DATA MIGRATION AND MOBILITIES WORKSHOP

TALLINN
8-9 APRIL 2026



Dear all,

We look forward to welcoming you to the **Data Migration and Mobilities** workshop in Tallinn on 8-9 April 2026.

The programme and practical information are provided below.

Getting from the airport to the city centre

Tallinn Airport is located close to the city centre, and the journey takes around 15 minutes. The city centre can be reached by taxi or ride-hailing services (e.g. Bolt), or by public transport. For more information on getting to and from the airport, see here.

Getting to TalTech

The workshop will take place at Tallinn University of Technology (TalTech), in the SOC building (Akadeemia tee 3, room SOC-309). TalTech can be reached from the city centre either by bus (approximately 25 minutes) or by taxi (approximately 15 minutes). More detailed information on how to reach TalTech is available here. Upon arrival, you can leave your outerwear in a designated, unattended area on the ground floor of the SOC building.

Practical information

Registration and coffee will be available from 9:30. Coffee breaks and lunch will be provided. The workshop dinner will take place on 8 April at 19:00 at Olde Hansa in the city centre.

Getting to TalTech

The workshop will take place at Tallinn University of Technology (TalTech), in the SOC building, Akadeemia tee 3, SOC-309. TalTech can be reached from the city centre either by bus, which takes around 25 minutes, or by taxi, which takes approximately 15 minutes.

Presentations

The programme consists of six sessions, each including three 20-minute presentations. Each session concludes with a 30-minute general discussion. To facilitate smooth transitions between presentations, please upload your presentation here before your session.

If you have any questions in the meantime, please do not hesitate to contact us.

We very much look forward to meeting you in Tallinn and to engaging and inspiring discussions at the workshop.

Best wishes,
Rob and Anu

Data Migration and Mobilities: Towards a New Research Agenda

Tallinn University of Technology (TalTech), Tallinn, 8–9 April 2026

Workshop overview

Data has long been described through metaphors of flows, streams, journeys, and transfers, offering powerful ways to conceptualise how information circulates. More recent research has begun to examine the social mechanisms through which data moves, replicates, and transforms across contexts. This workshop builds on emerging conceptual work on data migration (Masso et al., 2025) and data mobilities (Kitchin et al., 2025), which approach data movement through theories of mobility, socio-technical infrastructures, and social transformation.

The presentations explore how data movements are shaped by infrastructures, data imaginaries, and governance arrangements, and how these processes are entangled with geopolitics, global inequalities, and political economies of data. Several contributions focus on the everyday consequences of data mobility for individuals, communities, and institutions, while others examine analogies and tensions between data and human migration. Together, the workshop highlights conceptual, empirical, and methodological approaches to understanding data migration and mobilities as processes that actively reshape social life.

Organisers

Rob Kitchin, Maynooth University Social Science Institute (MUSSI), Ireland; Rob.Kitchin@mu.ie

Anu Masso, Ragnar Nurkse Department of Innovation and Governance & DataLab, Tallinn University of Technology, Estonia; Anu.Masso@taltech.ee

For questions, please contact either organiser.

Publication

Selected contributions may be invited for inclusion in a special issue or an edited volume (details to be confirmed).

References

Masso, A., Grotto, A. and Lauriault, T. P. (2025). Social Data Migration Concept: Analysing Transborder Data Flows in the Post-Industrial Economy. Social Media + Society, 11(1). https://doi.org/10.1177/20563051251320697

Kitchin, R., Davret, J., Kayanan, C. and Mutter, S. (2025) Data mobilities: Rethinking the movement and circulation of data. Mobilities. https://doi.org/10.1080/17450101.2025.2481309

Acknowledgements

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Program at a glance

Day One - 8 April

9:30 - 10:00	**Gathering and coffee**
10:00 - 10:15	Introduction
10:15 - 10:45	Data migration and data mobilities: what they are and why they matter?
10:45 - 12:15	Session 1: Theoretical foundations
12:15 - 13:15	**Lunch**
13:15 - 14:45	Session 2: Governance and sovereignty
14:45 - 15:00	**Coffee break**
15:00 - 17:00	Session 3: Circulations and rhythms
19:00	**Workshop dinner**

Day Two - 9 April

9:30 - 11:00	Session 4: Absences and erasures
11:00 - 11:15	**Coffee break**
11:15 - 12:45	Session 5: Materialities and infrastructures
12:45 - 13:45	**Lunch**
13:45 - 15:15	Session 6: Migrations and borders
15:15 - 15:30	Conclusion: towards a new research agenda?
15:30 - 16:30	Visit to the DataLab (optional, SOC-466–467)

Detailed program

Day One - 8 April

9:30 - 10:00 Gathering and coffee

10:00 - 10:15 Introduction

10:15 - 10:45 Data migration and data mobilities: what it is and why we need these?
Anu Masso, Rob Kitchin

Session 1: Theoretical foundations (10:45 - 12:15)

Moderator: Anu Masso

Pluriversal Lives of Data: Data Mobilities in a World of Many Worlds
Bartosz Ślosarski

Data Mobilities as a Complex Emergent Affair: Reframing the Ontological Status of Data
Stefano Calzati

Data-as-Pattern: Reframing the Movement and Meaning of Data in AI Infrastructures
Marco Germanò

12:15 - 13:15 Lunch

Session 2: Governance and sovereignty (13:15 - 14:45)

Moderator: Matthias Leese

From Marks to Metrics: Mapping Data Migration in Higher Education Regulation
Laura Knight

Between the Moon and the Ghetto: AI Economics for Data Mobilities and Migration
Igor Calzada

Digital Bridges or Data Dependencies? Sovereignty, Mobility, and Partnership on the Africa Knowledge Platform
Francesco Tonnarelli

14:45 - 15:00 Coffee break

Session 3: Circulations and rhythms (15:00 - 17:00)

