereby making a valuable contribution to methodologies employed in the study of data.

- **Decoding (Super)diverse cities: A Cognitive Exploration of Data Diversity and Perception in Autonomous Vehicle,** Mergime Ibrahimi

Abstract: Autonomous vehicles (AVs) promise to revolutionize urban mobility, but their development is predominantly influenced by the perspectives of dominant social groups, often

overlooking diverse public needs and interests (Costanza-Chock, 2020; Sadowski & Bendor, 2019; Martin, 2021). This disparity raises critical questions about mobility justice and inclusivity in future technologies whose design constantly centres on an extremely limited set of imagined users. When adding the dynamics and super-diverse urban spaces it becomes critical to study how diversity is (de)considered and transformed through automated data technologies, and how different people perceive such technologies. This research interrogates these questions through a mixed-method study, utilizing cognitive methods such as eye-tracking to study social and cultural aspects of data in the context of AVs. Our goal is to understand social transformation through data and how people perceive social diversity as 'coded' and transferred to algorithms and embedded in the surrounding social and cultural structures. The study comprises an in-lab eye-tracking experiment with a purposeful sample of 16 participants and an online eye-tracking experiment involving 1,276 respondents from 20 cities. This approach not only allows a detailed exploration of individual cognitive responses but also captures the broader trends across different social backgrounds and urban settings. Significantly, this study uncovers how cognitive research methods contribute to the prior ethnographic, computational, and digital approaches in the study of social and cultural aspects of data. Furthermore, it challenges the prevailing centres of data power in the AV industry, advocating for more inclusive and equitable data practices that reflect and respect the diversity of urban communities.

- **Mobile Safety App and Global South: Crowdsourced Data and Mobility Transformation,** Pauline Baudens

Abstract: The vast digital transformation permeates all areas of society, redefining consumer practices. This study focuses on mobile safety apps claiming to support women's mobility, particularly addressing issues of sexual harassment and violence through mapping, and navigating services. Women contribute to data collection through crowdsourcing techniques, while safety mobile applications analyse these data to provide spatial information on the safety index of various neighbourhoods to women. Real and perceived insecurity harms women's confidence and, consequently, their mobility. Therefore, the stated objective of these mobile safety apps is to enhance safety by providing street-level safety data and guiding users along the safest routes. The research, primarily conducted in Pune, India, includes interviews with fifty-seven women and seventeen experts, including city officials, researchers, and representatives from businesses and non-profits focused on women's safety. The main goal is to understand how mobile safety apps, through data collection and analysis, contribute to women's safety during their travels. The study seeks insights into how these mobile safety apps effectively transform women's safety practices potentially providing more safety feeling. Additionally, the study explores the interaction between women and mobile safety apps, as well as the question of surveillance feeling.

- **Bridging Urban Divides: Enhancing Access to Shared Mobility Services through Public-Private Data Collaboration,** Anniki Puura

Abstract: A comprehensive understanding of urban inequalities, characterized by spatial disparities and constrained access to services, is often limited due to insufficient collaboration and data sharing between public and private entities responsible for service provision. This paper focuses on the data-driven dimensions of collaboration between the public and private sectors to address such inequalities in the context of shared mobility services. Although shared mobility services provided by both local governments and the private sector are recognized for their role in reducing reliance on privately owned motorized vehicles in urban environments, less attention is paid to how services provided by private companies may intensify existing inequalities in accessing mobility resources. This is particularly important in urban areas with deep-rooted socioeconomic disparities and spatial segregation. While instances of public-private data-sharing collaborations have emerged, these are still less addressed in the context of urban inequalities. This paper focuses on the question: "How can public-private data collaboration mitigate urban inequities in accessing shared mobility services?" The study seeks answers in the context of Tallinn, the capital of Estonia, which has witnessed a rapid increase in the use of shared mobility services provided by the private sector and is also known for its high levels of spatial segregation, highlighting the importance of the study. This study maps data collaboration around shared

mobility services by evaluating ongoing collaboration between the public and private sectors. It also investigates, through interviews with representatives from both sectors, how they tackle and encompass the understanding of urban inequalities while providing their services.

- **Navigating AI Literacies: Insights from In-depth Interviews with Generation Z,** Jevgenia Gerassimenko, Kateryna Lobanova

Abstract: This presentation offers insights from the GenZAI project, led by Toshie Takahashi at the University of Waseda, focusing on AI literacy among Generation Z. The rapid growth of AI and robotics lacks a comprehensive understanding of their societal impact, particularly on the younger generation. Critical studies emphasize the assessment of opportunities, threats, and risks associated with AI and robots, primarily focusing on adults. However, youth, as future creators, and users of AI, play a crucial role in shaping future technologies. The concept of "data literacy" among youth involves not just understanding AI skills but also grasping the values crucial to their development. Neglecting a value-based approach may lead to inequalities, unequal power distribution, or data colonialism. Vulnerable groups, such as those with (forced) immigration backgrounds, and limited access to informal education, face specific risks, necessitating inclusive research for fair data collection and solution development. Ignoring these groups may deepen social inequality and lead to unfair policy development. Relying on the methodology developed at Waseda University and adjusted to the Estonian context, we conducted in-depth interviews among participants aged 9-27 (n=36) and a representative survey (n=1500), that this presentation relies on. The study spans different regions of Estonia, engaging children and youth with diverse experiences and interactions with artificial intelligence, influenced by varying educational opportunities, and socio-demographic and linguistic background. This presentation focuses on younger generations in Estonia, aiming to understand their AI literacies, with a particular focus on their perceptions of AI, identifying necessary skills for navigating technological challenges, ensuring data justice, mitigating risks, and fostering responsible and ethical data citizenship for sustainable technology use.

In-Person Panel GP2 Situating Care-full Data Studies **(Graz)**
G-RM: LS 15.03 **(chair:** Irina Zakharova**)**

- **Careful Validation in Environmental Data Arenas: Thinking Through Dilemmas of Data Universalism in Air and Biodiversity Datafication,** Bartosz Ślosarski

Abstract: The aim of the paper is to present environmental data as a prism of careful validation for environmental activists within two empirically studied contexts – the Polish air datafication and European biodiversity datafication (Pink 2022; Youatt 2016). Careful validation is understood as sets of practices involving the use and valuation of data to map environmental issues (de la Bellacasa 2017; Mol et al. 2010), such as air pollution or biodiversity loss. Data practices sensitize environmental activists to the perception of contexts, defined as data arenas – interactive spaces focused on strategic datafication of nature (Ślosarski 2023). It includes the diverse valuation of data (Muniesa et al. 2017), the perception of dominant data actors, such as state, academia, and corporations (Trere 2019), definition of the boundaries of data application and use (Star 2010), as well as strategic dilemmas or choices in the production and use of data in their activities.

This paper is based on critical qualitative research involving activists and other actors engaged in the strategic datafication within the arenas of air and biodiversity datafication (qualitative interviewing, N=40) and the Reflexive Thematic Analysis of the gathered empirical material (Braun, Clarke 2022). In both studied cases, activists – participants in environmental movements and non-governmental organizations – carefully seek confirmation within specific environmental data arenas. This, on the one hand, generates a set of dilemmas regarding data usage, harmonization, and adaptation to prevailing “universal” standards (Milan, Trere 2019). On the other hand, it reveals interdependencies as relations of material power associated with infrastructure control (Thatcher, Dalton 2021) and symbolic power of data as the ability to shape visions of environmental issues (Machen, Nost 2021). The careful pursuit of validation among other actors exposes activists to the exploration of incidental contexts where strategic datafication

occurs, posing dilemmas and uncovering the mechanisms of data power within specific contexts.

- **Between data-territories and embodied urban experiences: Uber, drivers, and platformised ways of knowing the city,** Abel Guerra

Abstract: This contribution approaches data power through a focus on knowledge production, delving into the infrastructural asymmetries and epistemic regimes animated in Uber and Uber drivers' ways of knowing, representing and engaging with urban space. Datafication powers Uber's algorithm-oriented spatial knowledge production – abstracting diverse territories and practices allows the platform to globally manage labour in over 60 countries around the world, mostly guided by pricing and demand regulation principles. Uber drivers, on their turn, ground their knowledge of urban space in everyday engagements with the city, oriented by a combination of the framework provided by Uber and their own set of concerns and tactics to optimise their earnings and safeguard their wellbeing.

This work builds on the analysis of texts and images produced by Uber's engineering team, contrasted with interviews with drivers (n=23) in São Paulo, Brazil. It argues that drivers' affective and calculative relationship with the city and collectively crafted circuits of information-sharing give shape to a particular ecology of knowledge which transcends Uber's abstractive rationalities. While learning to navigate the city through Uber's data-intensive financialisaton of the territory, drivers also factor in their own mental maps and imaginary borders, knowledge of infrastructural inequalities across the city, and safety concerns. Their experience and professional identity are marked by a sense of shared vulnerability, which gives rise to particular attunements to the city (e.g. feelings of being at risk), and an emergent infrastructure of care through which drivers look after one another. While driver's knowledge is partially based on personal experience and concerns, it is also gradually collectivized and stabilised as it shared and refined on WhatsApp groups, social media, and physical spaces.

- **Between local and generalizable: Organizations as typical contexts reconfiguring data power,** Stefanie Büchner

Abstract: This proposal addresses a critical challenge in situating data practice "beyond data universalism" (Milan and Treré, 2019): To take organizations into account in a double sense, as specific and typical contexts in our societies. To reflect upon data power and the actors enabling and enforcing data power on a day-to-day basis, I take on a perspective of organizational sociology.

Especially from an ANT and STS perspective, the assumption that organizations exist not only as local social worlds but maybe even as systems with typical structures and problems is seen as critical. On the other hand, an increasing number of publications and calls point towards an increased interest in organizations as a moderating factor of datafication and sociotechnical transformations (Schwarting and Ulbricht, 2022; Jarke, Zakharova and Breiter, 2022; Pinel, Prainsack and McKevitt, 2020).

Drawing on current empirical research (Jarke and Büchner, 2024; Büchner and Dosdall, 2024), among them youth welfare offices and police organizations, I discuss how a more nuanced understanding of organizations contributes to understanding the varieties and tensions of data care and especially of "data care arrangements" (Jarke and Büchner, 2024) in today's organizations.

- **Digital Citizenship as care: perspectives from UK secondary schooling,** Ted Palenski

Abstract: There is no shortage of scholarship that describes the ever-growing degree of datafication of schools in the Global North, from primary schooling (Bradbury & Roberts-Holmes, 2017) to secondary schooling (Grant, 2022; Greene, 2021), extending to all stages of a child's life course (Lupton & Williamson, 2017). There is also a storied trajectory of critique of schools as sites of the reproduction of inequality (Bowles & Gintis, 1976; Rafalow & Puckett, 2022). At the same time, many interventions in the space leverage the individualistic, apolitical ideas of digital literacy and digital citizenship, often focused on individual rights and 'responsible behaviour' (e.g.,

Ribble et al., 2004).

This paper takes a different approach. Inspired by framing educational technology, and attendant datafication practices, through the lens of an ethics of care (Zakharova & Jarke, 2022) and a postcritical approach (Gorur et al., 2023), I draw from recent ethnographic fieldwork in two secondary schools in the United Kingdom to posit a novel framing of digital citizenship: digital citizenship as care. I make use of examples from early-stage fieldwork, highlighting moments of care and moments of friction (Ruckenstein, 2023) that allow for new understandings of how we might explicitly teach for this digital citizenship, following the call of Milan and Treré of moving from datafication towards data justice (2019). I ultimately argue that this focus on care, a core element of some educational contexts, may help refocus efforts away from describing (and critiquing) data harms towards enacting data justice, while also building relationships of care between academic researchers and school settings in which that research is carried out. In doing so, I grapple with some methodological challenges of carrying out this work in an era of increased educational accountability. This work thus counters the depoliticising of digital citizenship education as it stands and proposes a renewed focus on care.

In-Person Panel GP3 Situating Participation, Co-design and Co-creation **(Graz)**
G-RM: LS 15.02 **(chair:** Yana Boeva**)**

- **Visualising the school?! A critical study on co-designing data-based interfaces of learning management systems,** Nina Brandau

Abstract: The global expansion of EdTech causes an increasing datafication of local school contexts (Bock et al. 2023). As one consequence, oftentimes socially-embedded factors, such as behaviour or pedagogical practice, are turned into measurable forms to be visually displayed on educational platforms. Those well-ordered, seemingly objective visualisations mostly obscure the messy process of transferring complex school realities into a certain technological design and their performative role in the (re)enactment of individual contexts (Kennedy et al. 2016). While critical research has increasingly scrutinised the visual display and performative character of numeric data on platforms (Ratner 2022), there is little knowledge, yet, on how the graphic compositions of platform interfaces influence the (re)enactment of schools more generally. Therefore, this contribution equally encompasses words, colours or images as a form of data that abstract realities through the technical environment of a platform (D'Ignazio & Klein 2020), and conceptualises their composition as Graphic Data Visualisations (GDVs). Focusing on these GDVs, the paper aims to deeper understand how pregiven interface compositions enact certain school practices while at the same time offering a possibility for critical engagement and re-design within the school community.

The presented empirical study was conducted in four German schools that were accompanied in (re-)designing the interface of a learning management system (LMS) according to their individual pedagogical and organisational ideas. Following a critical co-design approach by integrating school actors in the design and research process, the aim was to foster critical reflection on how the LMS in general and GDVs in specific shape educational practices in local school contexts. Applying a hybrid ethnographic approach, the study revealed that oftentimes little details in the GDVs strongly influence pedagogical practices. At the same time GDVs can be intentionally used in co-design processes to foster critical reflection on platforms' performative power.

- **Experiences with participatory design of entity-relationship models,** George Fletcher, Julia Stoyanovich

Abstract: Every information system hinges on a conceptualization of an application domain, that is, a slice of the world to be created and measured by the system for data capture (e.g., residents and households of a country), and analysis and intervention (e.g., identifying financial need so as to determine the distribution of welfare benefits for households). Without a model, whether it be implicit or explicit, there is no system. In essence, a conceptual model is a collection of things of interest (e.g., people, households, cities, jobs) and relationships of interest between these

collections of things (e.g., people can belong to households; households are located in cities; people can have jobs; people have citizenships and visa statuses). The Entity-Relationship Model is a typical framework for conceptual modeling taught worldwide since the 1970's in undergraduate programs in computer science, data science, software engineering, information science, and business information systems.

The interests serviced by an information system are often not those of the communities in front of the system, that is, those communities affected by the deployment of the system, by the data intervention realized with and through the system. For example, those whose health and safety depend the most on welfare benefits are often the least likely to be involved in the design of the systems for distribution of these benefits. Participatory Design is an established design practice which aims to embrace those in front of technological artifacts, to ""design with"", to co-design systems. Given the pivotal role of conceptual modeling in information systems such as machine learning-based and artificial intelligence-based systems, it is important to develop participatory approaches to the design of models. Currently, there are no established theories or methodologies for this.

We are embarking on a study towards developing the first theories and methodologies for participatory design of entity-relationship models. In this talk we will present our current findings and perspectives, as well as our outlook for research questions yet to be formulated. We hope to gain critical feedback from the wide range of disciplines and practices of participants of Data Power. We also hope to help identify and further foster a community around participatory design in data systems.

- **Computing the Student: Co-developing a research agenda for higher education surveillance with students,** Lyndsay Grant, Jessica Ogden, Kuba Jablonowski

Abstract: Digital data surveillance of students in Higher Education (HE) is now ubiquitous and increasingly fine-grained, encompassing the ways that institutions monitor student attendance, location, visa compliance, ‘integrity’ of assessments, ‘engagement’, and ‘wellbeing’, amongst others (Ross, 2022; Beetham et al. 2022). Such a ‘surveillance culture’ (Lyon, 2017), in which students’ are primarily known and governed through their data profiles, potentially undermines the pedagogical relationships of trust and care in HE, which are essential to educational flourishing (Doyle 2021).

In this early-stage scoping project we collaborated with a group of HE students to co-develop a future research agenda for researching university digital monitoring and surveillance. Working with students from diverse disciplinary and international backgrounds, we sought to place students’ experiences, insights and concerns at the centre of the research process. Students held varied, complex and ambivalent orientations towards their own digital surveillance, neither entirely resistant to data monitoring nor espousing the resignation of “surveillance realism” (Dencik 2018). In this context, centring the everyday experiences of students to co-create a critical research agenda for HE data surveillance, raised a number of methodological and ethical tensions. These include: tensions between students’ sometimes optimistic data imaginaries and more ‘critical’ framings of data power; navigating students’ transitory engagement with Universities and future-facing orientations of data monitoring; the complexity of researching data flows between HE institutions and third parties; and ethical questions of privacy, consent and agency when investigating institutional knowledge and decision-making about individuals and cohorts. We conclude by evaluating the methodological tensions, opportunities and ethical considerations involved in engaging diverse students in critical research about data power.

- **Citizen data projects. Between consumerism, amateurism and empowerment,** Marten Knol, Mirko Tobias Schäfer, Albert Meijer

Abstract: Citizen projects in the realm of data collection and analysis frequently have been either framed as citizen science or data activism. However, those terms are not always applicable and might even be misrepresentative for the actual quality of the project. Based on a comparative analysis of 38 citizen data projects in the Netherlands we identified four different categories of

projects. They differ profoundly in technical complexity, number of participants, their data literacy, but more importantly in emancipatory potential and political sensibility, and actual impact. From accessible data collection project where the citizen is merely a facilitating data collection to critical bottom-up activist projects or well-connected collaborative projects between citizen groups, government organisations and research facilities, these projects show very different data practices and motivations for participation. Government organisations oscillate between reluctance and enthusiasm in embracing these activities. On the one hand they might add useful data collection and processing capacity to their own organisations, they could connect effectively to urgencies and needs experienced by residents and contribute to problem solving. But on the other hand, the cooperation could turn out problematic due to many reasons: lack of competence and capacities on the side of citizen projects, lack of experience in cooperating with citizen projects on the side of the government organisations, worries about politically sensitive issues, etc.This paper provides a nuanced conceptualisation of citizen data projects and maps the different power dynamics unfolding from the different quality of the data projects.

In-Person Panel GP4 Situating Data Power in Data Ecosystems and their Governance **(Graz)**
G-RM: LS 15.01 **(chair:** Fariba Karimi**)**

- **The dark age of social media data access,** Jana Lasser

Abstract: After a brief “golden age” of access to social media data, driven mostly by a powerful, well documented and easy-to-use API (Application Programming Interface) to access data on X (formerly known as “Twitter”), as well as comprehensive access to data on Reddit, social media companies are increasingly making data access for researchers to public data on their platforms more difficult. This development includes extremely restrictive terms of use that are almost impossible to respect (TikTok), introduction of access fees (Reddit) or complete shutdown of data access through APIs (X, Facebook, Instagram). These developments shift the opportunities of who can still access data and shape which research questions can still be studied with these data: for example, in summer 2023 a series of high-profile studies was published, detailing research into the impact of Facebook’s algorithmic content curation on polarisation in the 2020 US elections. While this research can be characterised as groundbreaking, it relied on a close and exclusive collaboration of purely U.S.-based researchers with the platform’s parent company Meta. On the other hand, concurrent developments in the EU – specifically the implementation of the Digital Services Act – promise more democratic access to public platform data but haven’t led to widespread changes in platform data access policies and practice yet. In the proposed talk, I will give a brief history on the past, present and potential future of access to social media data. I will discuss how enabling or restricting access shapes which research is conducted, and how inequalities such as differences in the prestige of institutions, researcher’s tenure status, and their country of origin influences who is willing and able to conduct the research.