Moderator: **Kateryna Lobanova**

Fragile Mobilities: Data Circulation and the Politics of Care
Matthias Leese

How data are mobile in practice?
Rob Kitchin, **Juliette Davret**, **Carla Kayanan**, **Samuel Mutter**

Small Data, Big Tasks: Tracing Data Mobilities in Community Policing
Marc Schuilenburg, **Martijn Wessels**

19:00 Workshop dinner

Day Two - 9 April

Session 4: Absences and erasures (9:30 - 11:00)

Moderator: **Rob Kitchin**

Temporality, INC.: On the Data Practices and Imaginaries of Real Time Crime Center Software
Liz Calhoun

Data Voids: On the Politics of Missing Data
Azadeh Akbari

Gender Data Mobilities: Between Erasure and Empowerment
Jess Reia

11:00 - 11:15 Coffee break

Session 5: Materialities and infrastructures (11:15 - 12:45)

Moderator: **Stefano Calzati**

Data Assemblages in Motion: Unpacking Data Mobilities and Frictions through WeChat APIs
Fang Jiao

Kinetic Data Elites at the Digital Border: Carrier Liability and Migration Data Justice
William Hamilton Byrne, **Nanna Bonde Thylstrup**, **Katie MacKinnon**, **Thomas Gammeltoft-Hansen**

Combining Data Journeys and Data Valences to Examine Drivers of Health Data Circulation in the UK
Itzelle Medina-Perea, **Jo Bates**

12:45 - 13:45 Lunch

Session 6: Migrations and borders (13:45 - 15:15)

Moderator: **Azadeh Akbari**

Gender Aspect of Data Migration: Challenges and Restrictions for Ukrainian Men Abroad
Kateryna Lobanova

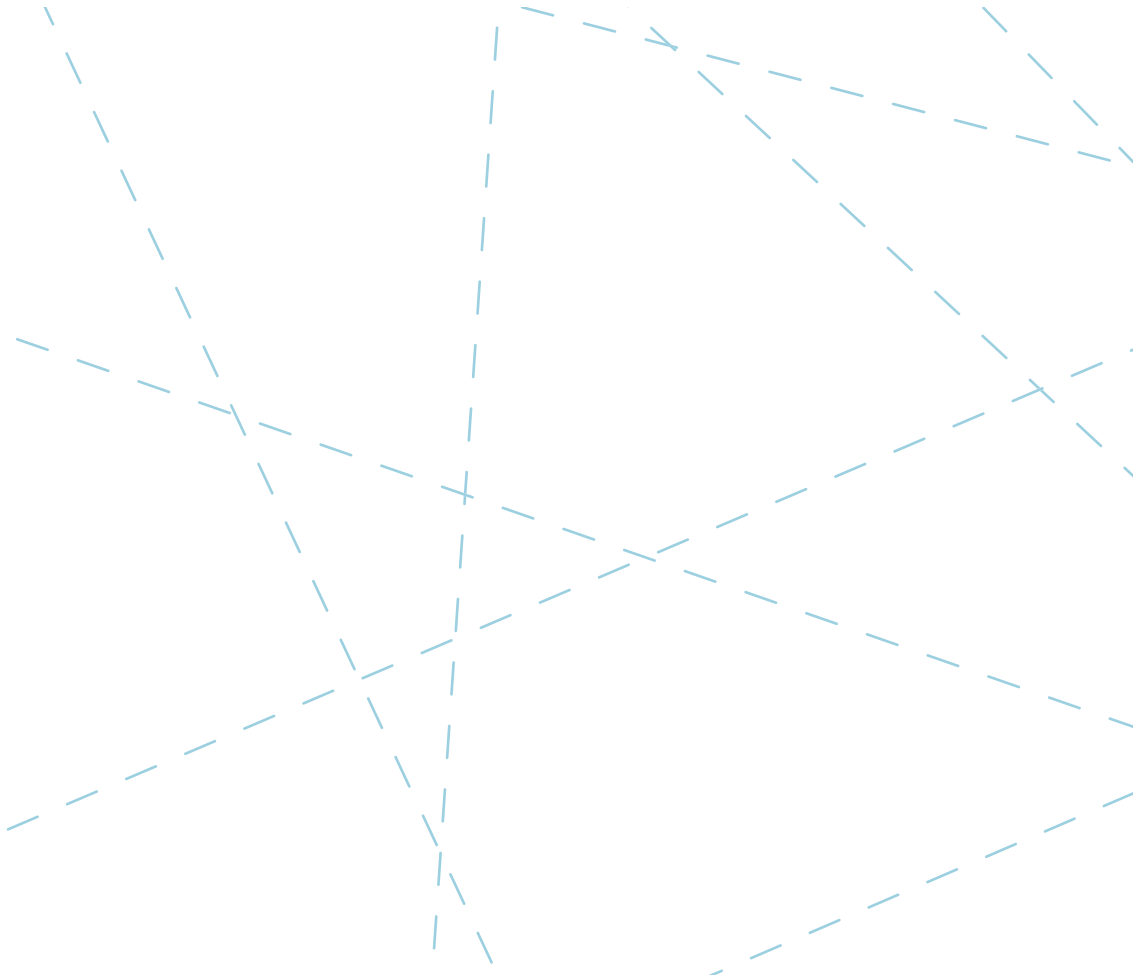
Moving Data, Moving Bodies: Rethinking Data Flows through the Politics of Cross-Border Migration
Paul Trauttmansdorff, **Sabina Leonelli**

Migration Data as Migration Infrastructure
Johan Lindquist, **Jonathan Krämer**

15:15 - 15:30 Conclusion: towards a new research agenda?

15:30 - 16:30 - Visit to the DataLab (optional)

* Our DataLab is equipped with eye-tracking and EEG/fNIRS technologies used for cognitive experimental research on societal mechanisms related to AI and data-based technologies.