- **Data Power in Food Systems: A Decolonial Critique,** Aditya Singh

Abstract: Agriculture in the global north is increasingly data-driven, with sensor-augmented equipment collecting a variety of data. ‘Smart’ agriculture promises granular insight into soil conditions, weather patterns, cropping patterns etc., providing predictive recommendations to farmers.

This equipment is typically developed by large agribusinesses such as Bayer and John Deere, putting them in a position of unilateral control over (access and use) of data. Consequently, there are concerns that stakeholders may not equally benefit from data-driven agriculture, which may instead exacerbate asymmetries of power in the sector.

In response, there is interest in ‘commons’, or ‘open’ approaches towards (agricultural) data, with a view towards democratising access and benefit. Data is still seen as a key driver of value, and models such as data trusts and cooperatives have been proposed to operationalize shared governance towards socially beneficial data use - in agriculture and beyond. This paper presents a generalised critique of such narratives, particularly in global north scholarship, that focus on data

(access) as an end in itself.

The critique builds from decolonial perspectives on data and artificial intelligence, challenging 'data-solutionist' imaginaries that risk amplifying inherently extractive logics, and the uneven geographies of their impact. While the enclosure of data has recently been framed as a new form of colonialism, contemporary data infrastructures represent the continuation of extractive colonial logics that impoverish the global south. 'Democratised' access to data does not challenge the ongoing coloniality of resource extraction and (data) labour that scaffolds big data and artificial intelligence. Prioritising data (access) implicitly accepts the consolidation of industrial forms of agriculture that are socially and ecologically extractive, and reproduce colonial ontologies with respect to land and knowledge.

Much is at stake with data-driven agriculture, though it remains relatively understudied in conversations around data and power. Employing a decolonial lens historicises these dynamics of extraction across geographies, recognizes the material and environmental dimensions of this ongoing extraction, and challenges the epistemic violences at the heart of these systems.

This paper thus presents a critical lens to assess the datafication of agriculture in the global north in the context of the colonial legacies of contemporary (and future) food systems.

- **A genealogy of EU data governance,** Gijs van Maanen, Charlotte Ducuing, Tommaso Fia

Abstract: As most debates on how to better regulate technology, the notion of 'data governance' is future-oriented. Data governance can be defined as the system of rights and responsibilities that determine who can take what actions with respect to data.[1] This notion has gained traction in policy and law circles, as a means to reconcile conflicting visions, rights, interests and dimensions nested in data.[2] Centering on 'data' as an object of regulation, however, channels the legal and regulatory trajectory into directions that sideline other ways to govern the development of technology.[3]

How the notion of data governance attained these legal and regulatory connotations, together with their normative and affordances, remains unclear. In this genealogy of data governance we shed light on this question, through connecting the history of EU data governance to its overarching discourses, intellectual understandings and cultural narratives. A genealogy of data governance is expected to help identify both the epistemological affordances of this concept and, possibly, paths that have not been taken and that could open alternative avenues.[4]

Methodologically-speaking, we draw from Foucauldian approaches that emphasise not only the legal-political origins of concepts, but also trace the material, infrastructure and other dimensions that help to explain what the notion in its variable meanings holds for the present.[5] We draw from histories and genealogies conducted in neighbouring fields such as comparative (private) law,[6] open data,[7] platform studies,[8] algorithm-studies,[9] and statistics.[10] In terms of scope, we investigate three areas of formation of EU data governance in the EU: policy orientations from the Commission and other European institutions, legal doctrinal research and other academic contributions to the various data governance debates, and the grey literature - often produced by data-driven companies.

- **Who Speaks When the Data Speaks for Itself: Surveying Grammars of Graphics,** Gabby Resch

Abstract: When prepared for public consumption, information graphics (charts, graphs, data visualizations, etc.) often serve a rhetorical function - to support, argue for, and persuade. Understanding how the rhetorical power of visualization can be wielded has become a crucial element of engaged citizenship. Many of the most popular visualization systems, however, obscure the epistemic conditions of their development and, in the process, reinforce specific biases about what constitutes data, who can be a data interpreter, and how data-driven authority should be leveraged.

Leland Wilkinson's seminal 1999 book ""The Grammar of Graphics"" introduced a suite of graphical formalisms that ""takes us beyond a limited set of charts (words) to an almost unlimited

world of graphical forms (statements)"" according to its author. It constructs an argument that 'charts' are mere artistic structures, while 'graphs' are about the underlying data structure, a form of mathesis (Drucker, 2001) that, in practice, reduces data engagement to a narrow positivism.

This paper will examine Wilkinson's ongoing influence on the world of data design, and will share insights about how this influence perpetuates biases that are embedded in popular software. It will survey a host of analysis and visualization systems that have Wilkinson's ideas at their core, including SPSS, Tableau, the R package ggplot2, and the JavaScript libraries Vega and D3, the latter being the foundation for a significant portion of the data graphics on the internet.

By engaging critically with Wilkinson's legacy, this paper will show the various ways that it reinforces the tired adage that data somehow ""speaks for itself."" Researchers of data power likely recognize that data never speaks for itself, but will benefit from learning how Wilkinson's voice often whispers in the background, helping structure arguments against those who wish to develop qualitative, subjective, interpretative, and humanistic data practices.

Session VII

Time:	Bangalore 14:10-15:35	Graz 10:40-12:05

In-Person Panel BP2 Data as power, power as data **(Bangalore)**
B-RM: R305 **G-RM:** HS 15.03 **(chair:** Janaki Srinivasan**)**

- **Unravelling Data Power Dynamics in a Food Delivery Platform A Perspective on Labour Management,** Nimmi Rangaswamy, Tanmay Goyal

Abstract: Underpinning the theme of moving ‘beyond data universalism’, our study intends to shed light on the everyday aspects of data power in the context of location, space, and time. Focusing on ‘agency’, one of the tenets in the theory of ‘datafication of and in the Souths’ (Milan & Treré 2019), the study aims to disentangle the idea of ‘performance’ as a social-technical derivative governing food delivery agents in urban India and, what we address as ‘unfair usage of data power’ by technology platforms. The global South has been contextualized as economically constrained, resource deficient, and socially hierarchical in contrast to the North. Although platform-mediated work has faced criticism for its precariousness and adverse effects in the Global North, its reception and impact in the Global South offer a few contrasting narrative strands. Flexibility, accessibility, and transparent income generation associated with platform labor have included individuals from diverse and precarious socio-economic backgrounds to earn and enhance their livelihoods. Without diminishing the information asymmetry, algorithmic tyranny, and challenges of performance pressure on food delivery labor, our study offers an ethnographic view of everyday opportunities, however small, to substitute the ‘despotism’ of platform work.

The first dimension of our study revolves around using data from food delivery platforms to optimize demand, supply, and business expansion over employment issues. Delivery platforms capture and deploy data on individual food orders to manipulate and optimize delivery time, speed, and quality over agent experience. Incentive schemes form the backbone of enhancing employee performance and, as a result, income. Management of data-driven incentive schemes renders individual agent targets exceedingly challenging to achieve, affecting the performance metrics of the delivery agent. Similarly, assigning long-distance orders to disrupt a delivery agent’s ‘target for the day’ impacts employee income and performance potential. The second aspect of our study focuses on the agency food-delivery agents' exhibit, however meagre, to evade the ‘draconian’ platform management of the delivery process (Shaikh et al., 2023). Our findings underscore the agents’ perception of forging agency through ‘incentives’ and ‘bonus points,’ essentially gamification techniques employed by platforms. Despite algorithmic management and the gamified nature of work, delivery agents demonstrate resilience and innovation in asserting agency. Using sophisticated tactics to maintain performance metrics, agents maximize earnings within platform constraints. We view gamification as requiring a comprehensive understanding and

manipulation of platform rules. Agents navigate delivery platforms to push their own preferences such as ‘order rejection’ and ‘transfer acceptance’ as techniques to ‘game’ dictates of platform optimizations. As platform companies’ game to optimize for operations and business expansion, agents’ game to maximize earnings, comfort, and time.

Despite the challenges of performance pressure on food delivery labor, we capture the daily rhythms and routines of delivery work punctuated by flashes of agenting, revealing small capacities to make choices and influence work outcomes. How effective or potentially disruptive are delivery agents' choices to claim agency? We use the concept of the ‘illusion of choice’ and ‘algorithmic despotism’ (Griesbach et al. 2019), shaping performance metrics of delivery agents in building a case on the preponderance of data power and their outcomes in the real world of food delivery work.

- **India Stack: The Public-Private Roads to Data Sovereignty**, Jyoti Panday

Abstract: This paper delves into the evolving landscape of digital governance in India, where the integration of digital technologies, content, and networks has generated vast amounts of data. As the digital transformation progresses, a significant portion of India's population remains offline, presenting both a challenge and an opportunity for the integration of this untapped demographic into the digital economy.

The study explores the global context of digital governance, examining how different nations approach data sovereignty amidst the rapidly changing political economy of the 21st century. The paper scrutinizes the distinctive strategies of the United States, China, and Europe, each grappling with unique challenges and adopting divergent regulatory models.

The primary focus, however, is on India's approach to data governance, grounded in a sovereignty-based agenda. The paper closely examines the India Stack initiative, a set of APIs and platforms operating in critical sectors such as identity, payments, and data. Positioned as ""national plumbing for the internet age,"" India Stack is evaluated as a unique platformization strategy that consolidates power over data with potential global implications.

The paper raises pertinent questions about the evolution of India's sovereignty-based approach, the operationalization of data governance through India Stack, and the resulting policy challenges. The analysis draws on existing literature and aims to shed light on the historical shifts in India's stance toward technology governance, emphasizing the current emphasis on sovereignty.

Structured in five main sections, the paper outlines the changing dynamics of technology development and governance in India, introduces a conceptual framework for understanding data sovereignty, and meticulously tracks the creation and deployment of India Stack products. It argues that India Stack is a deliberate effort to assert sovereignty over digital data, resources, markets, and technologies.

By addressing the broader implications of India's sovereignty-based strategy, the paper seeks to contribute to the ongoing discourse on the global governance of digital data and the intricate interplay between state competition, commercial interests, and normative considerations.

- **Data Body of the Digital Citizen: A Case of Indian Citizenship Laws,** Kenny Bhatia, Anushree, Gurpreet Kaur

Abstract: The notion of citizenship is intimately tied to the concept of the nation. According to Linda Bosniak’s Varieties of Citizenship (2007), accessing citizenship is now a privilege granted to those who can fulfil the legal, and social requirements set by the country. Indeed, citizenship is now dependent on the ownership/access of this data by the nation state. In order to prove the legibility of one’s citizenship, a digitised and data-fied subjectivity of the citizen subject is becoming essential. This paper attempts to open up questions of who is the citizen subject, through sites of contemporary ‘data-driven’ contestations on citizenship in India.

The recent CAA and NRC laws have been a political attempt to bring in legal requirements based on the documentation of citizenship; proven specifically by a religious minority in the country. The

National Population Register has been introduced by the state to create 'datasets' of (majority) legible citizens so as to be able to 'clean' the nation off the 'illegal migrant' (a religious minority). The paper then asks the question of the politics of dataising/documenting populations in the nation state and its relationship to exclusion of minority and marginalised populations. It also attempts to attend to the articulations of 'power' in a majoritarian political context in light of digitising populations.

As data compilation and storage have drastically changed over the years, their ownership, access and usage have also shifted, with many marginalised communities in today's context not managing to prove citizenship through land or birth related documents. As the CAA comes into enforcement in March, it will work alongside the compulsory Aadhaar, to rigorously control, and limit access to resources and govern the bodies of the citizens of the country. This paper critically examines how the Indian nation state is weaponizing data and datafication, through citizenship laws, as a means to exert complete power over certain communities.

The methodology we will use for this paper will essentially involve a review of secondary literature around the themes of bodies, citizenship and the data politics around citizenship laws like CAA and NRC. This review would include scanning of both academic articles and on-ground journalistic pieces. In case there are some gaps in existing literature, the authors are also open to using primary research methodologies like focus group discussions, in- depth interviews and short surveys with academics or activists working on the issue.

- **The eQuality Project Youth Summit: Using Deliberative Dialogue Methodology to Enable Young People to Challenge the Use of their Data in Education,** Valerie Steeves, Jane Bailey, Jacquelyn Burkell

Abstract: Over the last 10 years, we've worked with youth to conduct research and create educational and democratic interventions to give voice to young people's experiences of and concerns about the ways that data uses shape their lives. This has involved a conscious attempt to explore the power relations around data and data usage that shape young people's experiences and potential. At the urging of our youth partners, we've increasingly experimented with using art- and dialogue-based methods to do so, by providing a platform for young people to think deeply about the issues that matter to them and to share their concerns with others. In keeping with this advice, in October 2022 we brought a diverse group of 30 young people between the ages of 15 and 18 together with five Canadian policymakers for a one-day summit; throughout the day, our youth participants talked about their experiences with surveillance in school and articulated the kinds of solutions they need from the adults in charge of making the policies that affect them. In this paper, we provide an in-depth overview of the method we used to do this. In particular, we reflect on the ethical issues we faced as we designed the initiative, what approaches did (and didn't) work to ensure we could recruit a diverse group of youth, the kinds of background materials needed to ensure the conversation was informed and reflexive, the importance of providing training for our youth facilitators, the exercises we used to set the stage for an inclusive and productive dialogue, and the feedback we received from participants and facilitators on the process. We also discuss the key take-away messages that young people articulated through the process and policymakers' responses to those messages.

In-Person Panel GP5 Data Harms and Aging in Canada **(Graz)**
G-RM: HS 15.02 **(chair:** Joanna Redden**)**

- **Data Harms and Aging in Canada**

Abstract: This panel presents research findings from the Data Harms in Canada project. The Data Harms in Canada project builds on the Data Harm Record which provides a running record of how people are being negatively affected in different countries by corporate and government uses of data systems. Previous research demonstrates that harms occur both intentionally and unintentionally as bias is embedded in the automated systems that can influence people's access to opportunities, services, and health care. For example, researchers have identified how automated systems can discriminate and exacerbate inequality on the basis of age, skin colour,

ethnicity, gender and sexuality. As more and more of our daily lives are mediated through digital technologies, the lack of information people have about how their data is being collected and used leaves them vulnerable to exploitive targeting, data breaches and identity theft, wrongful denial of care and services, and dehumanizing treatment. Harm also occurs at individual and social levels as information is manipulated and people are targeted with disinformation in ways that corrupt democratic processes. The idea behind the Record is that by collating these examples we can gain a big picture appreciation of where we are heading, in terms of our datafied futures, and where we may need to change course to ensure that we work toward societies where we can all thrive.In this panel we detail findings from the Data Harms in Canada project which advances previous work on data and algorithmic harms by: a) identifying where and how data harms are occurring in Canada, as well as how they intersect with aging in the context of the current digital world, b) analysing Canadian French and English mainstream media discourses of data harms, c) assessing how media coverage aligns with existing research on data harms, d) consider what our research findings suggest about the needs of communities to seek redress and prevent harm and e) early work with communities to support strategies to redress and prevent harm.

- **Data Harms in Canada and the Significance of Age,** Joanna Redden, Kim Sawchuk, Constance Lafontaine

Abstract: This paper provides an overview of the ideas and contexts informing the Data Harms in Canada project and panel. In our discussion we focus on addressing what it means to think about data harms through the lens of aging, particularly in relation to Canadian contexts. A key element in debates about data justice has been toward investigating, documenting and politicizing data harms. The idea behind documenting data harms is that we can learn much about the transformations happening as a result of datafication as well as the nature of these transformations and their implications, by paying attention to how people are being adversely affected by these changes. The approach is informed by a recognition of the value and importance, particularly in relation to our capitalist societies, of paying attention to how sociotechnical transformations impact on people's rights, life-chances and well-being. There is now widespread consensus that datafication brings opportunities and risk. Our investigations of data harm begins from a different position, one that sees a discourse of risk as problematic and even enabling. To use a discourse of risk is to suggest that people may be negatively affected by datafication and presents harm as a future prospect. In contrast, our work on data harms documents how people and society more broadly are already being negatively affected by algorithmic systems. This research collates examples of harm published in academic journals and news articles. The examples identified and listed are wide-ranging and extensive. Our research to date also demonstrates that while some harms are visible and often referenced, such as data breaches, there are significant areas of silence about other kinds of harms. For example, little is said about the emotional and economic effects of identity theft. We argue that considering data harms through the lens of aging pushes us to rethink assumptions about technology and its uses, how harms are being experienced and challenged, what transparency and accountability should look like in datafied societies and how we might move collectively toward better datafied futures where we can all thrive.

- **Age and Data Harms in Canadian Francophone News Media,** Francis Léveillé

Abstract: Data collecting technologies produce a variety of different harms and marginalized populations are often directly targeted by these harms while also facing significant challenges when seeking redress. Harms facilitated by the use of data collecting technologies such as data theft, fraud, scams, disinformation, or even physical violence can be referred to as data harms. Part of a larger project that builds on the Data Harm Record started in 2017 at Cardiff University's Data Justice Lab, the research presented aims to describe how aging populations are included or not included in public discourses of data harms in French-speaking Canada. As a secondary objective, the research presents efforts that are currently being made to redress data harms impacting aging populations. To answer these objectives, the project analyzes news articles from francophone news organizations in Canada. This paper will present the results of a qualitative content analysis of four major newspapers and news websites and one national news agency (La

Presse, Le Journal de Montréal, Le Journal de Québec, Radio-Canada.ca, and La Presse Canadienne). The research uses a sample of 373 news articles covering an 18-month period between January 1, 2022, and June 30, 2023. The initial results show that age is largely absent in coverage of data harms. However, when old age is made a significant part of the coverage, it is most often presented in a stereotypical manner that responsibilizes older adults for their lack of knowledge of digital technologies. In comparison, teenagers and young adults are presented as a vulnerable population that need to be protected via legislation and educational programs on responsible use of technologies. Further, the entire sample is characterized by a lack of concrete information about data harms as the majority of news articles focus on the potential for future harms such as the impact of artificial intelligence on the labour market or algorithms as existential threats. The research concludes that news coverage of data harms convey a feeling of fear through continuous mention of threats but does not present clear descriptions of these threats and positive actions that can be taken to minimize them. This results in a general sense of individual responsibilization but without equipping individuals with adequate knowledge to protect themselves.

- **Data Harm as Social and Affective Harm,** Meghan Voll, Janelle Allan

Abstract: The dictionary definition of harm links it to physical and material injury now or in the future, and also to damages and adverse effects. Solove and Citron (2016) extend the concept of harm to understand how people are being negatively affected by data systems. They argue that we must also understand harm as 'impairment' or as setting the interests of a person, community or society back. Conceptually we can understand data harm as meaning that a person, community or society is worse off as a result of a data related practice (Citron and Pasquale 2014). While this definition is a start, it is insufficient and will need to be developed given the increasing ubiquity of datafied practices all around us and our growing awareness of how these practices are leading to a diverse range of harms.In this paper we draw on our content analysis of mainstream English language media coverage of data harms that have affected people in Canada, as well as an analysis of research articles discussing data or algorithmic harms. This research highlights where and how people are already being harmed by data practices, but it also considers how these harms are discussed. We detail significant areas of dominant discourses as well as silence. We centre our discussion on a consideration of what harm means in mainstream discourses in order to trouble current representations of harm. We argue that it is important to better understand the interplay between affective emotions and data harms in contemporary datafied societies. From our newspaper sample, we analyze affective harms that are repercussions of data harms at both individual and societal levels. Implicit in newspaper literature is an affective dimension caused by data harms such as undue stress or psychological trauma. Our research not only contributes to further scholarship on data harms but offers insights for policymakers and stakeholders into the emotional damages done by data misuse.

In-Person Panel GP6 (Un)desirable Bias and Responses to Data Power **(Graz)**
G-RM: LS 15.03 **(chair:** Thomas Zenkl**)**

- **Complicating the call for more diverse datasets in four dimensions,** Paola Lopez

Abstract: Bias in data is a well-known problem: Marginalized groups are invisible, hyper visible, or just plainly wrongly depicted in training data. Machine learning systems trained on that data, subsequently, generate unfair, wrong, or stereotypical outputs which, then, make or guide discriminatory decisions and, especially in the context of Generative AI, shape our cultural environment. Well-known examples are systematically malfunctioning facial recognition systems that have led to wrongful arrests of People of Colour; or Generative AI systems that are—often to an absurd extent—enmeshed with derogatory stereotypes which are, subsequently, reproduced as outputs. This is especially concerning, as Generative AI products, at this moment in time, are in the process of being widely accepted as ""tools"" to support the production of text or images in numerous contexts.

Against this backdrop, more diversity and adequate representation in datasets are an often-

proposed solution. After all, the argument goes, if humans appear in training data in their true heterogeneity, they can be adequately represented within an algorithmic system.

This paper aims to complicate the call for more diversity in datasets in four dimensions, and it argues that: first, the acquisition of diverse data can be predatory and harmful to those that are already disadvantaged; second, visibility and representation are never straightforward, but always ambivalent; third, there exists no true data; and fourth, even true data (which does not exist) can reinforce existing inequalities and have harmful effects. This paper does not seek to discard the call for more diversity in datasets, but to call attention to its porousness in order to engage with existing limitations and pitfalls productively.

- **Data Universalism or Infrastructural Perspectivism? Challenges in the Wikimedia Abstract Project,** Nathalie Casemajor

Abstract: A new project is currently in development on the Wikimedia platform, the non-profit initiative known as a flagship of commons-based peer production. Named “Abstract,” this project seeks to “create a language-independent version of Wikipedia using its structured data” (en.wikipedia.org). Is this new venture an expression of “data universalism” (Milan & Treré, 2019) – an abstract techno-rationalism oblivious to the linguistic and cultural context of local knowledge? Or, as its proponents argue, could it contribute to decolonizing knowledge by enhancing access to information in under-resourced languages? Leveraging insights from a multi-year ethnographic study on the Wikimedia movement, this paper aims to scrutinize the entanglement between knowledge practices and technical infrastructures within the Abstract project. My conceptual framework draws from infrastructure studies (Star & Bowker, 2006) and knowledge studies (Mignolo, 2012; Kwa, 2012).

I will focus on a recent dispute between Google fellows and Wikimedia Foundation staff members concerning the implementation of natural language generation (NLG) in the project. While Google fellows questioned the efficiency of its technical plan, suggesting that it would be better served by tapping into already existing NLG resources, Wikimedia staff members rejected this approach, arguing that it would perpetuate the dominance of “an imperialist English-focused Western-thinking industry” (The Signpost). This dispute encapsulates crucial issues related to the globalization of digital commons, which this paper seeks to unpack: 1) diversity and equity in programming; 2) tensions between a centralized technological system and the needs of a global collective functioning as a translocal assemblage; 3) challenges associated with building an infrastructure for natural language generation based on a plurality of knowledge perspectives (what we would coin an “infrastructural perspectivism”).

- **Who controls my gender? Power dynamics in Wikidata’s representation of gender,** Daniele Metilli, Beatrice Melis, Marta Fioravanti, Chiara Paolini

Abstract: The progressive digitization and datafication that our society is undergoing is having a significant impact on our daily lives. Every day, biographical data related to our identities is searched, generated, shared, and analyzed for purposes of the most diverse nature. This phenomenon has enabled new possibilities for communication across national, social, and cultural boundaries, but at the same time poses significant risks for marginalized communities.

In many cases, these threats come from corporations or state actors, who wield data as an instrument of power on their platforms. However, community-driven no-profit platforms also pose the risk of causing harm through their data practices.

One such platform is Wikidata, the collaborative knowledge base. On this platform, the user community carries a collective responsibility over the structured data contained in the knowledge base. Wikidata contains biographical data about millions of people, and the choices made in the collection and modelling of this data affect the representation of people’s identities.

The Wikidata Gender Diversity project is investigating how gender is represented in Wikidata, adopting the framework of critical data studies and a queer and intersectional feminist perspective. In the project, we center queer people, who are often underrepresented in online communities and

subjected to exclusionary and hateful practices.

In this paper, we analyze power dynamics within the Wikidata community that shaped changes in gender representation over a span of more than 10 years. We critically look at who has wielded data power and how this has affected gender modelling and gender data in the knowledge base, focusing in particular on queer identities.

- **Big Data, Precision Medicine, and Sex/Gender: From "Desirable Bias" to Binary Sex Essentialism,** Kelsey Ichikawa, Marion Boulicault, Sarah Richardson

Abstract: Critical data scholars and ethicists have cautioned about the potential bias of machine learning applications to healthcare, which frequently deploy race, gender, and other identity markers as predictive factors. While a rich literature is taking up the question of race and ethnicity correction factors and how they encode racial hierarchies in numerous medical technologies, including algorithms for estimating kidney function and lung capacity, still under-explored is the use of sex and gender variables and corrections. In response to the historic androcentrism of biomedical research and ongoing gendered health disparities, these variables are being rapidly incorporated into machine learning models for research on conditions like Alzheimer's Disease and Related Dementias (ADRD). In this paper, we use the case of ADRD to probe the consequences of a big data research program that, rather than overlooking sex and gender, is centrally oriented around these categories, envisioning sex-specific and sex-stratified solutions to a complex, costly disease with gender disparities in prevalence and caregiving burden. Focusing on the use of sex in machine learning models calculating risk and diagnosis for ADRD, we illustrate that the perceived predictive utility of classifying by, correcting for, and stratifying by "sex" stands in for evidence of putative underlying biological differences among subpopulations. This practice uncritically reifies the notion of a sexed disease, obscuring alternative hypotheses about social, intersectional variables and prematurely reinforcing a binary sex view of ADRD in its characterization, diagnosis, and treatment. Although presented under the banner of advancing women's health and health equity, emerging big data approaches may lead to the ossification of exclusionary, bioessentialist categories, effacing social context and heterogeneity within and among gender categories.

In-Person Panel GP7 (In)visibilities in environmental and spatial **(Graz)**
G-RM: LS 15.02 **(chair:** Bartosz Ślosarski**)**

- **Horsepower = Data Power? Data labor and power in the context of Verkehrswende politics in Frankfurt, Germany,** Janine Hagemeister, Catharina Dietrich

Abstract: Municipal planning and monitoring practices increasingly deal with data-saturated urban environments, especially in the traffic sector: Here, data become a prevalent tool for contriving more climate-friendly ways of moving people and goods in the context of striving for quantified sustainability goals. Car-centered infrastructure is still dominant in most cities and inferring from STS scholarship, we assume that it has politics. Comprising not only what is visible on the roads — traffic lights, lanes, and intersections — traffic infrastructure also includes a growing invisible twin of counting points, induction loops and data-handling systems.

Our research on the Verkehrswende ("mobility turn") politics in Frankfurt, Germany, observes that the municipality automatedly collects extensive data on motorized individual traffic, while for other forms of mobility, it relies on modest data patches of singular locuses. Within our two case studies on A) civic and B) administrative data politics we find, however, that for all types of traffic, fields of action exist in which the administration only acknowledges communicated concerns when they are quantified. In this context data gain substantial power, as the recognition or disregard of various realities hinges significantly upon the availability or absence of numerical data. To increase the discursive and political power of cyclists and pedestrians, and their space in the city, civil society organizations frequently collect data themselves, exerting significant unpaid labor. By creating new data stories, they render visible what was not on the screens before.

We argue that the unequal datafication of different mobilities in combination with uniform

expectations for data-informed arguments fosters power imbalances. It seems as if the horsepower of a road user corresponds with their overall power position — not only on the streets, but also in the digital data sheets.

- **Entangled Atmospheres: Gaslighter 727 - Speculative Design of Air Pollution Sensing,** Khadisha Dabayeva, Fabian Fischer

Abstract: Gaslighter 727 draws on decolonizing and speculative design to explore how oversimplified air pollution sensing can lead to environmental injustices. This research is cross-disciplinary at its heart, drawing on literature from artistic research as well as the natural sciences and critical approaches to data and standardization. Situated in Almaty, Kazakhstan, the project aims to explore alternative air pollution monitoring approaches and to facilitate critical conversations about the societal implications of monitoring practices. Its point of departure is a critique that challenges the limitations of the existing air pollution monitoring paradigm in Almaty. The conventional approach to monitoring, focusing on specific pollutants in fixed contexts, encounters constraints related to spatial limitations, inconsistent data quality, and privacy concerns. This work highlights how monitoring practices are socially entangled, including Soviet-era legacies and internal extractivism. Grounded in speculative and decolonizing design principles, this contribution explores how air quality sensing could be reimagined.

The project introduces Gaslighter 727 as a platform for reimagining air quality sensing, employing literature reviews, document analyses, and speculative object prototyping to prompt reflection on established norms. Gaslighter 727 exposes gaslighting practices employed by heavy industries and government entities to manipulate public perception, downplay air pollution's severity, and evade responsibility. Gaslighter 727 is a mixed-media installation, featuring an alternative map prototype that visualizes the unequal distribution of air pollution in a city, focusing on the polluters responsible for it. By overlaying data on heavy coal industries and correlating pollution levels with their proximity, the map highlights how certain communities bear a disproportionate burden of polluted air, translating pollution levels into the equivalent number of cigarettes smoked per day. While the project is rooted in the context of Almaty, it aspires to open avenues for discussions surrounding air quality sensing technologies more broadly.

- **“The actual project data is not integrated into this model”: Contextualizing data power in digital urban planning,** Yana Boeva

Abstract: The potentials of ‘data power’ have been stretching out into new domains, among them, more recently, urban planning. Governments, other major actors, and tech developers have eagerly promoted the datafication of urban planning by implementing digital technologies and processes like digital twins, smart city initiatives, various urban platforms, and cloud environments. Common narratives of data’s power include ‘better’ or ‘objective’ data-based decisions, ‘faster’ and efficient planning via digitalization, solving to degrees the shortage of public sector staff, especially in the area of ‘digital-based jobs,’ and, thereby, contributing to wider sustainability transitions demanded by cities. The attributed data power, however, falls short of a reflection on the sociocultural and political character of data practices and their inherently local context. Moreover, until now, there is little evidence that these data-driven arrangements effectively bring about these transformations. Drawing on an interview-based study with urban planning actors (i.e., planners, municipalities, geographers, tech developers and start-ups, interest groups, and research) in Germany, supplemented with an analysis of tools and documents, this paper aims to present a situated picture of data’s actual power in urban planning. Practitioners (municipalities, service providers, developers) encounter various organizational challenges and problems with interoperability, ambiguities, and uncertainties in the data in terms of completeness, timeliness, and accessibility. Following research in critical data studies, this paper argues that while data work in urban planning relies on local context and situated practices, decisions derived from that are driven by the regime of data-based optimization and efficiency and mainly shaped by powerful actors such as IT companies, business consultancies, and government actors, due to lacking data literacy and technical know-how of especially public sector actors.

- **Power of data imageries and materiality of borders in times of crisis,** Sanna Valtonen, Kaarina Nikunen

Abstract: Borders have become datafied due to the latest technologies that seek to improve systems of identification and surveillance (Leurs; Marino; Nikunen & Valtonen 2023; Aradau & Tazzioli, 2020; Broeders & Dijstelbom, 2016; Metcalfe & Dencik, 2019). In this paper we explore how data imageries among border officials and authorities shape politics of borders and how these imaginations may be challenged in case of hybrid attack, such as in the Eastern border of Finland in 2023 based on interviews with authorities of the interior ministry, the migration office, the police and the Non-discrimination ombudsman as well as documents concerning the on-going hybrid attack.

By imaginaries of infrastructure Enrich (2022) refers to the power to understand "technological systems as well as the values toward which they should be organized". Discussions of data infrastructures can be explored as sociotechnical imaginaries that" provide visions of the kinds of society that sociotechnical change could bring into being" and desired (Reutter 202). We argue that data imaginations reveal understandings of core values in datafied practices and ways in which for example human rights are connected to these imaginations. Our interviews reveal a strong belief in the power of datafied systems that 'never have a bad day' and concerns, that are more related to the lack of resources and the obsolescence of technologies than to the rights of people.

We argue that the proliferation of datafied solutions is bringing about broader social changes that influence understanding of what constitutes security. Our study shows that both datafication and materiality of borders speak of imagery of infrastructures that emphasize asylum seekers as data points that need to be managed – in ways that sideline humanity and human rights.

In-Person Panel GP8 Situating Data Power in Data Brokers and their Infrastructures **(Graz)**
G-RM: LS 15.01 **(chair:** Nikolaus Pöchhacker**)**

- **News from Yesterday: Private job agencies - data broker in labor markets in the 19th century,** Joern Kleinert, Wiltrud Moelzer

Abstract: The second half of the 19th century saw demand for information of various kinds increasing drastically. Information supply was organized in new ways which increased the amount of data vastly. To handle these large amounts of data, process it and make it individually valuable, people used the services of data brokers. These data brokers emerged, because they realized the profit opportunities that were in data search, processing and tailoring to individual needs of customers. We study private job agencies, a group of such data brokers in labor markets, which offered to facilitate satisfying matches of vacant positions and job seekers. Private job agencies used their knowledge about their local labor markets for their business. They used newspapers as data source for the information they sold and as platform to search for customers by offering their services there. By examining the mechanisms by which private job agents capitalized on information asymmetries, our study contributes to the broader discourse on data power. It sheds light on the beginnings of data brokering in labor markets and provides a foundational perspective for contemporary critical data studies. This historical analysis not only examines the antecedents of modern data practices, but also the evolution from private to public labor agencies, driven by the need to correct market failures and reduce data power, demonstrating the effectiveness of regulatory intervention in re-establishing equilibrium in data-driven markets.

We assess the history of the Austrian private job agencies through the lens of newspaper articles between 1860 and 1910. We can use the whole corpus of digitalized newspapers in Austria included in the ANNO database of the Austrian National Library. We thereby assess job ads as well as articles about job agencies in about 30 newspapers with more than 1,000,000 pages over this time period. We analyze these historical job agencies and their position as data brokers also with the so called "Berichte der k. k. Gewerbe Inspectoren" from the ANNO database. In these reports the k. k. trade inspectors described the reasons why private agencies should be regulated

in order to not hinder the desirable development of public agencies. We document (i) the dominant position of private job agencies in the late 19th century, (ii) their bad and worsening reputation throughout the period and (iii) the critique of many societal groups who urged for public labor agencies instead in order to pursue societal goals on labor markets. The bad reputation resulted from practices which were often not in line with the law. The agencies were accused to abuse their data power for private profits. Governments acknowledged market failures on labor markets, which led to the proscription of the private agencies in many European countries in the early 20th century. Public labor agencies replaced them and their structures became more and more like the contemporary job agencies.

- **Data Sales: Mapping the Procurement of Data and Data Products in Dutch Public Management,** Mirko Tobias Schäfer, Sofie De Wilde De Ligny, Iryna Susha

Abstract: Public management becomes ever more data-informed. Next to the vast datasets public organisations already have at their disposal, they increasingly purchase data, data products and data services from commercial parties. The procurement of data raises issues such as data sovereignty, vendor independence, but also more profane questions such as which data are used for what and how much public money is spent on it? While the spending and procurement practices of municipalities and other public organisations are expected to be transparent, there is scant information about the transactions of data. This paper describes the efforts of the authors to answer the simple question: How much do municipalities spend on data and what are those used data for? Data are not a specific category in public spending records and often they are part of other items, such as a dashboard, a BI-report, software applications such as digital twins, or reports provided by consulting firms. The transaction money for data is already difficult to establish. However, the authors sifted through public tender databases, interviewed employees of municipalities and reached out to professional associations. The result is an overview of use cases that demonstrate the different categories of data purchases and provide insight into the economy of data related to public management in the Netherlands. Drawing from these insights we sketch out the power asymmetries and possible responses for the public sector.

- **Sphere Transgressions in Medical Research: Tactical Engagements with Apple's ResearchKit,** Marthe Stevens

Abstract: In the last decade, large technology companies have started many initiatives to stimulate and innovate in the sphere of medical research. A prominent example is the ResearchKit software framework launched by tech giant Apple in 2015. This software framework allows medical researchers to build research apps on the iPhone that collect and access diverse types of research data. The 'sphere transgressions' theoretical lens (Sharon, 2021a; 2021b) draws attention to the dangers of such initiatives. For instance, that the large technology companies use the initiatives to change the sphere of medical research in line with their own values and interests. However, the theoretical lens risks portraying a simplistic one-directional understanding of Big Tech colonizing the sphere of medical research. This paper draws attention to medical researchers and their everyday interactions. Based on interviews with medical researchers using Apple's ResearchKit in the Netherlands and the United States, the paper shows that researchers are not passive recipients of Big Tech's initiatives. Instead, they respond to their initiatives in a variety of ways: not simply by welcoming or resisting Apple's ResearchKit, but also by 'making do' using a variety of tactics (de Certeau, 1984). Thinking in terms of tactics, it is argued in the discussion, helps to identify needs and interests that are of crucial importance to researchers and the broader sphere of medical research. These insights can be used to strengthen the sphere of medical research and innovate responsibly.