Abstracts

Session 1: Theoretical foundations (10:45–12:15)

Pluriversal Lives of Data: Data Mobilities in a World of Many Worlds

Bartosz Ślosarski

The aim of my paper is to introduce a pluriversal perspective in studies on data mobility as a trajectory of the socio-cultural life of data (Kitchin, 2021; Kopytoff, 1986) as a differently-valued boundary object (Star, 2010; Leurs, 2023). Earlier approaches have stressed the locality of data production (Loukissas, 2019), its translatability into global contexts (Masso et al., 2022), intercontextual fluidity (Bates et al., 2016) and diverse transformations (Masso et al., 2025), including the pluralist trajectory of proliferation (Kitchin et al., 2025).

I propose the concept of pluriverse (Savransky, 2021), gaining importance in postcolonial and pragmatist technoscience studies (Escobar, 2018; Millner & Amador-Jimenez, 2025). It stresses the coexistence of multiple worlds – policy, technoscience, activism – linked by associative and disassociative ties (FitzGerald, 2022), each valuing data differently and engaging in socio-material negotiations (Gabrys et al., 2016; Ślosarski, 2023). Data mobilities, understood as copying, transforming and deleting data, thus involve actors from varied social worlds guided by distinct values and practices. A pluriversal lens enables qualitative mapping of pluralistic trajectories of data lives while capturing contextual differences, negotiations, and consequences of valuation.

The perspective will be illustrated through qualitative case studies of air datafication and bird datafication in Central and Eastern Europe (Marzecová & Husberg, 2022; Ślosarski, 2024; Ślosarski & Juchniewicz, 2024). These show, first, the socio-material practices shaping mobility as transfer, multiplication, and transformation of data from local to regional levels. Second, they reveal the accompanying social transformations: the values actors bring, and the implications of data mobility for air and biodiversity governance.

Data Mobilities as a Complex Emergent Affair: Reframing the Ontological Status of Data

Stefano Calzati

This paper leverages the concept of “data mobilities” (Kitchin, et al., 2025) with the aim to challenge the common understanding of data and draw some implications for data governance.

Albeit going often unquestioned, the ontological understanding of data that informs discourses, policies, and laws regulating data (re)production, ownership, (re)use, and sharing is one of Cartesian atomism. Data are framed as givens, i.e., geometric points moving across infrastructures that are posited, in turn, on an ideal Cartesian space, with the network as the emblematic paradigm. Yet, such an understanding increasingly shows its explanatory limitation, failing to account for how data intervene in and are part and parcel of complex sociotechnical ecologies whose behaviors cannot be reduced to the mapping or the sum of their parts (Calzati & de Kerckhove 2024; Gershenson 2025).

To counterbalance this inadequacy and keep with the structural concept of data mobility, this paper contends that data shall be regarded as Janus-faced micro-artefacts, constantly shifting their own ontological framing depending on how they are used, by whom, and for which purposes. Notably, such shifting occurs between the two complementary facets of data as informational carriers (hence, potentially non- rivalrous and non-excludable) and/or sociotechnical constructs (hence, potentially rivalrous and excludable; cf. Hess & Ostrom, 2007). In other words, data are never (only) mono-dimensional points moving from here to there but complex artefacts that emerge through and tangle with issues of (re)production, ownership, (re)use, and sharing. De facto, it is the (more often than not) non- coextensiveness among these entangled issues (that always coexist and can conflict) that is responsible for

producing frictions across digital polities, leading to question, on every occasion, which configuration of the data-artefact is being prioritized (e.g., the European legal doctrine emphasizes the informational facet of data, while the US legal doctrine stresses the technical facet; cf. Floridi 2023). Hence, the space (and time) that data contribute to create through their shifting as complex micro-artefacts is not linear, but emergent and approachable from multiple entry points at once.

This reframing of data has profound implications, among other areas, for data ethics – beyond axiomatic "good vs bad" data uses (Calzati & Ploeger 2024) – and data law – beyond the dichotomy "public vs personal" data (Purtova 2017), as well as beyond the ex-ante risk-based categorization of AI technologies. These three cases, which will be touched upon, bear witness to the necessity for data governance to have its normative standpoint complemented by a dynamic rationale that can account for and accommodate the contingencies and inconsistencies inherent to data mobilities. Quantum communication infrastructures might represent an infrastructural supply to such a dynamic rationale (Calzati & Nikiforova 2025).

Data-as-Pattern: Reframing the Movement and Meaning of Data in AI Infrastructures

Marco Germanò

The role of data in contemporary societies is in constant flux. Over the past decades, both policy and scholarly imaginations have drawn on successive metaphors to describe what data is and does: from the reductionist notion of data as information to more dynamic understandings of data as flows, journeys, and migrations. Some of these metaphors retain interpretive power, yet others require refinement, as recent contributions to data theory have suggested (Kitchin et al., 2025; Masso et al., 2025). Building on these insights, this conceptual work-in-progress argues that in the emerging era of artificial intelligence and agentic computation, conceiving data merely as information or as flows is increasingly inadequate. In AI systems, data operates less as a carrier of meaning than as a substrate for the extraction and recomposition of patterns – structures that may be opaque to human observers yet decisive for how machines learn and act (Cloud et al., 2025). These configurations give rise to new forms of circulation. Rather than transferring meaning, such data and its patterned fragments generate machine-extractable value through relational configurations that can circulate, interact, and evolve within algorithmic environments, often detached from their original datasets. This logic is most visible in large language and generative vision models, which learn from vast, uncurated datasets by identifying statistical regularities rather than semantic meaning – and then propagate these learned patterns forward. The shift from information to pattern thus reframes the ontology of data and points to new mechanisms of its replication and recombination. In this paper, I outline a framework for understanding data-as-pattern as one of the next frontiers in data theory and discuss its implications for accountability, interpretation, and governance in evolving data-driven AI infrastructures.