- **Uneven data flows, contested sovereignties and the emergence of Southern European interconnection hubs,** Finn Dammann

Abstract: Many regions and countries on the African continent are facing a major digital transformation. The question of which technology companies, political actors and regulations (keyword: African single digital market) and internet infrastructures will establish themselves in African ICT markets is highly controversial in geopolitical and geoeconomic terms. Against this

background, the presentation will focus on an often invisible and little studied infrastructure: digital network interconnections. The presentation will show that a significant part of North African Internet traffic is carried by submarine cables through infrastructures located in Southern European interconnection hubs (notably Madrid, Marseille and Milan). These hubs do not only serve North African countries as gateways to European and international networks. In fact, transnational traffic between North African countries is to a considerable extent operationalised through Southern European interconnection infrastructures. In addition, global content providers such as Google/Alphabet, Facebook/Meta or Wikimedia often have their own points of presence in these interconnection hubs - and offer North African carriers and ISPs technical and material access to their services. Based on a mapping of interconnection infrastructures in the Mediterranean region, the presentation will discuss the extent to which a technical-material consolidation of the uneven geographies of data and information flows between Europe and North Africa is emerging - pointing to continuities of colonial dependencies in the age of digital transformation and raising questions about the resilience of digital infrastructures and the digital sovereignty of North African (tech) companies, internet users and state actors.

Keynote 2

G-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 16:30-17:45	Graz 13:00-14:15

GRAZ KEYNOTE: Tales from the Data Swamp: older adults speak, Kim Sawchuk & Eric Craven

Abstract: The datafication of later life is fraught with real world ramifications for those living in situations of precarity. This presentation addresses our complementary experiences of doing community-engaged, participatory research, in various digital literacy projects with older adults over the past 15 years. These projects have largely been oriented towards empowering older adults, many from marginalized communities, to not only access digital culture, but to transform it. This culture has changed within the past 10 years. Increasingly participation in a digital world is no longer an option, but obligatory. Likewise, increasingly engagement is not always a clear choice, given the deep imbrication of ordinary everyday devices in routine corporate information-gathering and deep data mining. Offering literacy training within this context is fraught with a variety of challenges and risks, including legitimate concerns about privacy, cybersecurity, or the potential of identity theft. How, in this world where data is power, can we provide digital literacy training in good faith? How might we ethically reassure our participants that they should participate, when WE don't really trust these information systems? This key note will discuss the desires and dilemmas identified by the older adults we have worked with, and discuss the creative strategies developed to confront data power in this realm.In particular, we focus on what an attention to age, considered not as a variable, but as a critical lens, has to tell us. The older adults we have worked with have lived a lifetime of technological change, and thus have a complex tale to tell of their relationship to this datasphere. We also highlight a commitment to "research-creation" as an approach. In the first instance we question what constitutes data from this perspective, and allows us to express this ambivalence and our desire to navigate this territory collectively and creatively. Rather than understanding data as a pristine, clean universe of swirling ones and zeros, we instead offer the image of the swamp as a central metaphor for our discussion. Swamps can be fetid pools of putrid, stagnant water- at least representationally- but they are also rich ecosystems that can nourish and sustain life.

Session VIII

Time:	Bangalore 18:05-19:30	Graz 14:35-16:00

In-Person Panel GP9 To code or not to code: Is this the question? **(Graz)**
G-RM: HS 15.02 **(chair:** Juliane Jarke**)**

- **To code or not to code: Is this the question?,** Stefan Thalmann, Thomas Gremsl, Stefan Storr, Bettina Kubicek, Reinhold Esterbauer, Christoph Spöck, Simon Grob, Laura Kunz, Magdalena Eder, Clemens Lauermann, Benjamin Gigerl

Abstract: This panel presents the work of a newly established and interdisciplinary research group at the University of Graz. Its research focuses on the emergence of a new type of design paradigm for AI systems: Low or No Code Development Platforms (LDCP) for AI. LCDPs such as AutoML are a subfield of AI research that subsumes methods to automate all stages of the design and development of AI-based systems. As such LCDPs aim to reduce tedious and repetitive tasks in the development of AI systems. They promise to make AI more accessible, in particular to professionals without in-depth AI/ML knowledge and expertise. Our panel features six presentations which consider different perspectives on the transformative role of LCDP-based systems in organisations.

Quality of Solution: Creating AI with Low or No Code Development Platforms (LCDP)

The first talk will introduce the basic idea of LCDP platforms for AI development by domain experts using a real-world example. Further, technical challenges of assessing the quality of the created AI model and of reproducing the results will be presented.

Organisation: The transformation of knowledge work

With the introduction of new digital technologies changes in how work is carried out in an organisation and by whom occur. With respect to LCDP, we can expect those changes to specifically manifest in the area of knowledge creation and knowledge management. This talk focuses on how new types of knowledge may transform social roles and relations in work contexts, and whose work is acknowledged and (made) visible.

Empowerment: Low or No Code Development Platforms (LCDP) as work designers or tools to craft one's own job?

The third talk explores the ambivalent nature of LCDPs from a work design perspective. LCDPs have the potential to modify crucial work characteristics, such as autonomy, complexity, feedback, and job demands. They may even intensify work. However, LCDPS can also enable workers to actively craft their jobs to better align with their needs and competences. Consequently, these platforms can empower workers by providing them the opportunity to exert discretion and experience themselves as competent agents.

Decision-making: Being in control

Depending on the relationship between a user and a machine (human -in-/on-/out-of- the-loop), the decision-making process is increasingly influenced by the latter. As there seems to be a simple trade-off between giving up controllability and gaining time efficiency, the fourth talk identifies preconditions and consequences of having control over something, as well as the consequences of losing it.

Prioritising Responsibility: Ethical Considerations in LCDP-Democratised AI

LCDPs democratise AI by broadening access, but raise ethically relevant questions about quality, compliance, responsibility and potential unintended consequences. The fifth talk, addresses ethical implications to establish a solid framework, which requires a detailed understanding of roles and responsibilities in both the design and use of LCDPs.

Legal Order: The fundamental rights framework for AI operations

The last talk concerns administrative actions which are primarily governed by fundamental rights. This also applies when authorities use artificial intelligence. Various supreme courts have already identified a specific dimension of interference with fundamental rights in automated data analysis or evaluation. We will present the significance of fundamental rights for the use of LDCP-based systems.

Overall, the six contributions point to two different perspectives on LDCP's transformative role: On the one hand LDCP-systems increasingly regulate the organisation of work, e.g. by reconfiguring roles and responsibilities in organisations, by transforming work characteristics and workers' perception of autonomy, competence and empowerment and by transforming our understanding of processes of decision-making. These transformations call (on the other hand) for a regulation of LCDP-based systems in organisations with respect to the quality of the solution, its compliance with the broader legal order as well as ethical design guidelines. We close with a joint reflection on what kinds of new challenges vis-à-vis data power may arise through this new type of AI-design paradigm.

In-Person Panel GP10 Critical Data Literacies **(Graz)**
G-RM: LS 15.03 **(chair:** Lyndsay Grant**)**

- **"Make it colourful and fun!" – Strategies and challenges for fostering critical datafication literacy in practice,** Ina Sander

Abstract: With the increasing datafication of our societies, data-based technologies play a ubiquitous role in many citizens' lives, they exert growing influence over how our societies are ordered, and come with new power imbalances (Hintz et al. 2019). Nevertheless, many citizens' understanding of the workings and societal implications of data systems as well as their own data rights is fragmentary (Akman 2022); and calls for a more complete theorisation of (critical) data literacy are increasing (Pangrazio and Sefton-Green, 2020, p.217). This study developed a theoretically and empirically grounded framework for critical datafication literacy and explored the experiences of practitioners in creating and using online educational resources about datafication. Specifically, a content analysis of online resources, semi structured interviews with resource creators, and a qualitative survey with educators were conducted.

This paper presents key findings on the practitioners' strategies and methods for fostering critical education about datafication in practice, and the challenges they face in this endeavour. Many parallels were identified across the different methodological approaches, such as the importance of easily accessible, engaging and target-group specific resources that provide constructive advice for learners. The practitioners described creative strategies for addressing the complex issues around datafication, for creating personal involvement of the learners, for adapting resources to people's existing narratives about data, and for dealing with digital resignation. Furthermore, crucial challenges around the accessibility and sustainability of online educational resources were identified. The study's findings offer valuable insights not only for creating future educational resources about datafication but also for educating about data technologies in the classroom and other educational contexts. To empower educators to foster critical datafication literacy in practice, the study further included a collaboration with the NGO Privacy International, in which the research findings were mobilised for educators in the form of an online guide to 'Teaching about Data'.

- **Is 'AI textbook' good for education?,** Saemi Jung

Abstract: South Korea is seeking the world's first "AI-digital textbook" (Kim, 2023) featuring an array of artificial intelligence and algorithmic technologies ranging from student surveillance/dataveillance, predictive analytics of student performance and career paths, to hidden commodification of children's everyday data (Lewis & Hartong, 2021; Lai & Flensburg, 2023). This state-led multi-year policy initiative called "Digital Driven Education Reform Plan" extends South Korea's long pattern of top-down modernization projects, characterized by strong corporate

influence on policy and a prioritization of market values over civic rights. In this respect, education has become a domain for private EdTech businesses to extract economic values through pervasive collection of student data and processing rather than fulfilling the meaning of education as a site of community, identity formation and individual growth such as Bildung (Van Dijck et al., 2018; Yu & Couldry, 2020). This configuration of voice and influence in AI and education have far-reaching implications for students in terms of data safety, autonomy, technological citizenship, and most importantly the meaning of education itself (Jarke & Breiter, 2019; Selwyn, 2022; Bolin, 2022). Through a study of media and news reports around the 'AI-digital textbook', this paper investigates discursive framing that legitimizes and naturalizes the new connective milieu of dataveillance in educational settings. This study shows what counts as 'good' education is shifting to accommodate the aggressive adoption of AI in public schools. It examines how the prevailing visions and imaginaries of AI in education in a post-colonial state become manifested through policy initiatives (Jasanoff & Kim, 2015). To work toward just data society, this paper opens new conversations about how education as a site of data power should be conceptualized and the ways in which we reclaim student-teacher autonomy and advance data-based technological citizenships.

- **Global South perspectives on privacy education for children: Examples from the Philippines and Saudi Arabia,** Priya Kumar, Hongyi Dong, Fatimah Albargi

Abstract: Since datafication poses significant threats to privacy, managing privacy is considered an important digital skill for children to develop (Stoilova et al., 2021). Research finds that media and information literacy programs help children make more informed privacy decisions, but few programs around the world explicitly include information about privacy (Culver & Grizzle, 2017). Some, like Common Sense Media (USA) and Media Smarts (Canada) have incorporated privacy information, but such work remains concentrated in Global North societies. Despite the recognition that privacy—what it means and how it is practiced—varies across cultures, privacy-related educational competencies (e.g., Culver & Grizzle, 2017) still embody a one-size-fits-all approach. This points to a need for privacy education that incorporates diverse perspectives, especially from Global South contexts. But developing such education is not simply a matter of designing new educational materials. It requires grappling with the colonialist foundations of privacy theory and research (Arora, 2019) and the fact that education alone does not change the conditions of datafication that are the cause of privacy concern (Kumar, 2023). It requires asking what is the goal of privacy education, recognizing that the answer will differ based on cultural context. Inspired by Milan and Treré's (2019) call to go beyond data universalism, we imagine what culturally specific privacy education could look like in two contexts in which the authors have lived experience: the Philippines and Saudi Arabia. We consider how cultural, social, and technological practices shape experiences of privacy in each context, what role each context plays in the global digital economy and how that informs visions of what children should learn about technology, and what unique ways privacy education in each context could contribute to resisting unjust accumulations of data power. We conclude with a set of provocations to inspire future work on culturally specific privacy education.

- **The influence of DWP organisational culture on the adoption of algorithmic bias mitigation practices,** Hadley Beresford

Abstract: In recent years, algorithmic technologies have been increasingly relied upon in the UK civil service. As these technologies enter more mainstream use, cases of algorithmic bias have become more prevalent. Concern regarding these cases has led to the development of 'de-biasing' methods which attempt to remove harmful biases from algorithmic technologies. However, it has been argued that discourses focusing on 'bad' algorithms and 'bad' data creates a narrow field of inquiry and limits practitioners' ability to recognise how data and algorithms connect to wider issues of injustice (Hoffman, 2019). To counter this, it has been suggested data practitioners must adopt socio-technical algorithmic bias mitigation methods which acknowledge the contextual nature of data and move away from framings which position data as objective and neutral (Green, 2020).

To date, little research has been conducted to understand how data practitioners perceive socio-technical algorithmic bias mitigation tools, and the challenges adopting them in a civil service context. I will discuss my initial findings from a qualitative project which investigated how civil servants perceive socio-technical algorithmic bias mitigation approaches such as VSD (value sensitive design), critical data skills, and AIAs (algorithmic impact assessments). The data for this paper were collected through conducting a series of seven educational workshops on algorithmic bias mitigation, and seven follow up interviews, in the UK government department the Department of Work and Pensions (DWP).

Drawing on my research, I argue it is difficult for civil service practitioners to align technologies to the social justice values which underline socio-technical bias mitigation approaches when servicing a large diverse public. Furthermore, civil service practitioners' room for action is limited by the political structures they work within, and government policy approaches may sometimes be in opposition to social justice values.

In-Person Panel GP11 Situating Data and Data Work **(Graz)**
G-RM: LS 15.02 **(chair:** Katrin Amelang**)**

- **'Everyday' data power: Ethnomethodology and the preemption of social need in UK welfare services,** Jess Brand

Abstract: Predictive analytics are increasingly used in welfare service provision across the UK to allocate scarce resources and manage surges in demand, but in particular to preempt "crises" before they happen (The Welcome Centre, 2019; London Borough of Barking and Dagenham, 2021; Maidstone Borough Council, 2021; Thurrock Council, 2020). This paper identifies three trends so far in the critique of welfare technologies: algorithmic "dramas" (Neyland, 2016) that tend to centre predictive technologies as stable but consequential, indicative of a "poverty panopticon" (Hurfurt and Carlo, 2021); contextualised studies of technology implementation and use that problematise the idea of seamlessness (e.g. Beer et al 2023); and the situating of these technologies in their historical and political power relations (e.g. Edwards et al, 2022). In response to these trends, and using the case study of predictive analytics in social welfare, this paper makes the case for ethnomethodologically informed critiques of data power that pay close attention to the everyday practices that reiterate and reproduce the social order of datafied service provision.

It does so by first arguing that ethnomethodology provides several important deflationary sensibilities (Neyland, 2016) that pull critique away from universalising discourses towards contextuality, enactment and local instances of friction and resistance. Secondly, it suggests that ethnomethodology can, by privileging members' practical procedures for sense-making, bring into sharper focus the tensions between different local accounts of, in this case, social need by highlighting how some accounts are sustained while others are marginalised or precluded (Duck, 2009; Ruppert and Scheel, 2021). Both of these ethnomethodological affordances matter for data power because, in foregrounding how this power gets done in practice on the frontline, they point to how it could be undone, interrupted and transformed.

- **The 'doings' behind data: an ethnography of police data construction,** Isabelle Fest

Abstract: Public organisations, including the Netherlands Police, are increasingly reliant on data. Despite the importance, there has been only limited academic attention to how data is created, and how its situated context may impact algorithmic interpretation of data. The current study aims to fill this gap by studying datafication from a constructivist perspective – emphasising the collaboration of human and non-human actors engaging in 'data work' to construct data in the form of police reports. The main research question is: How do human and non-human actors interact in 'data work' to enable datafication of street-level situated contexts at the Netherlands Police?

The study builds on nearly 200 hours of ethnographic fieldwork with street-level employees at the Netherlands police. The study finds that data work is deeply embedded in daily policing activities

and is shaped by the values of police employees, organisational context dynamics, and practical considerations. The findings highlight the unique challenges posed by structured and unstructured data entry in the registration software for police reports. Structured data limit discretion with predefined labels, often conflicting with employees' own perceptions. Unstructured data offer more flexibility but poses challenges such as linguistic nuance, inconsistencies, and the presence of 'voice' in police reports that complicate algorithmic interpretation of the data.

The study reveals that data in police reports is not neutral, despite its appearance of objectivity. A holistic, interpretivist approach, emphasising the interplay between human and non-human actors, organisational dynamics, and contextual factors, can help public sector organisations achieve responsible algorithmic interpretation of data and maintaining citizen trust.

- **Perpetual repair of public sector algorithmic systems,** Minna Ruckenstein, Tuukka Lehtiniemi

Abstract: This presentation introduces the concept of ‘breakage’ as a collaborative reflection point to the study of algorithmic systems in the public sector. By involving stakeholders in identifying system breakages, we encourage an examination of their aftermath, promoting thinking of how breakages could be repaired, and whether they are repairable. Drawing from our ongoing case studies in healthcare and social work, we illustrate the constantly developing, but also constantly falling-apart nature of public sector algorithmic systems. A key example is an electronic social and health care record system designed to consolidate data into a unified platform. With the aid of workshop materials, we focus on medical doctors’ perspectives that express significant concerns regarding the system’s demands for data work. The adjustments and repair needs of the system call for constant attention – at times the doctors feel that they are caring for the technical system rather than their patients. The system is constantly updated, but not necessarily for the better.

Despite substantial efforts, the electronic health record is in a perpetual state of repair, and it is said to be never finished. The interplay of pressing repair needs, and ongoing everyday adjustments and repair work, raises the question of what is being repaired and by whom, and for what aims. With this case and others like it, we can query whether the most pressing issues in terms of developing algorithmic systems generate actual repair efforts. Or: does the repair work that go into the repair of algorithmic systems maintain identified breakages by failing to repair people’s and organizations’ relations to those systems.

- **Bad patients, good tech: new infrastructures of medical knowledge production,** Sofie Kronberger

Abstract: In the increasingly digitized, datafied, and automated world of biomedicine, machine learning (ML) promises new forms of medical knowledge production. ML-based devices allow users to impact the configurations of their hearing aids more actively and in a time-sensitive manner. So far, this task has largely been reserved for audiologists, who relied on a mix of auditory tests as well as listening to their patients’ experiences. This practice is now being accompanied and, in some cases, replaced, in the form of machine learning-based recommender systems. Thus, these ML-based hearing aids promise to expand and automate forms of medical listening and decision-making by drawing on a multitude of data streams: from the reading of geo- and bio-data, as well as the collection of user input, to data collected from hearing aid users worldwide.

Based on six months of ethnographic fieldwork in Austria, Germany, and Denmark this paper examines the interplay of technological, epistemological, and economic changes in the world of hearing aids. Drawing on disability studies as well as critical data studies I showcase differing understandings and expectations of “good” patients: their obligations as well as their role in medical knowledge production. I trace how these understandings are embedded into digital infrastructures.

In-Person Panel GP12 Situating Data Power in the Public Sector **(Graz)**
G-RM: LS 15.01 **(chair:** Stefanie Büchner**)**

- **Data power, inequality and the welfare state,** Kaarina Nikunen, Karoliina Talvitie-Lamberg, Sanna Valtonen

Abstract: This paper is based on an empirical study that investigates experiences of datafication in the everyday life among three social groups that are considered to be vulnerable in terms of their opportunities or life situation: the undocumented migrants, unemployed persons and the older adults. Based on diaries, interviews and case studies with 87 participants the paper introduces the manifold and often ambiguous experiences of datafication among these groups in Finland. Our approach draws on postcolonial feminist thinker, Chandra Mohanty (2003), who argues that envisioning a just and democratic society requires understanding the experience of some of the most marginalized.

While automated data driven systems may provide efficiency and ease to many, in our study the experiences of datafication were connected to a sense of invisibility, mistrust and loss of agency in different ways. While some particularly suffered from the increased surveillance and lack of access to social services, others were more concerned about becoming data points and targets of data driven advertising (Jørgensen 2023). The research shows the contextual nature of datafication and data power: it becomes visible in different life situations from seeking jobs to asylum process, from public transport to banking - and accordingly shapes social relations and social status in various ways.

Overall, the research illustrates the embodied transformation from citizens with rights to mere data points. The study points out a shift in values of the welfare state encoded in digital infrastructures as well as the diminishing role of citizens design of the public services (Broomfeld and Reutter 2022). It raises concerns over the conditions of social commitment and solidarity, along with equality, that are considered essential for the idea of a welfare state.

- **Datafied Welfare: Promises and expectations of data power in regulatory discourses,** Irina Zakharova

Abstract: With the ongoing datafication of welfare services provision, digital data are used for governance, public decision-making, (non-)citizens' profiling and scoring for e.g. fraud prediction or calculation of welfare benefits. Both public and private actors are promoting their products and services, not at least to increase their public acceptance. In regulatory discourses (e.g. strategy papers) datafication of public welfare is, hence, presented as a 'solution' to certain problems. These discourses make promises among which are efficiency, effectiveness, or freed up time of citizens and public administration workers. This contribution joins scholarship critically interrogating such promises by exploring discourses around digital transformation and datafication of the public sector, particularly in Germany, more closely.

I ask, what roles regulatory discourses allocate to data in the organisation of digital welfare and how these data become situated in the power relations configuring public organisations. For this analysis of current and expected data power, a critical data feminist approach is taken (D'Ignazio & Klein 2020) while this contribution also speaks to research on imaginaries and metaphors in public documents (Mager & Katzenbach, 202; Puschmann & Burgess, 2014). This analytical lens helps interrogate public welfare actors' discourses in regard to their values, whose work would be required to fulfil the promises of datafication of welfare, and who are the expected beneficiaries. Empirically, the paper is based on a discourse analysis of publicly available documentation regulating the digital transformation and datafication in German public sector (strategic papers, legal acts, policy documents). By attending to these discourses and speculating about subsequent changing relations between the state and its citizens through the feminist analysis of data power, this contribution discusses the extent to which datafied transformation could contribute to more just and equitable futures and what (other) relations are required to achieve these.

- **Where technology leads, the problems follow: Technosolutionism and the Dutch**

contact tracing app, Lotje Siffels, Tamar Sharon

Abstract: In April 2020, in the midst of its first pandemic lockdown, the Dutch government announced plans to develop a contact tracing app to help contain the spread of the coronavirus – the Coronamelder. Originally intended to address the problem of the overburdening of manual contract tracers, by the time the app was released six months later the problem it sought to solve had drastically changed, without the solution undergoing any modification, making it a prime example of technosolutionism. While numerous critics have mobilised the concept of technosolutionism, the questions of how technosolutionism works in practice and which specific harms it can provoke have been understudied. In this paper we advance a concept of technosolutionism which, drawing on Evgeny Morozov, distinguishes it from the notion of technological fix, and emphasizes its constructivist dimension. Using this concept, we closely follow the problem that the Coronamelder aimed to solve and how it shifted over time to fit the Coronamelder solution, rather than the other way around. We argue that, although problems are always constructed, technosolutionist problems are neither constructed well nor are they robust, as one might hope problem construction in public policy making to be. This introduces three harms: a subversion of democratic decision-making; the presence of powerful new actors in the public policy context – here Big Tech; and the creation of "orphan problems", whereby the initial problems that triggered the need to develop a (techno)solution are left behind.

- **The Fog of Transparency: A Critical Inquiry of Algorithm Registers,** Mirko Tobias Schäfer, Iris Muis, Julia Straatman

Abstract: Algorithm registers are heralded as very much needed means for constituting transparency (Floridi 2020). After the cities of Helsinki and Amsterdam, were among the first to launch such public inventories of the algorithms used in their municipalities, other followed suit. Recently reports by Bertelsman Foundation and AlgorithmWatch advocated for the development of such a register in Germany. In the Netherlands, the cities The Hauge, Utrecht, and government organisations such as the Immigration & Naturalisation Service or the Dutch Social Insurance Bank also published documentation of their algorithms. Almost two years ago, a national register was launched. There are now 278 algorithms included. This paper situates the Dutch national algorithm register in the current discourse on algorithmic transparency and provides an overview of the different solutions. Focusing then on the national register, to our knowledge the largest around, our analysis does not only look at the documented algorithms but considers the process of development and the controversies around use cases and standards. Drawing from critical perspectives on transparency (De Vries 2021; Rieder & Hofmann 2020; Nouws, Janssen, Dobbe 2022), this paper maps the profound limitations of the current register and outlines the necessary changes and the practices needed for it to become an effective element for responsible and accountable use of AI in public management.

Keynote 3

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 19:50-21:05	Graz 16:20-17:35

ONLINE KEYNOTE: Open Worlds and the Limits of Datafication, Lucy Suchman

Abstract: This talk is in conversation with Science and Technology Studies (STS) and kindred research that works to denaturalise data by attending closely to the systems of categorisation, labour, interests, and erasures that enable datafication. I take as my case in point projects in the automation of targeting, both in its more literal operations in the context of militarization and armed conflict and the broader sense of multiple practices of discriminatory profiling. Central to the analysis is close attention to the elision of closed worlds of data with the open worlds from which data are derived. Fixed and labelled within datasets, images of things and traces of lives stand as proxies suitable for computational analysis. Investigations informed by STS can help to recover the complex histories, ambivalences and multiplicities that escape these operations, opening spaces in which to consider the political economies of datafication and the possibilities of knowing otherwise.

Day 3
Friday September 6

Session IX

Time:	Bangalore 12:30-13:55	Graz 09:00-10:25

In-Person Panel BP3 Reimagining data **(Bangalore)**
B-RM: R305 **G-RM:** HS 15.03 **(chair:** Janaki Srinivasan**)**

- **Rediscovering Interoperability: A Vital Tool to Unlock the Future of Social Media,** Sachin Dhawan, Fawaz Shaheen, Jhalak Mrignayani Kakkar

Abstract: The concentration of social media platforms into the hands of a few companies is a matter of enormous significance. As user data has increasingly become the currency of operating a business on the internet, social media companies have become incentivised to ensure that more and more of the data is uploaded, generated and concentrated on their platforms. This has come to be reflected in the design of social media platforms, which discourage users to move out by consolidating more features and services into their umbrella and severely limiting or eliminating the ability to interact with other social media platforms. This has transformed social media companies from open spaces on the internet to virtual walled-gardens.

So far, regulatory efforts such as placing enhanced obligations on Significant Social Media Intermediaries under the Information Technology Act, 2000 in India, have failed to address the concentration of data power in the hands of a few online platforms. This data power translates not only into market share and sectoral dominance, but also gives them enormous power over online speech and behaviour.

We seek to propose a solution which will work. Specifically, we propose that Parliament pass a law that (i) mandates data portability, and interoperability and (ii) permits adversarial interoperability. There is a rich but forgotten history of interoperability in the world of social media platforms that needs to be revived. The measures we are suggesting are not new tools but are as old as the hills in the timescale of social media.

Adopting interoperability and data portability can promote much needed competition and innovation in the market for social media services. In particular, such policy mechanisms can take the power out of the hands of a few social media platforms concentrated in the Global North and put it into the hands of their users disproportionately located in the Global Majority. Social media platforms have not adequately responded to concerns in the Global Majority as evidenced for instance by their poor investment in content moderation resources in the Global Majority despite these countries having some of their largest user bases. Adopting such policy mechanisms would enable the users in the Global Majority countries to have their feeds curated in ways that are more responsive to their interests and perspectives.

- **Another future is possible: Reimagining data ownership and stewardship with and for communities,** Padmini Murray, Siddhant Shinde

Abstract: Community health practices in India have tended to reduce frontline workers to “data-mules” - collecting and delivering personal data of the community members to the “centre” where decisions are taken about community health, without consent and participation. The implications of these data practices are significant and worrisome, given the propensity of government initiatives such as the National Health Stack to collect patient data with a maximalist agenda. To push back on these harmful data practices, Design Beku alongside community health navigators affiliated with NGO Maya Health (HNs) have been co-creating infrastructures for community health data as a local and situated entity in Channapatna. These efforts have culminated in co-building Channapatna Health Library (CHL) - a digital repository of local health experiences and traditional

knowledge about wellbeing practices - to facilitate ethical, locally meaningful, and sustainable care work and activities through community-owned digital health infrastructure. We currently have a repository of 200-250 audio/video recorded content of community members by HNs; archived, tagged, annotated, and curated by the HNs on a decentralised independent server using open-source tool called PAPAD - hypermedia storytelling, archiving and media making through audio and video.

The intended users of PAPAD is the local community which raises signficant questions with regards to data governance and stewardship. We have been exploring some of the following questions with the HNs:

* How do we create a data governance mandate that ensures fairness to all who have provided their data?

* How might the community utilise the data productively to create their own datasets?

* How do we create the possibilities for communities to leverage the value of these datasets, rather than giving them away to exploitative third parties?

In our paper we will explore the outcomes of these discussions, and how they have shaped our thinking with regards to potential futures of community owned archives.

- **Redefining Data Practices: A Data Feminist Perspective on Privacy as Infrastructure,** Shipra Yadav

Abstract: This paper delves into the dynamic nature of data collection, stressing the importance of disentangling privacy implications from presumed technological objectivity. Employing the lens of sociotechnical relationalities, it examines the mechanics of data collection practices, particularly within the context of facial recognition technologies used in policing in India. It argues that these practices, encompassing both data collection and computing, are deeply embedded within a power-laden network involving the state, technology, and commerce, inherently marked by gendered and violent dynamics.

Drawing from the principles of data feminism and the framework of data performativity, the paper offers an alternative perspective on data practices and informational privacy, advocating for a broader understanding of privacy as an infrastructure transcending traditional boundaries.

The case of facial recognition technologies is used to illustrate the application of the theoretical framework, demonstrating how these technologies in policing reflect and reinforce power dynamics inherent in data collection practices. By providing theoretical insights and reflective analysis, the study contributes to broader discussions on the intricate politics of data and the intersectionality of gender, technology, and power dynamics.

Applying a critical lens informed by data feminism and the concept of data performativity, the case study underscores the complex interplay between technology, power, and privacy in the context of facial recognition technology in India.

Online Panel OP8 Data Infrastructures **(Online)**
G-RM: HS 15.02 **(chair:** Arne Hintz**)**

- **A New Wave of Data Power?: Data Integration and Analysis Platforms between desilosation and interoperability,** Simon Egbert

Abstract: In contemporary society that is (nearly) completely digitalized, many institutions are faced with the problem of making use of the ever-increasing amount of data that can be found in an ever-increasing number of places. Organizations and companies are increasingly faced with the challenge of making a seemingly unmanageable mass of data processable to derive meaningful and actionable information from it. In this context, digital platforms play a prominent role not only as major creator of this flood of data, but also as the currently most prominently discussed tools with which this flood of data is to be made manageable. It is above all data

integration and analysis platforms, such as those currently most frequently used by the US software company Palantir Technologies, that have established themselves as a promising data research and analysis technology. Before this backdrop, in my paper I will discuss data integration and analysis platforms as special sub-type of digital platforms, reviewing their major commonalities and differences to the more common internet platforms (Amazon, Facebook, Uber etc.), and highlighting the generative role they should play: by connecting third parties (their clients) with data, as well as data (banks) among each other, they aim to enhance interoperability. Hence, their main goal is desilosation, which means to transgress data boundaries and to break up data silos – that is, data sources unconnected to each other and only accessibly separately without the possibility of association. I will argue that in doing so data integration and analysis platforms signify a new wave of data power by further strengthening the role of data in societies knowledge creation and decision-making processes.

In my analysis, I draw on the discourse in platform studies, which has identified the fundamental characteristics and effects of digital platforms (e.g. Bucher & Helmond, 2018; Gillespie, 2010; Gorwa, 2019; Srnicek, 2016; Van Dijck et al., 2018; Zuboff, 2019). I will also draw on empirical material I gathered on the platform company Palantir (mostly documents) and interview data on the application of the Palantir Gotham platform hessenDATA by the Hessian police.

- **Dataism II as a strategy against data colonialism: Divergences in digital twinning in Germany's and Japan's COVID-19 pandemic responses,** Harald Kümmerle, Johannes Thumfart

Abstract: While datafication has aided health systems in coping with the COVID-19 pandemic, it also provided an opportunity for data colonialists to further their interests (Magalhães and Couldry, 2020). By enacting a diffractive genealogy (Barad, 2007, Mauthner, 2016) of how different pandemic countermeasures emerged inside of similar infrastructural trajectories, this paper uncovers a previously overlooked variety of dataism (van Dijck, 2014), enriching the analytical repertoire of critical data and surveillance studies. It does so by highlighting a notable divergence in the pandemic responses of Germany and Japan, a development that is surprising given the similarities in economic structure and digital strategies Industrie 4.0 (Germany) Society 5.0 (Japan), both emphasizing the importance of spatial digital twins.

Germany's response during the pandemic, largely followed the global "Covid consensus" (Green and Fazi, 2023), and concentrated on breaking chains of infections arising between individuals. This followed the logic of datafication of social relations aligns with the classic dataism (van Dijck, 2014) that is considered to be at the heart of data colonialism (Couldry and Mejias, 2019). We argue that this is merely one variety of dataism, relabeling it as dataism I. In contrast, Japan's approach significantly diverged from the global "Covid consensus" and instead concentrated on breaking chains of infection clusters arising between groups of individuals. This approach follows the logic of datafying spatial environments (Kümmerle, 2023), a different variety of dataism which we label as dataism II.

The logic of dataism II is exemplified in the use of the supercomputer Fugaku for aerosol and droplet simulations (Ando et al., 2021), which won the Gordon Bell Special Prize for COVID-19 Related Research 2021, and the dissemination of their findings through mechanisms of liquid surveillance (Bauman and Lyon, 2012). This strategy enabled Japan to keep most schools open, leveraging platform power for citizen wellbeing (van Dijck et al., 2019), while Germany missed this opportunity, resulting in widespread and prolonged school closures.

In conclusion, this comparative analysis of dataism in Germany and Japan's pandemic responses allows for a more differentiated critique of datafication practices for furthering the public good. It also contributes to the discourse on an emerging 'non- aligned tech movement' that aims to steer clear of Sino-American competition (Mejias, 2020).

- **Data power in the public sector. How data are used to exercise power in public health insurance,** Astrid Mager, Doris Allhutter

Abstract: The managerialism and entrepreneurial remodeling of state institutions of the 1990ies has been introducing a marketization of social protection even before datafication and automation found their way into bureaucracy. Public agencies are increasingly steered by ideas of efficiency, effectivity and cost-reduction. As Dencik (2022) emphasizes, the "ideology of dataism and the political economy of technology posit values and operational logics that are markedly different from how the welfare state has previously been understood".

This paper asks how data are used to exercise power and how state-citizen relations are reconfigured through data practices in public health insurance? Do practices of surveilling, profiling, targeting, nudging, and incentivizing users – well known from big tech companies – spill over to public institutions due to the increasing use of data and algorithmic systems? To answer these questions, we draw on ongoing fieldwork conducted in the biggest public health insurance of Austria. Covering public health insurance for 7,5 Mio Austrians (out of 9,1 Mio), this institution holds a massive data infrastructure covering administrative data of various sorts. It aims at making this data productive for managing scarce resources, for implementing and monitoring public health measures, and for detecting fraudulent behavior. E.g., in the aftermath of a legislation from 2015 to detect welfare fraud, the institution has developed a software that repurposes health insurance data to uncover bogus companies. Another example of corporate data practices injected and reconfigured in the public sector, is the envisioned targeting of particular citizen groups for vaccination or screening measures. Altogether, 12 qualitative, semi-structured interviews with different stakeholders including software developers and users of the fraud detection software to detect bogus companies, representatives and public health experts of the health insurance, stakeholders involved in the Austrian Micro Data Center governing access to administrative data for researchers, a health economics researcher working with administrative data from the health insurance, as well as a policy maker specialized in Austria's digital data strategy have been conducted so far (2-3 additional ones will be conducted in the upcoming weeks). Moreover, policy documents, media reports, and internal materials related to datafication/automation attempts of the Austrian health insurance have been analyzed to frame the interviews. Finally, a mind scripting workshop (Allhutter 2021) with different users of the fraud detection software deploying collective deconstruction of work practices, is planned for May 2024 (confirmation by the Austrian health insurance still pending).

To conclude, we will discuss how practices of monitoring and nudging affect public policies and their effectiveness. While big tech companies have developed sophisticated techniques of user surveillance, targeting, and nudging for gaining profit, the state aims to use data to manage its scarce resources efficiently and to detect "black sheep" that exploit the welfare state in fraudulent ways. Despite these crucial differences, however, public sector data practices show interesting similarities, e.g. in terms of translating algorithmic bias and automated discrimination into the public sector (e.g. Allhutter et al. 2020). Our contribution analyses the implications of corporate dynamics entering the public sector through datafication practices and discusses the tensions in state actors' attempts to create public value (Prainsack et al. 2022).

- **Data Power and National Security,** Miah Hammond-Errey

Abstract: This research explores how changes in power or control over data is impacting the national security environment and society more broadly. It draws on a core concept of the author's recently published book, Big Data, Emerging Technologies and Intelligence Production: National Security Disrupted.

This body of work establishes that big data has created a new big data landscape comprising data abundance, digital connectivity and ubiquitous technology. Within this context, a set of large technology companies has concentrated information, computational and economic power – and continues to do so. By considering each of the features of the big data landscape in turn, this paper further analyses this ongoing concentration and consolidation of power. It does so by drawing on interviews with practitioners from the Australian National Intelligence Community, to

consider the implications of this for the national security environment and society writ large. It will also draw on new research into the centralising of computational and economic power in Australia and globally, including around the core architecture that underpins artificial intelligence and data analytics.