Abstracts

Session 2: Governance and sovereignty (13:15–14:45)

From Marks to Metrics: Mapping Data Migration in Higher Education Regulation

Laura Knight

This research in progress examines the mechanisms by which assessment judgements migrate through English higher education's regulatory infrastructure to become the gap metrics used to rank institutions. Moving beyond metaphorical conceptualisations of data "flows," I trace specific processes of replication, transformation, and proliferation that transform subjective academic judgments into regulatory compliance targets and sector benchmarks.

As these data migrate through regulatory systems, individual marks become degree classifications; aggregated by ethnicity, they become "awarding gaps"; regulatory benchmarking transforms them into performance indicators; integrated into dashboards they shape discussions of institutional racism; incorporated into plans, they become targets requiring intervention. Each migration transforms the data, generating multiple simultaneous incarnations for use in policy and decision-making.

I map this migration process at a single institution, tracing how individual marks transform as they move from pedagogical contexts into regulatory infrastructure. This mapping reveals what is added and lost at each migration point: the technical decisions that progressively sever metrics from the assessment practices, curricular contexts, and structural conditions that generated them.

This infrastructure makes inequality hypervisible through metrics while paradoxically constraining intervention by severing metrics from their generative practices. Once assessment data complete their migration through successive abstractions, awarding gaps circulate as decontextualised evidence of institutional failure – stripped of the pedagogical, curricular, and structural information needed to inform transformative action. This empirical analysis of data mobilities in action reveals how migration mechanisms themselves can prevent the transformative outcomes regulatory infrastructure claims to pursue.

Between the Moon and the Ghetto: AI Economics for Data Mobilities and Migration

Igor Calzada

This paper extends the argument of Datafied Democracies & AI Economics Unplugged (Springer Nature, 2025) to interrogate how the mobilities and migrations of data reshape economic systems. Drawing on Richard R. Nelson's (1977) enduring metaphor of "the Moon and the Ghetto," it foregrounds a persistent paradox: while societies channel vast resources toward frontier AI technologies and predictive infrastructures, they continue to neglect entrenched inequalities in data governance, social justice, and territorial inclusion. Bridging Rob Kitchin's notion of data mobilities – the replication, proliferation, and transformation of data – with Anu Masso et al.'s concept of social data migration, the paper theorizes data movement as an embedded process of social transformation shaped by power asymmetries and territorial dependencies. Extending this lens, it incorporates the emerging post-Westphalian Web3 regime of citizenship by connection (Masso et al., 2024), wherein data links individuals to placeless digital lifeworlds while simultaneously reproducing new datafied borders and inequalities. The Basque Country serves as a case for exploring anticipatory governance and Web3-driven diasporic initiatives that attempt to localize AI's value chains and embed democratic accountability. By extending Karl Polanyi's "double movement" into the digital domain, the paper interprets civic data cooperatives and decentralized infrastructures as counter-movements against the disembedding

forces of data-opolies and algorithmic governance. Ultimately, reconnecting the Moon of technological ambition with the Ghetto of social justice becomes vital to cultivating democratic resilience in post-Westphalian, datafied futures.

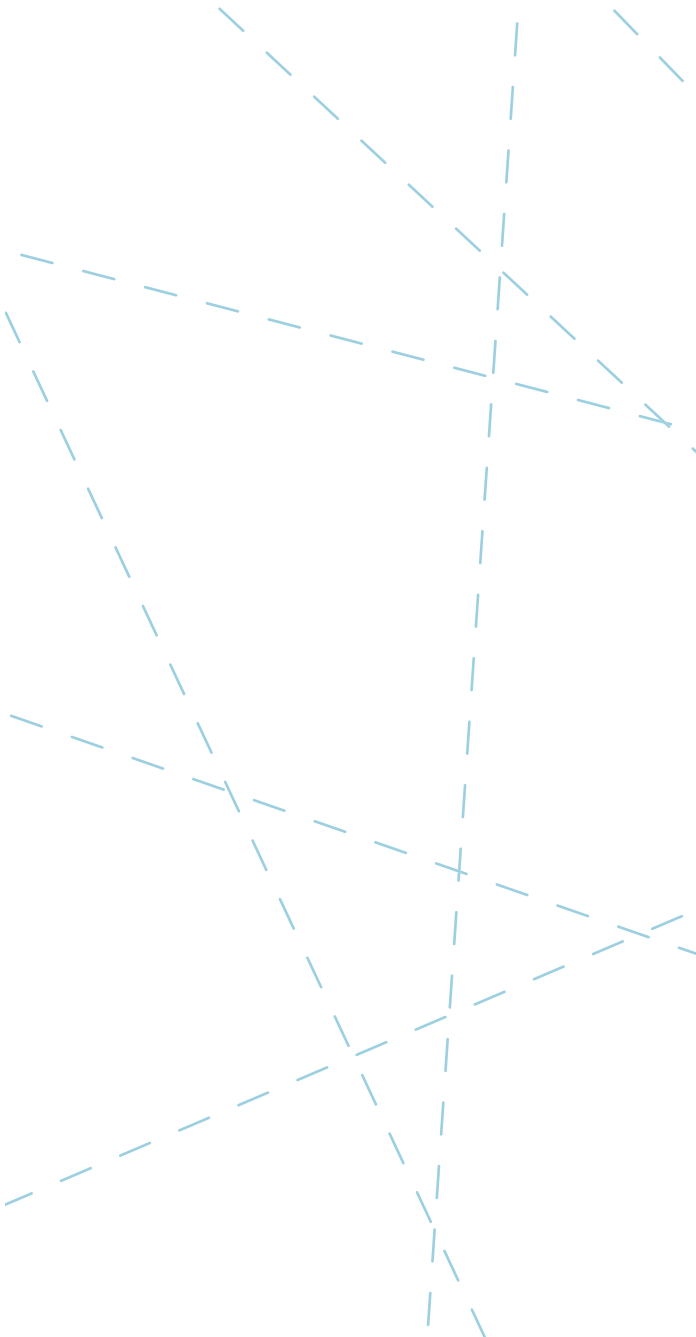
Digital Bridges or Data Dependencies? Sovereignty, Mobility, and Partnership on the Africa Knowledge Platform

Francesco Tonnarelli

This ongoing research explores the evolving concept of data sovereignty through the lens of data mobility, using the Africa Knowledge Platform as a case study. The platform, a gateway to data on Africa's development, is a joint initiative between the European Commission and African partners. This study interrogates how such platforms can shape and redefine data politics and sovereignty in an era of increasing cross-border data flows and international development partnerships. As data becomes a critical resource for economic and social development, the question of who owns, controls, and benefits from data is paramount.