This paper considers how the big data landscape – and the concentration of power – across it – is giving select actors asymmetrical advantages in accessing previously hard to acquire capabilities, making intrusive digital surveillance, profiling, influence, monitoring, tracking and targeting available to a wider range of actors (both state and non-state). The paper explores the concept of the big data landscape, and draw on unique interview data and research, to consider the implications of consolidated power over data, and what that means for the national security environment and society writ large.

- **Centring Indigenous and queer perspectives on Google's AI/ML,** Bronwyn Miller

Abstract: While there is an important and growing body of scholarship on the oppressive nature of Artificial Intelligence/Machine Learning (AI/ML) systems in relation to large social categories, i.e., race, class, and gender, further research is required that centres affected Indigenous and/or queer communities in contextualised discussions of AI/ML systems. The primary aim of this research was to understand collaborators' perspectives on Google's AI/ML information representation and co-produce community-relevant research priorities and outcomes. By engaging with Indigenous and/or LGBTQIA++ individuals through focus groups and interviews, collaborators set the priorities for this data and the overall direction of the research through their perspectives. This research shows that Google's AI/ML technologies in so-called Australia reinvigorate settler colonial power arrangements through the logics of statistical normalization, surveillance, and techno-determinism. Lastly, this research outlines the initial stages of a co-designed community-focused toolkit that refuses Google's/AI/ML settler colonial logics of elimination (Wolfe 2006), Western hegemony (Quijano), surveillance (Browne 2015), white-possession (Moreton-Robinson 2009), and heteropatriarchy (Day 2021).

This settler colonial framing also provides an implicit critique on normative assumption around data 'citizenship' and 'rights' (Dencik et al 2017) as well as universalist approaches to 'decolonisation' (Couldry & Mejias (2023). This research argues that only vigorous oversight and willing accountability to Indigenous researchers and community members can intervene in the reproduction of settler-colonialism. True decolonial and anti-colonial methods require Indigenous leadership. While this research is relevant to all three of the conference's primary concerns, it particularly speaks to the extent that critical data power research needs to be situated in specific contexts otherwise risk reproducing data universalism and modern/colonial rationalities of 'justice' and 'recognition' (Coulthard 2014).

Keynote 4

B-RM: 109 **G-RM:** HS 15.03

Time:	Bangalore 14:15-15:30	Graz 10:45-12:00

ONLINE KEYNOTE: Open Worlds and the Limits of Datafication, Lucy Suchman

Abstract: This talk is in conversation with Science and Technology Studies (STS) and kindred research that works to denaturalise data by attending closely to the systems of categorisation, labour, interests, and erasures that enable datafication. I take as my case in point projects in the automation of targeting, both in its more literal operations in the context of militarization and armed conflict and the broader sense of multiple practices of discriminatory profiling. Central to the analysis is close attention to the elision of closed worlds of data with the open worlds from which data are derived. Fixed and labelled within datasets, images of things and traces of lives stand as proxies suitable for computational analysis. Investigations informed by STS can help to recover the complex histories, ambivalences and multiplicities that escape these operations, opening spaces in which to consider the political economies of datafication and the possibilities of knowing otherwise.

BOOK LAUNCH

B-RM: 109 **G-RM:** HS 15.03

Time:	Bangalore 15:30-16:00	Graz 12:00-12:30

DATA POWER BOOK LAUNCH: Dialogues in Data Power, Juliane Jarke, Jo Bates, Karen Louise Smith, Lyndsay Grant, Priya C. Kumar, and Lorenzo Giuseppe

Abstract: The book is an experiment in facilitating interdisciplinary dialogue and collective scholarship among 80 researchers through nine collectively authored chapters. Contributors to each chapter were invited based on their presentations at the 4th Data Power conference which attracted 175 participants and took place in June 2022 simultaneously in Canada, Germany, the UK, and online. In a series of workshops for each of the chapters, the invited contributors explored their various perspectives, experiences, and responses to the chapter's theme. They then collectively wrote a joint introduction to the chapter, as well as individual sections that provide their own perspective. This responsive process led to what authors in different chapters refer to as a 'kaleidoscope' or 'braid' of scholarly engagement. The process, hence, did not aim to provide a conclusive view on any given theme but allowed for a diffractive writing of multiple and also differing or disagreeing perspectives. To further increase the dialogue, we also invited scholars – mostly from outside the Data Power realm – as discussants for the individual chapters. Their task was to provide a response and situate the arguments in their own research. Through this form, we have created a space for dialogue and mutual encounter that is difficult to find otherwise in such an interdisciplinary field.

Session X

Time:	Bangalore 17:00-18:25	Graz 13:30-14:55

In-Person Panel GP13 Growing Old With and Through Data: Situating Data Practices in Later Life **(Graz)**

G-RM: HS 15.02 **(chair:** Unmil Karadkar**)**

- **Growing Old With and Through Data: Situating Data Practices in Later Life**

Abstract: Experiences of growing older are increasingly shaped through and with data. In the last years, older bodies have become sites of datafication, as data-intensive gerontechnologies, such as health monitoring or self-tracking systems, promise to be the most effective and economical approach to solving the "problems" of population ageing (Moreia, 2017). However, there currently remain crucial gaps in our understandings of how older adults make sense of, engage with or stand in opposition to diverse practices of datafication in their everyday lives. While there is much hope put on (big) data in the context of demographic change, the roles of older adults in making and constructing these data, and the "constructed, polyvalent nature of human data" (Joyce et al., 2021) in the context of later life currently remain critically understudied.

The aim of this panel is to situate data practices in later life through exploring how older adults engage with, make sense of and think about (digital) data. Aiming at sparking a dialogue between age studies and critical data studies, the panel asks: What is the role of (digital) data in the constitution of ageing and later life? How are older adults included in or excluded from datafication practices that concern them? How is "age" as an intersectional category of difference constituted in and through data?

The panel features four papers that engage with these questions through different concepts and methodologies: Dalmer's and Gallistl and Lehner's papers focus on the difficulties of finding language around data and algorithms that is inclusive of the experiences of a diverse older population. Karadkar and colleagues sketch out results of the first cross-national study that explores older adults' perceptions and attitudes towards surveillance. Lastly, Reuter's paper

adopts a digital civics approach to understand the datafication of older adults' representations in societies and in research datasets.

- **Digital Civics and ageing,** Arlind Reuter

Abstract: Digital Civics, an emerging area of research in the field of Human-Computer Interaction, explores digital participatory citizenship practices. It seeks to understand how technologies can be designed in the context of civic interactions and experiences. Developing participatory systems that enable citizen engagement in a relational rather than transactional way, includes the co-production and co-ownership of political thinking, action, and civic data (Olivier & Wright, 2015). Creating socio-technical systems that value differences in experience, values, and knowledge, can generate new opportunities for civic engagement in digitalising societies.

Despite the impetus to develop digital participatory citizenship in digitalising societies, research on Digital Civics is widely detached from research on ageing, thus risking exclusion of older adults from this transformation. This project explores the datafication of later life through a Digital Civics lens. Drawing on insights from participatory research with older

citizens, I discuss the datafication of later life from two angles: 1) older adults as creators of their own representations in society, and 2) older adults as creators of their own representations in research data. I locate Digital Civics within wider age-friendly efforts and discourses on civic engagement practices.

- **"It's like I am throwing my data into a black hole" - How older adults make sense of algorithms and (big) data,** Vera Gallistl, Katrin Lehner

Abstract: Algorithms and its capacities to analyze data have developed as modern myths. On the one hand, they are depicted as omnipotent entities that govern our lives through the automated analysis of big data, on the other hand, they are perceived as vulnerable and instable systems that make wrong decisions or (re)produce bias (Ziewitz, 2015). In gerontology, the interest in algorithms is fueled by enthusiasm about their transformative potential, with connected hopes that algorithmic technologies will increase care productivity, safety and autonomy (Rantz et al. 2015). Critical gerontology highlighted that such an interventionist view on algorithms tends to render invisible the manifold engagements of older adults with algorithmic technologies, that often happen outside of interventions.

This paper makes a novel contribution by exploring how older adults perceive and make sense of algorithms in their everyday lives. We discuss results from a participatory research project in which we conducted two group sessions with a group of eight co-researchers over the age of 60 years. Between these two group sessions, co-researchers conducted research on algorithms in their everyday lives through photo voice (Simmonds et al. 2015).

Results uncover the manifold algorithms and data practices that are relevant in older adults' lives. While understanding these algorithms was often perceived as difficult, partly because of their technical complexity, partly because of deliberate black-boxing by tech companies, our co-researchers shared manifold strategies to make sense of these algorithms. These strategies became visible through the frequent use of dystopian metaphors to describe algorithmic regimes: Co-researchers described algorithms as magical and omnipotent entities or black holes that eat up and digest massive amounts of their personal data. These metaphors enabled an insight into the meanings and experiences of growing older in a datafied world, and ultimately also enabled a dialogue about futures of an ageing society.

- **"I don't know what you mean by that": Seeking a common vocabulary around data in later life,** Nicole Dalmer, Cal Biruk

Abstract: With the domestication of digital devices into the everyday, this paper offers reflections from two, related studies that both sought to explore older Canadians' understandings of and experiences with the digital technologies they use in everyday life. The first, a virtual, qualitative survey with 70 older Canadians, and the second, a pilot interview study with 7 older adults in their homes.

Not only do our daily activities and routines rely on data, our routines are often, in turn, converted into data through our many devices (Burgess et al., 2022). Living with data, however, is often an experience that differs from person to person and from group to group. Given these differences, how then, do you communicate about data with different groups? In both studies, we sought to highlight and understand participants' own diction, images, metaphors, and concepts they articulate when thinking with and about their own data, giving them a space to speak and share "their own data stories louder than those that are being told about them by others" or by other devices (Thorp, 2021, p. 19). In this paper, we offer our observations on the challenges and difficulties (and potential ways forward) in finding a common vocabulary in research relationships between participants and researchers to speak both to data and the many ways that data circulate in and out of older adults' everyday lives.

- **"Understanding perceptions of online surveillance among older adults: A six-country perspective",** Unmil Karadkar

Abstract: This presentation will show the preliminary findings of the first cross-national quantitative study of older adults' perceptions of ICT-based surveillance. This research is novel in several respects: past studies related to perceptions of ICT-based surveillance have mainly used

qualitative methods, while those related to older adults and surveillance have focused on monitoring devices used in eldercare facilities or respondents' homes. Finally, no study has explored cross-national differences related to older adults and surveillance.

Adults aged 60 or more from six countries (Austria, Canada, Israel, The Netherlands, Romania, and Spain) completed an online survey in Nov-Dec 2023. With around 500 respondents from each country, our findings are underpinned by a sample of 3,030 responses. In addition to providing demographic data, respondents reported on various aspects of their ICT use, their perception of surveillance by six agents (individuals such as friends or family, social institutions, employers, corporations, government, and bad actors), perceived attitudes about surveillance outcomes, technostress, online privacy behavior, and conspiracy mentality.

A first look at the data reveals the respondents' internet use patterns are diverse. The study found variations in the perceived level of surveillance among participants who reported engaging in various online privacy protection actions. Among them, the most common ones were clearing cookies and browser history and blocking unwanted messages/emails. The data is being analyzed by teams based in each of the six countries, focusing on agents of perceived surveillance and country-specific data. The analysis will shed light on whether and how older adults' perceptions of online surveillance relate to their adoption of privacy-protecting behaviors, perhaps as an attempt to balance the power dynamic in their online behaviors.

In-Person Panel GP14 Situating user perspectives and lived **(Graz)**
G-RM: LS 15.03 **(chair:** Gwendolin Barnard**)**

- **Putting trust to the test: Everyday negotiations of digital surveillance on TikTok,** Andreas Schellewald

Abstract: In parallel to TikTok's international growth over the last years, there has been continued scrutiny of its data infrastructures and corporate ties to China. Due to such, TikTok has been banned in some countries, like India. TikTok has been scrutinised not only due its geopolitical position, however. The app's accuracy in figuring people, as well as its presumed ability to 'hook' people, have sparked further concerns about it. Yet, despite such concerns, every day there are millions of people around the world who take out their phones, open TikTok, and start scrolling. From the very moment of opening the app, TikTok will start observing and produce data about their behaviour in relation to content displayed on their screens. The paper will investigate this interaction, asking the question of why and how people manage to enjoy being in an a surveillant online environment like that of TikTok. It will offer an ethnographically situated account of TikTok consumption as it was observed amongst young adults based in the United Kingdom. Drawing on their stories, the paper will offer a perspective on how trust in TikTok and its data practices was

negotiated, for example in moments when the app went ‘too far’ and recommended ‘scarily accurate’ content. By doing so, the paper outlines how participants conditionally trusted the app as an everyday technology, and how this trust was continuously put to the test in its local contexts of use. Describing the resulting fragility of the relationship with TikTok, the paper contributes to ongoing debates and highlights the ambivalent feelings people have on the datafication of their everyday lives.

- **Data-intensive Technology Systems for Women Safety: Lessons from Bengaluru’s AI-powered CCTV Network,** Udipta Boro, Fran Meissner, Karin Pfeffer

Abstract: Ample scholarly work highlights the harmful social effects of CCTV surveillance, such as hypervisibility, biased profiling, and discrimination against certain social groups. Research also shows low correlations between the use of CCTV cameras and crime prevention. Despite those observations, CCTV surveillance is expanding and is marked by the increasing use of advanced video analytics with artificial intelligence (AI). These developments further complicate the unequal power structures perpetuated by such technological systems. In Bengaluru, authorities are using CCTV data from AI-powered surveillance systems to ensure women safety as part of the Bengaluru Safe City Project (BSCP). Given AI surveillance’s harmful effects, how safety is understood in such projects is little studied. In this paper, we unpack how the notion of safety is evoked within BSCP’s data-intensive environment. Analyzing key documents from BSCP actors describing the intended use and technological capabilities of the now partially implemented surveillance system, we identify the following storylines surrounding urban safety: a) women should be protected from men (safety from physical and sexual violence), b) public places are inherently dangerous for women (safety from potential harm), and even within a high-tech urban environment, c) women are responsible for their own safety (safety in your own hands). These storylines reveal that data-intensive technological systems, even when particularly tailored for women safety, do not provide guaranteed safety but conditional safety at most. These findings nuance our empirical understanding of unequal and pervasive data-intensive technologies in public spaces. We show that rather than promoting a promise of greater safety, BSCP and how it invokes safety reinscribes asymmetrical power dynamics infused with patriarchal beliefs. This asymmetry disrupts the gendered rights to the city, creating techno-mediated (spatial) injustice. In conclusion, we reflect on those findings and situate them within critical discussions around algorithmic care as a future research direction.

- **Centring student agency in the analysis of datafication in higher education,** Joe Noteboom

Abstract: Responding to calls for critical data studies to pay more attention to the agency of ordinary people in relation to datafication, this paper asks what can be learned by centring student agency in the analysis of datafication in higher education. Student agency has been widely theorised as both an analytical category and normative goal of higher education. While proponents argue that emerging data practices such as learning analytics have the potential to foster and enhance the agency of students, critical studies of datafication in higher education have mainly emphasised the ways in which datafication constrains or threatens student agency. Data studies research on people’s everyday experiences of datafication, meanwhile, highlights how, despite power and information asymmetries, ordinary people exercise agency in their feelings about, understandings of and responses to data practices. This paper draws on everyday data studies literature to theorise research with university students in Scotland that employed creative and speculative methods to investigate students’ everyday experiences of datafication and their perspectives on university data practices and data futures more broadly. This research shows that while students employ a range of literacies and coping tactics in response to datafication, their agency is limited by feelings of resignation in the face of top-down data relations at university. These findings, I argue, point to the value of seeing agency over data as a key dimension of student agency in the context of datafication. By promoting students’ agency over data, university governance can therefore become a key site for advancing data citizenship and building better data futures.

- **Personalising technology governance: the case for researching affective safety,** Linnet Taylor

Abstract: Innovation-friendly governance in the digital economy relies substantially on formalising complex concepts into useable tools for regulation and standardisation. Safety has become one of the contemporary buzzwords of technology governance, driven both by the product safety focus of the EU's upcoming AI Act and by the massive investment of academic and commercial research in building an international field of 'AI safety'.

This paper examines the process of building a field around AI safety, and focuses on its interaction with older formalisations of this concept, such as 'user safety' in the app economy. Drawing on the findings of an empirical project conducted in the Netherlands, exploring affective perceptions of safety among users of mental health and wellbeing apps, we will explore what is lost in the process of narrowing the idea of safety from its affective form(s) to an abbreviated and standardised metric. Comparing these two, and their actual and potential uses, we will make the case that sourcing users' perceptions on affective safety has the potential to shape power in the app economy.

This paper will focus on the methodologies and theoretical approaches that can help in sourcing views on affective safety; in integrating them into critiques of neoliberal technology governance, and for conceptualising their use in formulating more just governance of data technologies.

In-Person Panel GP15 Situating Data Power in Risks and Securitization **(Graz)**
G-RM: LS 15.02 **(chair:** Minna Ruckenstein**)**

- **Sharing, Caring and Breaking Silos - Ethics Shopping for Health Data Interoperability,** Petter Falk

Abstract: Ethics in technology implementation has served as a normative bureaucratic mechanism to delimit the discursive scope within which technology can be appraised and discussed (Tallacchini, 2009; van Dijk et al., 2021). As such, the prevailing laissez-faire and opportunistic approach to data sharing in public welfare administration today (Broomfield & Reutter, 2022; Dencik & Kaun, 2020) draws vitality from a constructed form of technosocial ethics. ""Sharing is caring"", as public actors "shop" for ethical arguments to move data nationally and internationally (van Dijk et al., 2021).

Drawing on ethnographic studies of Swedish welfare, using the infrastructural notion of 'breaking silos' as a reference point, this presenteion outlines three common ethical arguments used in arbitrary and contradictory ways to motivate increased health data sharing.

- **Navigating the Technoscape: Spatial and Temporal Strategies of At-Risk Tech Users,** Christian Eichenmüller

Abstract: A growing body of digital-safety research focuses on risk factors and needs of so-called at-risk users. These are individuals who are more likely to be digitally attacked or targeted by surveillance and/or could be disproportionately harmed by such attacks. Examples of at-risk tech users include dissidents, activists, refugees, journalists and lawyers. At-risk user research is particularly urgent. Digitization and information processing are increasing rapidly in all areas of life. From smart home and smart city to smart mobility, the Internet of Things projects what is gradually becoming reality: Digitization is no longer limited to a series of personal devices that can be switched on and off, but increasingly and continuously surrounds at-risk users and populations. In this emerging technoscape, a term intended to capture the human-made technological landscape, the incessant information processing goes far beyond the awareness or control of the individuals or populations whose data is being processed. This increasing intertwining of digitization with the material environment has consequences for security, privacy, and safety of at-risk users. As existing research shows, users are aware of their exposure to these risks.

Drawing on qualitative interviews in Germany with a diverse set of international activists and dissidents, this project examines how at-risk individuals negotiate risks to their security, privacy

and safety when interacting with data technologies. These technologies range from mobile and web applications, to public CCTV and facial recognition, or smart home voice recognition and biometric authentication services. In their daily encounters with ubiquitous computing environments and data power, interviewees use anticipatory data practices that are often in tension with interpersonal communication and relationships. Confronted with known unknowns and tradeoffs in their daily tech use, at-risk individuals begin to consider some places and spaces as risky due to infrastructural and technological conditions. Therefore, this project particularly investigates the spatial strategies of individuals moving through the technoscape.

- **Emergent Framings of Risk in Data Weaponization: Real, Imagined, Relative and Modal,** Jethani Suneel

Abstract: This paper discusses data weaponization in terms of the material relations of risk with reference to emergent properties and powers arising from joint action between humans, technology, information, and ideology. Drawing on a critical analysis of risk discourse and preliminary interview data from a larger project, it considers 'actual risk' in contrast to abstract, realist and relativist framings and situates them within a broader political ontology of data in society. I argue that in the (re)formation of material relations that flow through data-driven technologies, a complex risk/trust dialectic emerges. This dialectic is, I argue, an evolving, relational property that sustains both actual and abstract notions of risk, material infrastructures and public expectations of trust within and across domains. I propose that realist and relativist framings of risk are not particularly useful debates about data weaponization and suggest an alternative framing, modal risk. Modal conceptions of risk follow Jacques Ellul's assertion in The Technological System (1980: 233) that: 'when a new technology appears, there is no single and obvious decision; the choice is "not to do or not to do", [...] the choice is among several possibilities [...]'. Modal risk, I argue, is not vertical and one does not level up through thresholds and tolerances. Rather, its orientation is horizontal, akin to putting different lenses in front of each other, resulting in different apertures and resolutions on risk materialising. I conclude the paper with the proposal of a theoretical framework for applying modal risk analysis in empirical studies in a way that encourages us to explore the actual causes of risk and the material factors that contribute to it—even when we may not fully comprehend or be able to observe them.

- **Risk refusal: strategies to resist the logics of risk-driven surveillance regimes,** Becky Kazansky

Abstract: Risk scholars argue that contemporary societies and cultures can be characterised by their preoccupation with risk and the embracing of a 'risk lens' to understand and manage hazards ranging from the technological to the planetary (c.f. Beck, 1992; Douglas, 1992). However, alongside the ubiquitous embracing of risk, there are also important instances of push back against the risk-centric practices used by institutions to adjudicate what is just, advance rights, or care for people and planet. Through a novel conceptual framework that builds upon a four year study of surveillance resistance amongst transnationally collaborating digital rights organisations and grassroots organisers, this paper bolsters the case for why resistance to the risk lens on the world is necessary — and offers examples of how social movements are already engaging in this kind of resistance. Grounding itself in concerns with contemporary data and AI-driven surveillance, this conceptual framework builds on practice-based grey literature on worker safety in contexts of hazardous work, the interrogation of risk within surveillance and critical data studies (Gandy 2009; Dencik, et al., 2022), and research documenting how communities refuse engagement with unjust and harmful technological systems (Benjamin, 2016; Gangadharan, 2020). The paper argues that refusing risk is a way to work towards 'enlarge(ing) the space of possibility' (Amsler and Facer, 2017) of more just futures for technology, people, and planet.

In-Person Panel GP16 Situating Open Data Practices **(Graz)**
G-RM: LS 15.01 **(chair:** Jo Bates**)**

- **Open Access Data, Data Capitalism and Urban Planning,** Juliette Davret, Carla Maria Kayanan, Samuel Mutter, Rob Kitchin

Abstract: This paper applies West's (2017) theories on data capitalism and asymmetrical relationships created through data commodification to a discussion on open-access data. We underscore how the capitalist model transforms data consolidation into value-added products, creating sales opportunities and inverting power relations by transforming the creators of open-access data into buyers. Findings are based on Data Stories, an ERC-funded project using research-creation to understand Ireland's planning and property data ecosystem, and specifically, as part of this project, on the case study of a company specialising in the commercialisation of open-access data used in the Irish urban planning system. Our research details the intricate process of merging disparate data systems into a single unified product. This process involves breaking down barriers between and across systems, validating the data, and creating an integrated and coherent entity. Information on the company and their data practices were collected in a series of stages: 1) five semi-structured interviews with eight employees, 2) three days of on-site visits shadowing the employees, and 3) a stakeholder survey. Collected material was used to shape three workshops designed by an artist on the project using speculative fiction methods to understand the company's data philosophy in more detail. Through mapping the data management flows between Ireland and data intermediaries in South Asia, the paper highlights the inherent challenges in managing multiple data systems. We emphasise an approach to data that rationalises the entire data infrastructure from an economic perspective, promotes more efficient management and strategic use of information, enhances "opportunities" generated by these data, and, through this, initiates a crucial discussion on data ethics and the role of data intermediaries in the planning system. Finally, we discuss how the capitalist data model is being challenged by the digitisation of planning processes and open data movement (Lund, 2017), highlighting the importance of finding a balance between economic benefits and ethical principles in the use of open access data.

- **The territorial imbalances of urban open data,** Ana Maria Bustamante Duarte, Diego Fabian Pajarito Grajales, Manuel Portela

Abstract: The promise of processing and "opening" data by public administrations to increase accountability in their management activities is not new. To inform decision-making or the promotion of people's participation and their representation into urban planning. Audits and other studies have largely demonstrated the unfairness and injustice in urban planning when quantitative data is incomplete. More recent methods from social computing and data science have been useful to map the lack of resources, investment and the deprivation of public services unevenly across the territory. The idea that making data publicly available has been a promise of transparency as a universal solution for public accountability and for identifying unfair and unjust urban dynamics, actions, and patterns. As such, diverse actors, mainly civic organizations, use public data for their activities (from open data portals, public repositories, open-source projects or citizen science initiatives). However, the quality of public data (e.g., its origin documentation, its type of processing including reporting and visualization) continues being a matter of attention since they can hamper, on occasions, proper analyses of such complex urban dynamics, actions, and patterns. In this article, we analyze two core urban observatories, repositories and data platforms (mobility and housing) from two urban regions (Bogota and Barcelona) in different continents. We initially explored the urban data power dynamics behind these urban observatories/repositories/data platforms and their data practices focusing on: 1) identifying their data sources, vendors and relevant characteristics of, 2) the (lack of) level of representation of certain residents' groups and urban areas and identify some of the reasons behind it and 3) on the additional impacts that the imbalances on these aspects generate in terms of urban data justice. Conversely, we mapped the provided spatio-temporal data to acknowledge territorial imbalances impacting the access to services and a fairer distribution of power.

- **Navigating the Data Seas: Identifying Power Dynamics in Data Practices from a Transnational Comparative Perspective,** Alejandra Manco

Abstract: Open research data sharing is portrayed as a positive practice (Tenopir et al., 2020; Thoegersen & Borlund, 2022), bolstered by open science policies at institutional, national, or regional levels worldwide. However, it is evident that data is not neutral (Beaulieu & Leonelli,

2021), giving rise to implicit power relations arising from data usage among researchers, their data sharing practices and motivations, as well as data infrastructures and reusability. While employing open data can serve as an effective means to counteract data colonialism to some extent, openness may also exhibit extractive tendencies, potential negative effects, or unintended consequences. This presentation will delve deeper into these issues concerning data sharing and reuse in the basic science domains (biology, chemistry, and physics) using a transnational comparative approach from the perspectives of scientists in Brazil, France, and Peru.

This empirical qualitative proposal is built upon thirty semi-directed interviews with scientists in Brazil, France, and Peru, constituting a transnational comparison on this specific topic. The data collection process involved: Identifying the best universities in each country using the QS World University Rankings 2022 as a guide. Contacting scientists in the mentioned areas through social networks such as Twitter or Linkedin after identifying the institutions, and conducting interviews with those who agreed. Analyzing interview transcripts using Nvivo software. Conducting the coding process through thematic analysis and employing an inductive category development approach. Subsequently, the results were analyzed from a critical discourse analysis perspective (Jorgensen & Phillips, 2002).

The research questions addressed are:

How do researchers navigate and address concerns regarding the safety and trustworthiness of data stored in cloud-based archives and other platforms, considering the broader implications of data's power on scientific practices?

What variations exist in perceptions of data sharing and data reusability across scientific fields, and how do specific tools and methodologies contribute to shaping these perceptions, shedding light on the implications of data practices?

How does the availability of proper infrastructures influence the reliance on shared data in developing countries, and what advantages and disadvantages does this symbiotic relationship present in terms of research speed, innovation, and research agenda?

- **Open Data Platforms and Governance Intricacy,** Mahardika Fadmastuti

Abstract: Graham (2013) contends that contemporary cities are shaped not only by physical elements like bricks and mortar but equally by their digital counterparts, referred to as digital shadows. These digital shadows encompass the layers of digital information produced about urban spaces, as discussed by Ash, Kitchin, and Leszyzynski (2019). As urban environments are progressively transformed into data, our perception of cities is concurrently influenced by the information encapsulated in their digital shadows; namely digitalized map, city dashboards, and other open data platforms.

Public sector reform builds an expectation that technological and related institutional transformations are able to deliver more open, participatory and co-creative forms of policy-making, public service design and delivery (Pollitt and Bouckaert, 2017; Varró and Bunders, 2019). The Open Data Platform initiatives expect to address public services, increase transparency, and engage with wider social benefits (Graham and Marvin, 2001; Batty et al., 2012; Kitchin, 2014; 2016). Nevertheless, this initiative requires a multi-level and cross-organizational involvement. Our recent study about mapping typology of Open Data Platforms and City Dashboards in OECD countries depicted that all of Open Data Platforms and 40% of the City Dashboards in the case study have multi-focus contents. It consists of a combination of two or more focuses of the smart city goals themes (health, environment, mobility, etc). It shows that in ensuring the data movement operability, it requires contribution and coalition of different agencies.

This proposal seeks to address the governance intricacy and analyze the challenges in managing open data exchange tools. We combine the study of multi-level governance and previous study of data exchange tools typology to propose an exploratory study of multi cases in different cities such as Tallinn, Helsinki, and Dublin. These cities have been developing urban digitalized data and making it available for public access. Moreover, Helsinki and Dublin open data platforms were

some of the open data pioneers in EU countries while Tallinn is one of the leaders in e-Governance initiatives. We highlight how multi-level governance practices in managing open data platform initiatives.

Session X

Time:	Bangalore 18:45-20:10	Graz 15:15-16:40

In-Person Panel GP17 Transforming Data Paradigms at the Interfaces of Open Science and AI **(Graz)**
G-RM: HS 15.02 **(chair:** Katja Mayer**)**

- **Transforming Data Paradigms at the Interfaces of Open Science and AI**

Abstract: Currently we are witnessing both a transformation of digital and computational scientific methods in the context of AI and how access and use of scientific knowledge production is organised and governed, e.g. by open science mandates in public research funding. This session will explore the interplay between Artificial Intelligence (AI) and Open Science (OS), with a focus on power asymmetries, renegotiation of scientific integrity and hence the evaluation of scientific knowledge, and respective processes of datafication and sharing. Central to this session is the examination of the data ecosystem and its complex role in the relationship between open science and AI. It delves into the challenges and ethical considerations of data accessibility and stewardship in and for AI research, and the influence of the political economy on open-source AI. This exploration extends to include the transparency and accessibility of information about AI operation, the resource demands of AI systems, and their implications in terms of labour and the socio-economic environment. Moreover, access to AI research, development and resources for deployment is primarily concentrated in the Global North. Despite AI's promises to redress current inequalities, this asymmetry threatens to reinforce the divide even further.

In this interactive session, speakers will provide short impulse talks scrutinising how power dynamics shift and are redefined at the nexus of evolving AI methodologies and emerging Open Science workflows. Data Power Conference attendees will then be engaged in active discussion that seeks to shed light on how AI transformations are influencing, and being influenced by Open Science practices. The session will hence aim to better understand the broader impact of AI and open science on knowledge production more generally.

Having invited a multidisciplinary array of scholars from STS, computational social science, data science, open-source advocacy, and beyond, the session aims to address not only the impact AI has and will have on open scholarship and vice versa, but also to critically engage with themes such as data access, reproducibility, the AI readiness of data, transparency, and resource-related challenges, all within the context of power dynamics in order to highlight priorities for future research and future action.

- **Re-assessing "open" in Open Science and AI,** Katja Mayer

Abstract: From a critical data studies viewpoint, this introductory talk will explore the dual nature of open AI research, encompassing both its potential benefits and inherent challenges. AI technologies, on the one hand revitalising scientific fields through enhanced data analysis and simulation capabilities, on the other hand bring forth significant concerns regarding data quality, transparency, reproducibility, as well as regarding ethics, sustainability and exploitation or labour and resources. This duality is only partially underscored by public scrutiny, such as "red teaming" events, which not only illuminate these quality issues but also suggest potential resolutions. These include advocating for more "independent science" and for better integrating science into AI through peer-reviewed scientific records. Such records, when made openly accessible, enable the development of generative models based on curated, trustworthy datasets, it is hoped. Nevertheless, the growing dependency of science on large-scale commercial AI infrastructures and industry legacies raises critical questions about the essence of independent scholarship. This

reliance has sparked scepticism about the ramifications of increased openness in AI technologies, potentially paving the way for harmful applications and security risks. Consequently, there's a pressing need to reassess what "Open" and "Open Science" truly mean in the era of AI-driven knowledge discovery. In this short presentation, I will probe the appropriate degree of openness in AI within the scientific realm and contemplate the various interpretations of openness among different stakeholders in the political economy of AI research. Additionally, I will delve into some of the contradictions between the principles of open source AI and open science, illustrating the frequent clash between the ideals of openness and the reality of power concentration at the intersection of scientific and industrial interests.

- **Insights from Social Media Research for AI research for public interest,** Jürgen Pfeffer

Abstract: This short presentation highlights some of the crucial learnings from social media research and platform studies, particularly focusing on accessing data from major platforms and social media providers. As digital platforms increasingly influence societal dynamics, understanding the nuances of bias, disinformation, radicalization, social movements, and social contagion, and their impact on public discourse and societal trends has long become of interest. However, until today researchers are struggling to gain and give access to this sort of data. I briefly will discuss several concerted efforts and initiatives to make these platforms more transparent and accountable. Furthermore, I will explain the several troubles when dealing with APIs and platform-provided data access. The insights gained are not only instrumental for policymakers and regulators in crafting informed AI regulations but also serve as guidelines for the critical AI research community. I will advocate for a balanced approach to data openness, supporting the aim that AI research remains in the public interest. The presentation underscores the importance of defining clear guidelines on what data and methods should be openly accessible, safeguarding ethical standards and societal welfare. In conclusion, this presentation offers lessons from social media research, exploring limitations but also proposing pathways for responsible AI development in line with Open Science.

- **Generative AI, reproducibility and trust in scholarly work,** Tony Ross-Hellauer

Abstract: Recent advances in Large Language Models (LLMs) have captured the public attention and raised interest in the potential for such AI technologies to transform workflows across a range of areas, including scientific work. Rich experimentation is already underway to examine their potential in reshaping scientific tasks including information retrieval, data analysis, data synthesis, quality assurance and more. This comes, however, at a time when many disciplines are addressing what has been termed a “reproducibility crisis”, with systematic replication, prevalence of questionable research practices and lack of transparency casting doubt on the robustness of results. This short talk will reflect on how LLMs, as tools of data power, hold potential to reshape the dynamics of scientific knowledge production, especially with regard to the robustness and integrity of results. Via consideration of issues of reproducibility in such models themselves (inherent indeterminism, model opacity, lack of access to training datasets, lack of disclosure of human feedback values and other training measures, bias, resource-intensity of model creation and maintenance, etc) and then through discussion of recent exploratory work regarding LLMs in scholarly work, this short talk will examine the potential for LLMs to both help and hinder improvement on reproducibility and trust in scholarly knowledge.

- **A glimpse into the LLM rat race,** Jana Lasser, Joao Pinheiro Neto

We are currently witnessing a “cambrian explosion” of open large language models (LLMs), driven by the (at first accidental) release of model weights to the public, in combination with rapid development of tools that offer a high level of abstraction and ease of access to these models. Over the past year, we have explored the potential of using such open LLMs to produce (more) realistic simulations of human behaviour for our research. In this endeavour, we have encountered new challenges to research in an environment where everything is open by default. For example, new boundaries to accessibility and findability of information are introduced by the transition of authoritative information sources away from scholarly literature to subreddits and blogs. In addition, the rapid pace of development undermines efforts to provide comprehensive reviews of

the current state-of-the art and the integration of new knowledge. Lastly, the vast space of model configuration possibilities and rapid development of new tools introduces new demands on good documentation practices to enable reproducibility. In this short talk, we will contribute our perspective as practitioners, (trying to) stay at the frontier of LLM development. We will relate current challenges for researchers to Open Science practices and offer our strategies for not losing orientation in a research environment that is moving at a breakneck pace.

In-Person Panel GP18 Situating Data Activism **(Graz)**
G-RM: LS 15.03 **(chair:** Nicole Dalmer**)**

- **From power centres to peripheries: Communities confronting data injustices,** Semeli Hadjiloizou, Smera Jayadeva, Shyam Krishna

Abstract: As sociotechnical phenomena, data-intensive technologies repeatedly reinforce and exacerbate longstanding structures of inequality, discrimination, and exploitation. The data justice movement has emerged as a critical lens for critically reflecting on these entrenched power dynamics and as a framework for actively contesting such structures. Specifically, the 'Advancing Data Justice Research and Practice' (ADJRP) project aims to challenge hegemonic narratives of data universalism by foregrounding intercultural and contextually situated approaches to reclaiming agency within increasingly datafied social realities. An ongoing collaboration with over a dozen civil society organisations from across the globe, ADJRP advocates for the relocation of data justice beyond Eurocentric modes of thinking and being by centring the perspectives, knowledges, and lived experiences of communities at the so-called 'margins'. ADJRP amplifies the activism and advocacy of these organisations through a diverse range of outputs including a three-part documentary series, resulting in a melding of traditionally distinct understandings of research versus practice. Drawing on the work of the ADJRP project, this paper illustrates the importance of situating data practices within specific localities to understand both the differential impacts of datafication and the range of actions taken by impacted communities to counter data power. This paper investigates three instances of mobilisation for data justice – the use of data as an advocacy tool for communities that have been marginalised because of their gender, the algorithmic power impacting workers in the gig economy, and the decolonisation of datafication through Māori data sovereignty – undertaken by Digital Rights Foundation (Lahore, Pakistan), Digital Empowerment Foundation (Delhi, India), and Digital Natives Academy (Rotorua, Aotearoa), respectively. As these three ground-up initiatives emphasise, centring local voices and experiences is integral to both revealing the interdependencies between unjust data practices and wider sociohistorical power structures as well as how data power can be countered and reimagined for more equitable data futures.