This paper examines the Africa Knowledge Platform's data governance model, its impact on data accessibility and usability for African stakeholders, and its implications for empowering African nations to leverage their data for sustainable development. Through an analysis of platform documents and stakeholder interviews, this research is investigating the tensions and synergies between the principles of data sovereignty and the practicalities of international data sharing for development.

It is hypothesized that the Africa Knowledge Platform may show opportunities for a shift towards a more collaborative and equitable approach. A central aim of this study is to critically assess the legal and ethical frameworks required to ensure that such data mobility enhances, rather than compromises, sovereignty. Upon completion, this research will contribute to the broader discourse on data justice and equitable governance in North-South partnerships, offering timely insights for policymakers and practitioners working to harness the data revolution for a more inclusive future.



Abstracts

Session 3: Circulations and rhythms (15:00–17:00)

Fragile Mobilities: Data Circulation and the Politics of Care

Matthias Leese

This paper explores the often-invisible care work that enables the continuous circulation of data within large-scale digital infrastructures such as the Schengen Information System (SIS). While databases like the SIS are conventionally described as seamless and automated networks, their operation depends on a dense web of human and institutional practices that reconcile breakdowns, bridge semantic and technical differences, and maintain data consistency across jurisdictions. Drawing on ethnographic research with SIS practitioners, the paper conceptualizes these practices as forms of data care. By this I mean the situated and relational labor that sustains the movement of data across political, legal, and cultural boundaries. As the paper explicates, the mobility of data within the SIS is characterized by inconsistencies in formats, transliterations, and classifications that require constant attention, correction, and negotiation. This ongoing maintenance should thereby be understood as deeply political: through decisions about what to correct, harmonize, or ignore, caretakers enact hierarchies of value and belonging that shape whose data are made actionable, and whose remain marginalized or erroneous. In this sense, care does not simply preserve infrastructures but actively remakes them, stabilizing particular orders of mobility, control, and exclusion.

How data are mobile in practice?

Rob Kitchin, Juliette Davret, Carla Kayanan, Samuel Mutter

The mobility of data has been variously described as data: flows, streams, journeys, threads, transfers, exchanges, and circulation. In each case, data mobility is conceived as a movement from here to there; that data moves along a chain of receivers and senders. However, we contend that the metaphors of data flows (or journeys, threads, etc.) does not reflect well the processes by which digital data are shared. Rather, we propose moving from a metaphorical conceptualisation to a description of the actual mechanisms of mobility. Through a case study of the planning data ecosystem in Ireland, we detail how data replicate (replica copies produced), with the original source retaining the data and a new source gaining it, and data proliferate (multiply) across systems and sites when made available. As data replicate and proliferate, they are transformed through processes of data cleaning, data wrangling, and data fusion, producing new incarnations of the source data. Importantly, this rethinking of data mobility makes clear how and why various data incarnations are produced and, in so doing, create fundamental issues regarding the integrity of data sharing and data-driven work, the repeatability, replicability and reproducibility of science, and data sovereignty and the control of data use.

Small Data, Big Tasks: Tracing Data Mobilities in Community Policing

Marc Schuilenburg, Martijn Wessels

This ongoing study investigates the movement, replication, and transformation of data throughout the development and use of AI tools in community policing. As part of the EU-funded KOBAN project, we have collaborated over 1,5 years with six European law enforcement agencies, tech companies, and research institutes to design AI tools that foster 'trust', 'care', and 'well-being' between citizens and local police; shifting away from enforcement-driven systems that risk discrimination, overpolicing, and social harm.

Our longitudinal (total of 3 years), empirical approach addresses a gap in research on AI development and use in policing and security, particularly regarding AI tools aimed at empowerment, trust and societal equity. Through (1) in-depth interviews with police officers, data scientists, and tech developers, (2) observations in local sites, and (3) participating in AI development workshops, we examine how data is selected, collected, stored, replicated, wrangled, and transformed during the research and development process of two pilots in the KOBAN project.

We focus on the ethical, legal, and societal implications (ELSA) of these data mobilities, asking: where and how do frictions arise, how and when is data reshaped, and to what extent do these flows support community empowerment in policing contexts? By tracing these dynamics, we aim to contribute to more transparent, accountable, and socially responsive AI practices for community policing.

Abstracts

Session 4: Absences and erasures (9:30–11:00)

Temporality, INC.: On the Data Practices and Imaginaries of Real Time Crime Center Software

Liz Calhoun

Following the development of Data Fusion Centers after 9/11 to share data across federal, state, and local law enforcement, the ethos of 'data unification' has fostered the recent proliferation of Real Time Crime Centers (RTCCs) in U.S. cities. Advocates claim that these centers enhance police officers' situational awareness by combining data sources such as CCTV, body-worn cameras, automated license plate readers, and Records Management System data (such as arrest records, incident reports, and vehicle and property registration information). Increasingly, these data are integrated in software platforms made by private companies, such as Motorola, that include artificial intelligence and data analytics supposedly able to forecast areas at high risk for crime. However, these risk assessment software require years of historic crime data to generate models, meaning that RTCCs work across disparate time signatures and, often, with spatial layers that may no longer be accurate. This paper unpacks the relationship, both professed and actual, between the production of 'real-time' information – rendered in promotional materials as flows and streams – and processes of 'unification' that imagine an ever-expanding 'web' linking past to future via seamlessly coexisting inputs. My aim is not only to unearth the contradictions within the technical processes underlying these stated aims but also to understand how their imaginaries enable the rapidly expanding paradigm of 'preventative' policing at the intersection of public and private interests. Methods include content and discourse analysis of white papers, institutional records, and promotional materials, and will evolve as I conduct interviews with RTCC practitioners.

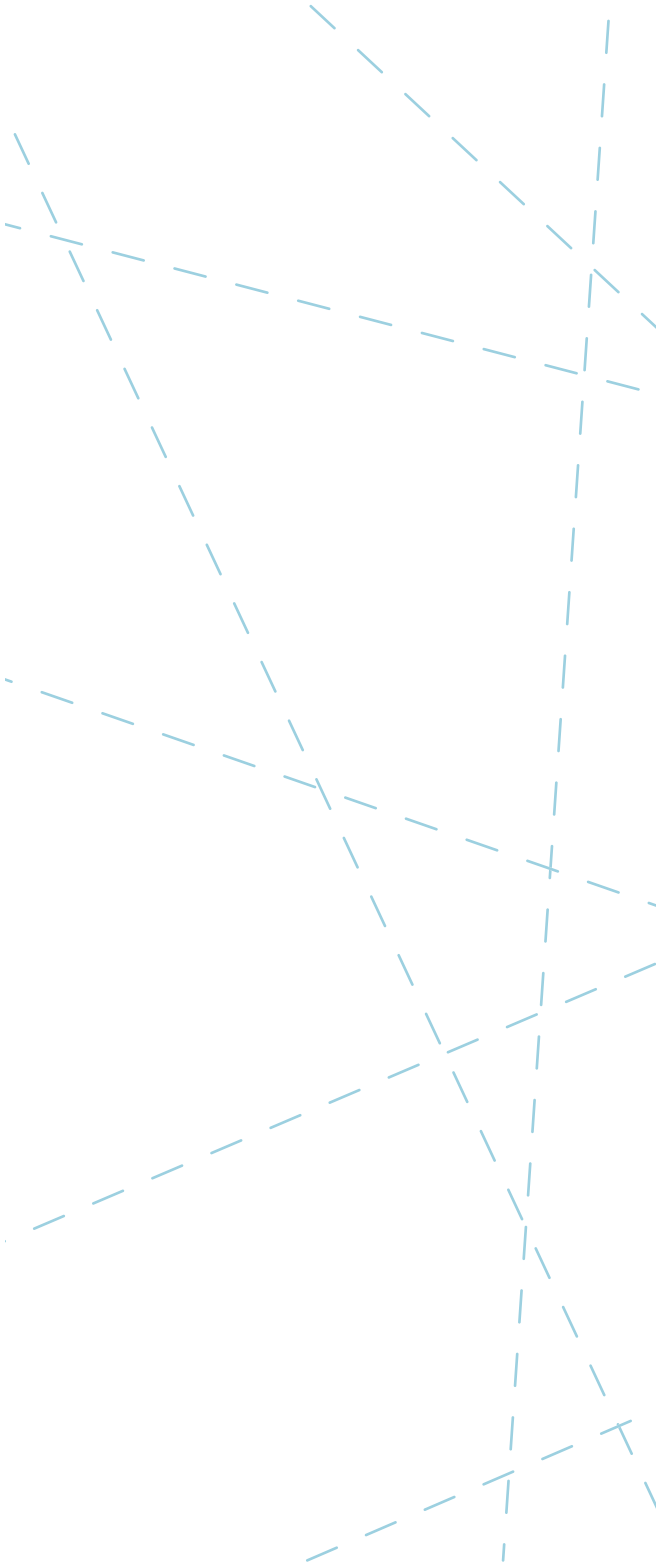
Data Voids: On the Politics of Missing Data

Azadeh Akbari

The datafication of nearly all spheres of life has become a defining feature of the contemporary moment, shaping social, political, and economic structures in profound ways. While much attention has been paid to the proliferation and governance of data, comparatively little has been said about what is absent and the politics of this absence. Building on my earlier work on following data outside the common trajectories of data circulation in the global North (Akbari 2020), this paper introduces the concept of data voids to trace the trajectories and implications of what remains unrecorded, uncollected, or erased. Data voids can emerge in a variety of ways: through low or non-existent levels of digitalisation (as seen in many low-income or rural regions), the devaluation or exclusion of specific types of data (often along racial, gendered, or classed lines), deliberate censorship or suppression (particularly in authoritarian regimes), or systemic issues such as the lack of interoperability between data infrastructures. Each of these categories not only shapes what becomes knowable or actionable, but also reflects different forms of data injustice within different data governance regimes. The paper critically examines the 'solutions' proposed by states, private sector actors, Big Tech, and data activist communities to address or 'fill' these voids, questioning whose interests these interventions serve. By studying data voids, this research exposes how regimes of data governance actively produce, maintain, or exploit absences in data and argues that what is missing is just as politically significant as what is present.

Gender Data Mobilities: Between Erasure and Empowerment

Jess Reia



With the rise of techno-authoritarianism, gender identity and trans rights became even more polarizing topics, and far-right governments and big tech companies across the globe are weaponizing the issue. Part of a coordinated international agenda that includes attacks on other human and social rights, the rampant assaults on trans rights occur in many contexts, including legislation, social media platforms, and data moving between organizations and to the government. Datafication poses specific challenges for gender-diverse communities and, despite the hostility of the digital environment, its effects are ambivalent. On the one hand, we see increasing digital erasure -- the process of making entire groups of people invisible in data points, datasets, and online platforms. The widespread adoption of AI further complicates this scenario, as models often run on biased and inaccurate datasets. On the other, digital technologies can serve as a key resource for understanding and archiving gender identity and expression, facilitating community building by encouraging activism and solidarity, as well as community-based data collection (e.g., citizen-generated data) and the migration of data collected by and about trans individuals. The paper explores the intersection of gender diversity, authoritarianism, and data mobilities. It is guided by two questions: (1) How does digital erasure of gender-related information affect data flows and mobilities? and (2) How are gender-diverse communities being empowered by the possibility to influence the way we define, keep, share, circulate and reuse data? This is a work-in-progress paper, part of an ongoing project supported by the Andrew Carnegie Fellowship, which draws on legal and policy analysis, in-depth qualitative interviews, and workshops co-designed by community members.