- **Diversity and Inclusion in Data Activism: Frame Resonance and the Barrier of Problem Recognition,** Jared Wright

Abstract: Contentious issues around digital data often involve complex technical aspects difficult for average people to understand, especially from underprivileged social groups. I propose that the digital divide and the knowledge gap create a barrier to problem recognition which can impede how well activists achieve frame resonance with different segments of society. This in turn shapes the diversity of their activist culture. To understand the extent of this effect, I comparatively analyzed two major cases of data activism, the Digital Rights movement (DR) and Anonymous (ANON), using a mixed quantitative and qualitative frame analysis of four years of archival data. I show how the DR's frames of "Internet freedom" and "individual efficacy" and their emphasis on formal accredited experts appear to indirectly reify socioeconomic inequalities by resonating mostly with technologically elite audiences. In contrast, ANON's frames of "freedom of speech" and "collective efficacy" combined with their open community help it to be more accessible to diverse groups. However, while DR activists organize outreach strategies to increase their inclusivity, ANON's leaderless dynamic also largely fails to engender trust from wider audiences. These findings show how framing strategies and practices can shape diversity and inclusion within social movements and have significant implications for achieving data justice.

- **Empowering Grassroots Resistance to Data-Centrism: Navigating Epistemological Ambiguity and Generatively Refusing Data-Driven Epistemologies,** McKane Andrus, Sucheta Ghoshal, Sayamindu Dasgupta

Abstract: In this paper, we seek to situate the data practices of grassroots activists within the hegemony of data-centrism in order to better understand the growing number of cases where activists are disempowered by data, even as they appropriate it towards their own ends. The shift towards data-driven governance represents a consolidation of power that has shaped what are considered acceptable means to "know" the world through, and we argue that buying into these privileged epistemologies can pave over other ways of knowing that are central to grassroots practices of resistance and worldbuilding. Building off of Muravyov's (2022) concept of "epistemological ambiguity," we demonstrate how the practice of data-focused activism requires complex navigations between data-based epistemologies and the experiential, relational epistemologies that characterize grassroots movements. Through two case studies drawn from existing scholarship and first-hand accounts of social audits in Capetown, South Africa and countermapping in the San Francisco Bay Area, we identify various points at which data activists have the difficult task of resisting the reductionistic, detached views of data-centrism when employing datafied tactics. In addition to these case studies, we present a third, original case study of Seattle-based, non-data-focused activists that actively refuse and seek to undermine the city's data-centric view of homelessness by disseminating on-the-ground perspectives. Though this form of activism is unlikely to be considered "data activism" as it does not instrumentalize or target data, we argue it illuminates an important pathway for challenging data power. Synthesizing the findings of these three case studies, we provide an analytical model of how carving out more space for generative, epistemological refusals can in turn support more value-aligned navigations of epistemological ambiguity that resist data-centrism. Finally, we explore how these findings can be built upon through critical data literacy pedagogies to help learners navigate datafied political arenas.

- **Collaborative methodologies for critical data power research,** Nanna Würtz Kristiansen

Abstract: Inspired by participatory action research and with a desire to decolonize qualitative methodologies in ethical ways, my method for researching data power is through a collaborative study on digital justice with a Danish, tech-critical grassroot organization.

The distribution of power in tech is fundamentally unjust. Too few have too much (data) power over too many. Whether we name this societal configuration digital, data, platform, or surveillance capitalism, or, my term of choice, data colonialism, it is a system that appears to effectively colonize our time, attention, and imagination. Driven by economic incentives, the contemporary continuous extraction and exploitation of digital data from peoples' lives creates a cognitive/epistemological injustice without spaces for unquantifiable knowledges (of the South).

Motivated by feelings of indignation over the unjust power distribution in tech, the kind of data activism, we do in the grassroot organization in my study, is to disseminate our critical perspectives on these issues – e.g., how big tech controls our lives both through social media or by supplying all the it-services that runs our welfare state in Denmark. Our goal is to further collective digital empowerment and citizen-centered digital developments. And too me, our collective space is in itself a work of resistance. Where we are gathering and organizing instead of panicking.

With my methodological approach and theoretical position, I try to not only oppose the episteme of data colonialism, but actively build and enact alternatives to it. I try to question traditional methodological roles of 'researcher' and 'informants' and to level out knowledge hierarchies of academia by being an active member of the organization myself and inviting the other members to co-create the research. I ask: What can and should critical data power researchers contribute to in data activistic initiatives? What can academia learn from data activists?

In-Person Panel GP19 Situating Extractive Data Practices **(Graz)**
G-RM: LS 15.02 **(chair:** Priya Kumar**)**

- **Data simulation as centers of data power,** Victoria Kontrus, Roger von Laufenberg, Vera Gallistl

Abstract: Training AI models requires copious amounts of data. As AI is often developed within profit-oriented structures, new ways of meeting this growing need for data ever-more efficiently are being explored constantly. The result is a shift from data gathering to data simulation, and from natural data to synthetic data. Synthetic data is often cheaper, can be obtained faster and – to some extent – in greater variety than natural data. Simulation is especially useful for data on rare events or data from hardly accessible contexts. This economically driven shift in the mode and context of data production entails a shift in data power from the original data subjects towards those who develop AI. This entanglement of economic structures of AI, data power and data simulation shall be illustrated using the case of an AI-based fall detection and prevention system used in long-term care facilities.

Instead of months of on-site data gathering of residents' behavior in LTC facilities, developers simulate data of falls using a complex infrastructure of tools, including motion capture suits, 3D modelling programs as well as their own – often young, male, white and able – bodies. Especially in profit-oriented structures of production, these data simulation labs become new centers of data power where ground-truths of AI are fabricated and shaped. Reduced dependency on data subjects and suppliers of natural data further advances the power of those who develop AI, as the process towards market-readiness of their products is streamlined. Power is then further leveraged through deployed fall monitors which continually harvest new natural data, exploiting free labor of residents as data subjects without their knowledge, while these already pay for the service offered to them. As this case shows, data synthesis proves a valuable instance for the analysis of data power, illuminating the complex entanglement with economic power.

- **Curious techno-hope in prison data labor,** Tuukka Lehtiniemi, Minna Ruckenstein, Sonja Trifuljesko

Abstract: Data labor arrangements upheld by digital platforms invite universal conclusions about the exploitation of data workers. In this presentation, we will juxtapose these universal analyses with a situated view drawn on our ongoing observation of Finnish prison inmates doing data labor for a local AI company. Prisons are characterized by highly uneven power relations and extreme forms of control. Data power is assuredly at work when prisoners do data labor. Our case, however, serves as a reminder that data labor practices should not be disembedded from local specificity. The Finnish prison is a strictly structured environment with rules, regulations, and embedded welfare state values that prevent tech companies from simply transforming prisons into data sweatshops.

Arora (2020) suggests that the current pessimistic undercurrent of critical scholarship is not always reflected empirically, and we need "new framings to make sense of the complex matrix and flow of humans and technology". In our presentation, we pick up the curious form of techno-hope present in the prison and discuss conditions for more ambivalent and potentially optimistic ideas and imaginaries for data labor. Inside the prison system, data labor settles in the frame of the aspirational: it is associated with an aspiration of future returns for data work, a hope that AI-related work can help rehabilitation, and the idea that prisoners' life chances might improve a little if they engage in computer work. We ask how to balance private economic interests and societal benefits in the realm of data labor. To what extent can data labor's exploitative and dehumanizing features be pushed back by rehabilitative aspirations, locally embedded values and socially negotiated expectations? Can societally more sustainable data arrangements be scalable, and what would happen if they were?

- **Translation, Communicative AI and Data Power,** Stefan Baumgarten

Abstract: Translation in the 21st century takes place in the digital world. As an originally text-based practice, the age-old activity of written translation has almost entirely become absorbed by the digital realm. Today's professional translation workflows, embedded in the dynamics of capital accumulation, are determined by the exigencies of economies of scale, cost reduction and speedy product delivery (Baumgarten and Bourgadel 2023). While there has been an extraordinary market growth in the language and translation industries since the turn of the century, the number of language services providers (LSPs) continues to shrink to the benefit of ever larger market players (Hickey 2023), heralding the gradual emergence of an oligopolic market. Professional translation practice is underpinned by increasingly powerful machine translation systems, which are based on huge parallel text corpora and powered by AI-driven and self-learning neural networks. Today, translation data, to be more precise – Big Translation Data – are the new gold standard in the industry. With the advent of communicative AI, translation data are being groomed into large language models by LSPs, translators and a diverse range of tech-companies. These data are largely 'syphoned off' by the big digital players in the translation industry and elsewhere, without any consideration for intellectual property, with the resulting Big Translation Data significantly adding to asset growth and capital flow (Baumgarten, in press). In fact, the most important question concerning the datafication of communication and translation workflows has never seriously been asked: To what extent does this 'great data robbery' and the increasing automation in the digital economy of translation engender entirely novel forms of exploitation, disenfranchisement and precarisation? In my presentation, and with a view to the global labourforce of translation workers (Zwischenberger and Alfer 2022), I aim to approach this question from a translation studies and social science perspective (Zuboff 2013).

Keywords: language services, translation industry, automatic translation, big translation data, digital economy of translation

- **Critical datafication of violence: Reflections and contributions on critical data studies from Latin American contexts,** Victor H Abrego

Abstract: This paper proposes a conceptualization of a type of critical datafication of violence that seeks to provide elements for the theoretical densification of data and datafication processes based on records of serious human rights violations in Colombia and Mexico. The proposal is based on the following critical reflections: Problematizing the data analysis based on questions that reveal versions that are not validated or have been made invisible in historical records of this kind of violence; dialoguing with the numerical dimension of data but placing it outside the center of the analysis; taking data as a symbolic infrastructure subject to intervention, and as a record that does not fully understand the social experience captured in it; approaching data from a non-predictive analysis and taking it as politically situated cut of reality from which it is possible to study, with the help of digital methods and network analysis to obtain and segment information, the construction of imaginaries about victims, violence and peace, in media discourses, digital platforms conversations, governments and relevant national and international actors.

In Latin America datafication processes of reality are inserted in crisis contexts of serious human rights violations, and institutional fragility, where truth commissions, alternative media and NGOs produce and analyze datasets that contain records of such violations. The datafication of violence crosses and conditions transitional justice processes and contributes to the construction of imaginaries about the past, present and future of both national and international social crises. This proposal seeks to contribute theoretically and methodologically to the critical data studies field from experiences located outside the global north.

In-Person Panel GP20 Data-In-Flux: Conceptual and Methodological Challenges in the Study of Data On Move **(Graz)**
G-RM: LS 15.01 **(chair:** Anu Masso**)**

- **Data-In-Flux: Conceptual and Methodological Challenges in the Study of Data On Move; Bridging E-Diasporas and E-Residence Governmental Programmes: Navigating Data-In-Flux in an AI-Intensive Globalized World,** Anu Masso, Igor Calzada, Mahardika Fadmastuti

Abstract: The decisions that governments make today about the ownership and governance of emerging technologies, such as Artificial Intelligence (AI) and blockchain, can set the course for the next century (The Economist, 2024). In the era of accelerated algorithmic advancement, AI emerges as both a transformative and disruptive reality (Cheney-Lippold, 2024). Against this backdrop, the intricate dynamics of data monopolies, referred to as “data-opolies,” and their implications for democratic erosion, typically embodied by large technology corporations, accumulate extensive datasets, affording them significant influence (Calzada, 2024). The sustainability of such data-opolitic practices should be critically examined to better navigate data-in-flux in an AI-mediated globalized world for governmental programs that aim to protect the digital rights of ‘their’ diasporic and digital citizens abroad such as the Basque Government’s e-diaspora and Estonian Government’s e-residence programs.

Against this backdrop, this paper explores the confluence of an e-diaspora active platform facilitated by the Basque Government (www.hanhemen.eus; Calzada, 2023a, 2023b) and the e-residence program by the Estonian Government (Masso, Kasapoglu, Tammpuu, and Calzada, 2024) within the complex tapestry of digital identities and emerging technologies such as AI and blockchain.

E-diasporas represent digital communities that leverage technology to foster connections between diaspora members and their homelands, often navigating through the vast, yet contentious, terrains of Big Tech platforms or data-opolies. This digital congregation, amplified by the exigencies of the global pandemic, has underscored the potential and pitfalls of digital connectivity, where issues of data privacy and institutional trust loom large. The initiative of HanHemen, a blockchain-based platform developed by the Basque Government, exemplifies a novel approach embracing decentralization towards ensuring data privacy and co-production, highlighting a shift towards digital nomadism and a critical stance against the extractivist tendencies of hyperconnected diasporas (Calzada, 2022).

Concurrently, the concept of e-residence, as illustrated by the Estonian e-residency program, presents a groundbreaking exploration into digital identity and access, transcending traditional notions of nationality and geographical boundaries (Tammpuu and Masso, 2018). This initiative offers a lens into the datafied control mechanisms that govern digital inclusion and exclusion, revealing patterns that may perpetuate global inequalities under the guise of digital borders. Through in-depth analysis of expert and participant perspectives, this discussion delves into the emerging 'citizenship by connection' regime, interrogating the construction of digital borders and the implications for global data governance.

Thus, this paper aims to contribute by presenting both programs and suggesting further insights to adopt AI-intensive disruptive and emerging technologies by suggesting an active exploration towards decentralized technologies such as blockchain, DAOs, and data cooperatives (Calzada, 2023b).

By bridging these programs, this paper contributes to the panel with a deeper understanding of how data-in-flux requires experimenting with a paradigm shift toward Web3 and decentralization by highlighting the need for innovative approaches to navigate the intricacies of our AI-intensive globalized world seen from translocal governmental practices.

Closing Remarks

B-RM: R109 **G-RM:** HS 15.03

Time:	Bangalore 20:15-20:30	Graz 16:45-17:00

Data Power 2024 Committee

Please join us in convening together from the various locations to mark the ending of the 5th Data Power Conference. If you are attending in-person in Graz, please join us for a farewell drink afterwards.

Conference Organizing Committee

Janaki Srinivasan

Associate Professor and Convenor, Centre for Information Technology and Public Policy (CITAPP), IIIT Bangalore; Co-investigator, Fairwork India

Janaki's research examines the political economy of information technology-based development initiatives. She uses ethnographic research to examine how gender, caste and class shape the use of such technologies. Her work has explored these interests in the context of Indian digital inclusion initiatives focussed on community computer centres, mobile phones, identity systems and open information systems. Her work explores privacy, algorithmic control and the role of intermediaries in digital transactions, with an emphasis on the domains of financial inclusion, work automation, and the gig economy.

Amit Prakash

Professor, Centre for IT and Public Policy (CITAPP), IIITB

Amit's interests lie in Information Systems and Public Policy, particularly as they intersect with development sectors such as public health & nutrition, education & skill development, and food & livelihood security. The focus of his recent research and consulting efforts has been equity and inclusion in matters related to technology designs and policy choices. At IIITB, he serves as the Head of the Department of Digital Humanities and Societal Systems and Convenor of the Centre for Accessibility in the Global South (CAGS).

Juliane Jarke

Professor of Digital Societies, University of Graz

Juliane's research attends to data power and algorithmic systems in the public sector, education and for ageing populations. She received her PhD in Organisation, Work and Technology from Lancaster University and has a background in computer science, philosophy and STS. She has recently co-edited a special issue on *Care-ful Data Studies* (Information, Communication and Society). Her latest co-edited books include *Algorithmic Regimes: Methods, Interactions and Politics* (Amsterdam University Press) and *Dialogues in Data Power: Shifting Response-abilities in a Datafied World* (Bristol University Press). More on www.sociodigitalfutures.info

Thomas Zenkl

PhD Researcher, Department of Sociology, University of Graz & Research Network "HFDT - Human Factor in Digital Transformation"

Interested in the societal consequences of AI and the proliferation of automated decision making, Thomas' ongoing PhD research focuses on practices of resistance/refusal that arise from the ongoing colonisation of everyday life by digital systems. He is currently conducting research within the Austrian public employment agency to explore how advanced algorithms, the datafication of unemployment and applications of AI may influence and restructure the delivery of labour market policies, but also what practices affected workers employ to chart their way out of a perceived technological entrapment.

Gwendolin Barnard

PhD Researcher, Department of Sociology, University of Graz

Gwendolin Barnard is a PhD researcher at the department of Sociology at University of Graz working on the intersection of AI policy and regulation of work. Their research interests include the regulation of datafication of work, data justice, and worker participation in the accountability of data-driven systems.
They hold an MSc in Media and Communications (Data & Society) from the London School of Economics, where they researched the role of data in the negotiation of the management relationship between white-collar workers and their managers.
Before starting their PhD studies, they worked at the London-based policy institute 'Institute for the Future of Work' where they researched topics including algorithmic impact assessments and affective algorithmic management.
They are also part of the research team at the US-based organisation 'Our Data Bodies – Justice and Human rights' and conduct research for unions and activist groups organizing against surveillance and algorithmic management in the US-logistics sectors.

Jo Bates

Professor of Data and Society at the University of Sheffield

Jo Bates is Professor of Data and Society at the University of Sheffield. Jo's research in Critical Data Studies covers four thematic areas: data cultures, data journeys & friction, climate & environmental data, and digital labour. Jo is currently leading the Patterns in Practice project which explores how practitioners' beliefs, values and feelings interact to shape how they engage with and in data mining and machine learning across science, education and the arts. Other recent projects include Living with Data and Net-zero Data Frictions.

Helen Kennedy

Professor of Digital Society, Department of Sociological Studies, University of Sheffield

Helen Kennedy is Professor of Digital Society at the University of Sheffield where she directs the Digital Good Network and the Living With Data programme of research. She is interested in how digital developments are experienced and how these experiences can inform the work of digital practitioners in ways that overcome inequalities. She is interested in perceptions of datafication, the possibility of data-related agency, trust, equity, justice, and what 'the digital good' might look like. Other current projects include Generic Visuals in the News and Patterns in Practice: cultures of data mining in science, education and the arts. Recent books include *Data Visualization in Society* (Amsterdam University Press, 2020) and *Post, Mine, Repeat: social media data mining becomes ordinary* (Palgrave MacMillan, 2016). A full list of publications can be found here.

Tracey P. Lauriault

Associate Professor, Critical Media and Big Data, Communication and Media Studies, School of Journalism and Communications, Carleton University, Canada

Cross Appointed to Digital Humanities, and is board member of the Institute for Data Science at Carleton University in Ottawa, Ontario. Her ongoing work on open data, open government, big data, smart cities, and data preservation is international, transdisciplinary, and multi-sectoral. Her current research interests are in digital twins, data brokers, Indigenous data, disaggregated equity data and data governance. Lauriault is one of the founders of the field critical data studies, open data and Open Smart Cities, AI & trust, taking a data and technology governance approach to the shaping of large complex systems. As a publicly engaged scholar, she mobilizes her research into data and technology policy across sectors. As a data and technological citizen, she examines large and small data and technology systems with the hope of making them more just, inclusive, equitable and environmentally sustainable.

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