Abstracts

Session 5: Materialities and infrastructures (11:15–12:45)

Data Assemblages in Motion: Unpacking Data Mobilities and Frictions through WeChat APIs

Fang Jiao

This research examines how data moves and generates mobility across social media Application Programming Interfaces (APIs). Studies in CDS and STS have explored data mobility by identifying the patterns, frictions, and effects. Continuing these efforts, this research situates itself within the Chinese social media platform WeChat and its APIs. Based on the new materialist perspective and research methods of document analysis and thematic analysis of interviews with API practitioners, this research examines data mobility in three WeChat API subcategories: Official Accounts, Mini Programs, and Mini Games. In Official Accounts, data moves via API calls and changes its formats and entanglements with heterogeneous technical elements. Data mobility in Mini Programs is based on the generation and movement of code packages and is constrained by the Mini Program project lifecycle. Mini Games emphasize real-time and synchronous communication, as well as the separation of users' personal data and game performance data. Across these processes of data movement, spatial and temporal elements are materially and discursively constructed through the shifting of data assemblages across data generation, transformation and circulation, aggregation, and immobility. Furthermore, the productive and resistant qualities of frictions in data mobilities are conceptualized as "generative cut" to exemplify the embodiment of data frictions in specific data ecosystems. Building on these findings, this research contributes to a deeper understanding of how data assemblages are (re)configured through data mobilities and frictions.

Kinetic Data Elites at the Digital Border: Carrier Liability and Migration Data Justice

William Hamilton Byrne, Nanna Bonde Thylstrup, Katie MacKinnon, Thomas Gammeltoft-Hansen

This paper examines how data itself becomes differentially mobile within digital border infrastructures, and how these unequal data mobilities underpin contemporary migration governance. Responding to calls to bring data migration (Masso et al.) and data mobilities (Kitchinet al.) into dialogue, it treats data migration not as the movement of a bounded object but as an effect of uneven infrastructural conditions. Empirically, the paper focuses on airline carrier liability and pre-boarding data checks in the Schengen border regime, analysing how passenger data is generated, replicated, retained, or lost across public-private border infrastructures before any physical border encounter occurs.

Drawing on critical data studies that reconceptualise data mobilities as processes of replication, proliferation, and versioning (Kitchin et al.), and bringing these into conversation with data justice and mobility and migration studies, the paper traces how API/PNR data, document verification signals, and carrier risk flags circulate across airline systems, state databases, and subscription-based verification services. It shows how some data forms are stabilised through interoperability mandates, durable storage, redundancy, and institutional investment, while other data, often produced or held within temporary, under-resourced, or externally dependent infrastructures, remain fragile, prone to expiration, misalignment, or disappearance.

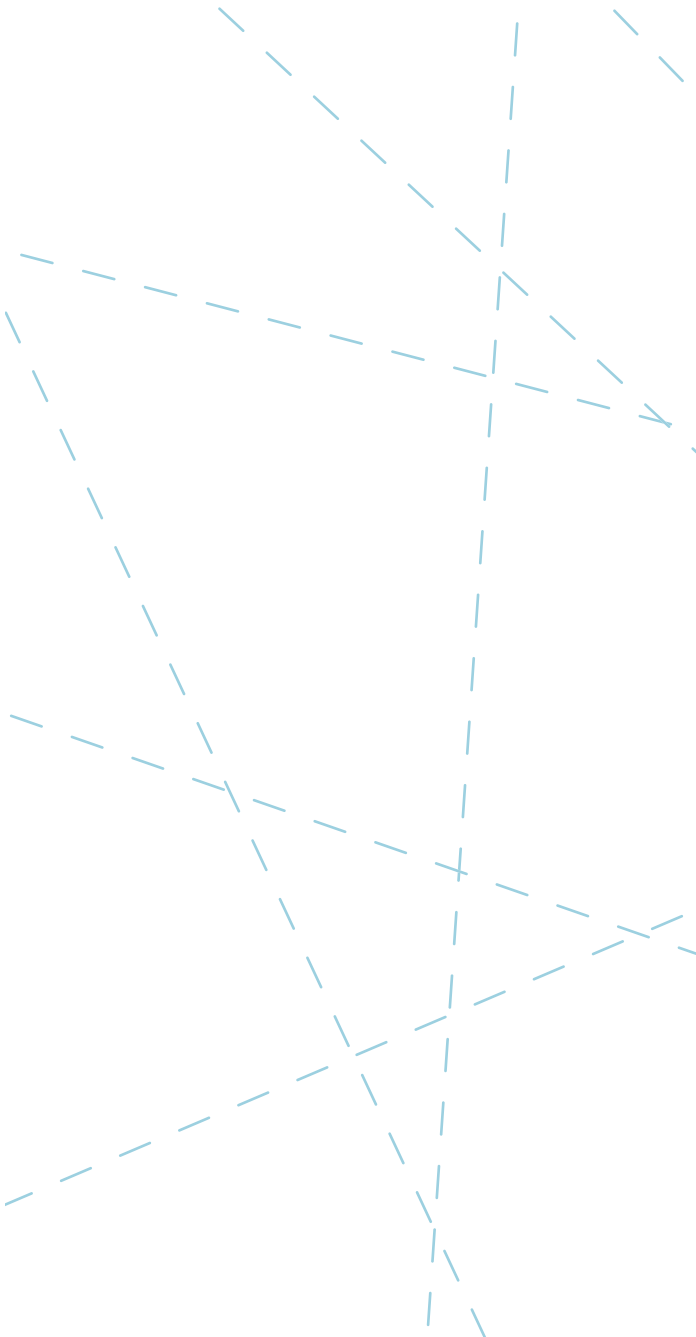
Reworking Mimi Sheller's concept of the kinetic elite, the paper introduces kinetic data elites: forms of data that enjoy privileged mobility through border infrastructures, replicating effectively across systems and remaining actionable over time. In contrast, data reliant

on fragile infrastructures is effectively denied mobility, limiting its capacity to circulate, persist, or be contested once decisions are made. From this analysis, the paper advances migration data justice as a framework for understanding border governance through questions of data durability, loss, and downstream accountability, and proposes "following data mobility itself" as a methodological approach to studying borders as infrastructures of data inequality.

Combining Data Journeys and Data Valences to Examine Drivers of Health Data Circulation in the UK

Itzelle Medina-Perea, Jo Bates

We discuss how data journeys (Bates et al, 2016) used in combination with the concept of data valences (Fiore-Gartland and Neff, 2015) can be a valuable analytical lens in examining the ideational-material drivers of data circulation. We begin from the understanding that in order to make sense of what drives the circulation of data, it is crucial to give the ideational and material an equal level of attention. Data valences works to strengthen the data journeys approach with its more explicit framework for examining the socio-cultural, specifically the expectations and value that people place on data. Returning to the original notion of data journeys as a form of 'mobile ethnography' (Sheller and Urry, 2006), we discuss how this analytical lens can shed light on both the material conditions of production and ideational constructs about data circulation, better than either of the approaches in isolation. We demonstrate the value of the approach by drawing on insights from our empirical work exploring the drivers behind the circulation of patient data generated in the UK healthcare sector to researchers in universities. Our work revealed how, alongside material drivers such as investment, infrastructure and labour, were the valences that framed data as a route to discovery, truth and action and having the capacity to put people at the vanguard of scientific discovery. These drivers mutually feed and reinforce each other, powering a cycle that drives hype and pours more investment and resources into making data flow.



Abstracts

Session 6: Migrations and borders (13:45–15:15)

Gender Aspect of Data Migration: Challenges and Restrictions for Ukrainian Men Abroad

Kateryna Lobanova

The creation of a unified national database of conscripts to assess a country's military potential is an important and necessary state objective. Integrating and regularly updating data from different registers can play a crucial role in national defense. However, this initiative faces multiple unresolved practical and ethical challenges, particularly regarding the rights of citizens abroad. When data from citizens overseas are collected through voluntary-compulsory measures and access to consular services becomes conditional, fundamental constitutional rights may be at risk.

These processes can be viewed as 'data tracing' - the state's attempt to gather all possible information about its citizens - while, from the individual's perspective, they may resemble 'data concealment', as people intentionally avoid sharing personal information due to a lack of trust in government data practices. The lack of transparency around how such data are processed and who has access to them further deepens this distrust.

This research analyzes these challenges through the gendered lens of migration, focusing on Ukrainian men abroad. Using a scenario-based approach and eye-tracking technology, and drawing on 30 interviews with Ukrainian male refugees and non-refugees in Estonia, the study explores how state data-tracking initiatives affect citizens living outside their home country, often complicating access to essential government services.

The expected findings will expose both the practical difficulties and theoretical implications that arise when data migration and human migration intersect, helping to formulate strategies for more ethical and effective data governance in an increasingly mobile world.

The Epistemic Economies of Data Journeys: Phenotyping Under Conditions

Paul Trauttmansdorff, Sabina Leonelli

The human face has more recently become a source of medically relevant information and a symbol of medical innovation – from automatically revealing subtle indicators of genetic conditions to signaling expressions of pain or well-being. With the rapid advancement of AI and the proliferation of facial recognition technologies across all social domains, the algorithmic diagnosis of faces in clinical and healthcare environments is also expanding. This paper examines the data journeys of medical faces at this moment of celebration for recognition technologies. We examine the capture, production, circulation and automated evaluation of data about facial traits, focusing particularly on the epistemic economies that shape and are shaped by these data movements. The paper first situates the analysis in the context of facial recognition in rare disease detection, where facial traits are coded, algorithmically processed and circulated to support diagnostic decision-making. We then discuss the personal and social economies at play around the datafication of facial traits – tracing how hopes, uncertainties, and promises are built into the vehicles and infrastructures used to make these data travel, and how personal value is here weighted against social risks and harms. Finally, we address the broader epistemic economy of these data journeys, and argue that they are caught between two ends of a wide spectrum: on the one hand, an economy of complete openness resting on the twin ideals of frictionless data sharing and techno-solutionism, whereby effective knowledge comes from avoiding any restriction to data travel; on the other hand, an economy of closure linked to political-regulatory spaces, geopolitical tensions around data sovereignty and widespread social concern around privacy and surveillance. In closing, the paper reflects

on how tensions between open and closed epistemic economies can inform both our conceptual and methodological understanding of data mobilities.

Migration Data as Migration Infrastructure

Johan Lindquist, Jonathan Krämer

The collection of migrant data by governments has become increasingly central to international migration and border control, particularly since the rise of biometrics in the wake of 9/11. This has further intensified after the Covid-19 pandemic, not least in the context of state-sponsored migration for low-skilled labor in the Global South, where government platforms for migration management have been rolled out in sending and receiving countries such as Ethiopia and Saudi Arabia, respectively. The digitalization and platformization of migration management thus raises questions not only about the regulation of human mobility across borders, but also the mobility of data itself, and the relationship between these mobilities. Engaging with recent work on data migration and data mobilities, this paper will offer examples of how the politics of migration mangement comes to shape the circulation of migrant data and the position of the migrant body in this process. The paper argues that the growing importance of migration data can be understood as an integral part of what we understand as the expansion and intensification of “migration infrastructure” (Xiang and Lindquist, 2014).

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