







### Valuing Public Data for Social, Economic and Environmental Development

### 25-26 January 2024

Scottish Universities Insight Institute Collins Building, 22 Richmond Street Glasgow G1 1XQ

All times in GMT/UK/UTC+0 time

Thursday 25 January				
09:00-09:30	Registration			
09:30-10:00	Introduction and welcome			
10:00-11:00	Keynote 1 - 'The Open Data context: valuing public data for an inclusive knowledge society' - Professor Bridgette Wessels, University of Glasgow (in person)			
11:00-11:15	Coffee break			
11:15-12:45	<ol> <li>Session 1 - 'Accessing Data'</li> <li>1. 'The allocation of state advertising to private media corporations in Europe: an overview of the availability of public government data' - Adriana Mutu, ESIC Business &amp; Marketing School, Barcelona, Catalonia/Spain (online)</li> <li>2. 'Research data as an open public good – refreshing UKRI ESRC's research data policy' - Paul Allanson, Angela Daly, Awais Elahi, Alistair Geddes, Maeve Malone, Niamh Nic Daeid, Lucille Tetley-Brown, University of Dundee, Scotland/UK (in person)</li> <li>3. 'Input-output analysis using large-scale payments data' - Vasco Carvalho, Kerstin Hötte, François Lafond, Johannes Luma, Victor Meirinhos, Turing Institute, UK (online)</li> <li>4. 'Aggregate fluctuations from production networks - evidence from payments data' - Johannes Lumma et al., Turing Institute, UK (online)</li> </ol>			
12:45-13:15	Lunch			
13:15-14:30	Session 2 - 'Data and Place'  1. 'Enhancing data readiness in rural areas' - Nataša Božić, Jure Trilar, Nina Cvar, Simona Stojanova, Argene Superina, University of Ljubljana, Slovenia (online)  2. 'Improving information literacy and public benefit among Polish metropolis' citizens – cas study: information management of data regarding air quality in Poland' - Hanna Gaweł, Institute of Information Studies, Jagiellonian University, Poland (online)  3. 'Collating local sustainability data; challenges and opportunities' - Eirini Gallou, University of Strathclyde, and Michael Butler, HI UN House, Scotland/UK (in person)			
14:30-14:45	Coffee break			
14:45-16:45	Workshop - 'A gifted Account Information Service Provider (AISP) for banking account research data' - Facilitator: Daniel Broby, Ulster University, Northern Ireland/UK (in person)			
16:45-17:00	Day 1 workshop close			

17:30-19:00 Evening public event - 'Joy and ethics in making AI art, or how I found the universe in my data self' - Tim Murray-Browne, Freelance AI Engineer, Digital Artist, Creative Coder

#### All times in GMT/UK/UTC+0 time

#### Friday 26 January

09:00-09:45 Registration

09:45-10:00 Welcome and recap of previous day

10:00-11:00 Keynote 2 - 'Information Flow in Scotland: A Legal Perspective' - Dr Sean Whittaker, University of

Dundee, Scotland/UK

11:00-11:15 Coffee break

11:15-12:45 Session 3 - 'Contesting, Challenging and Debating Data Governance'

- 1.'Data-driven research and healthcare: public trust, data governance and the NHS' Angeliki Kerasidou & Xaroula Kerasidou, University of Oxford, UK (online)
- 2. 'Mapping the social impact of surveillance capitalism beyond privacy' Alessandro Caliandro, Dario Pizzul & Emma Garavaglia, Università degli Studi di Pavia, Italy (online)
- 3. The battle for sovereign and democratic data' Laeed Zaghlami, Algiers University, Algeria (in person)
- 4. 'The value of data created during multiple-stakeholder workshops for the public sector' Noella Edelmann, Lucille Tetley-Brown & Mariana Lameiras, University of Continuing Education Krems, Austria & UN University, Portugal (online)

12:45-13:15 Lunch

13:15-14:45 Session 4 - 'Managing Data'

- 1.'Human-centric personal data sharing: my data or our data?' Johan Linåker & Alina Östling, RISE Research Institutes of Sweden (online)
- 'Governance of open data ecosystems as relational data commons' Mélanie Dulong de Rosnay & Ramya Chandrasekhar, French National Centre for Scientific Research (CNRS), France (online)
- 3.'Reuse Datasets a design concept for waste prevention' Felipe Schmidt Fonseca, Northumbria University, UK (in person)

14:45-15:00 Coffee break

15:00-16:30 Research to Policy roundtable:

- Sara Thabit European Commission, Italy
- Alexandra Albert NESTA, UK
- Chris Mackie Health and Social Care Alliance Scotland, UK

16:30-17:00 Next steps and close

Project leads:
Prof. Angela Daly, University of Dundee
Dr Esperanza Miyake, University of Strathclyde

This project is funded by the Scottish Universities Insight Institute (SUII) and Scotland Europa.

For more information, visit the project's dedicated page on the SUII website: <a href="https://www.scottishinsight.ac.uk/Programmes/ScotlandinEurope/PublicSectorData.aspx">www.scottishinsight.ac.uk/Programmes/ScotlandinEurope/PublicSectorData.aspx</a>







# Abstracts

Thursday 25 January

Session 1 - 'Accessing Data'

1. 'The allocation of state advertising to private media corporations in Europe: an overview of the availability of public government data' - Adriana Mutu, ESIC Business & Marketing School, Barcelona, Catalonia/Spain

State aid schemes for media corporations in the form of state advertising and subsidies have been seen both as instruments to support media pluralism and as potential forms of government control over the media. The regulation of state advertising as a form of indirect state sponsorship was scarcely studied in prior research. Attention was paid to the transparency mechanisms in the bidding process, criteria to award contracts, checks and balances mechanisms and reporting procedures. Prior research has shown that in many European Member States there is no specific legislation nor specific obligations to ensure institutional and governmental transparency about the amounts of state advertising funding awarded to private media outlets. This article aims to close the gaps in prior research and provides an assessment of the institutional advertising regulatory frameworks in nine European countries representing two models for media systems: the Polarised Pluralist – active in Spain and France – and the Democratic Corporative media system – used in Austria, Germany, Denmark, Finland, Norway, Sweden, and Switzerland. The variables selected for analysis are extracted from prior interdisciplinary research published on the topic and focus on the relevant laws and regulations, authorities involved in the process of tender preparation and awarding of advertising contracts, monitoring and transparency mechanisms. It raises several key research questions: What are the fundamental rules and regulations for awarding state institutional advertising contracts to news media companies? How is competition ensured in the award process? Is there any obligation regarding the disclosure of government spending carried out in institutional advertising campaigns? Data were collected between 2019 and 2022 from multiple publicly available sources. Methodological limitations are related to access and availability of public data. Results show significant variations between countries in the level of institutional transparency regarding the allocation and distribution of state institutional advertising.

2. 'Research data as an open public good – refreshing UKRI ESRC's research data policy' - Paul Allanson, Angela Daly, Awais Elahi, Alistair Geddes, Maeve Malone, Niamh Nic Daeid, Lucille Tetley-Brown, University of Dundee, Scotland/UK

This presentation will give an overview of the team's independent review of the UK's Economic and Social Science (ESRC) research data policy, which governs data produced in economics and social science research projects and investments which the ESRC funds, and was last revised in 2018. The policy mandates the deposit and sharing of this data in the publicly accessible UK Data Service or another appropriate repository as a condition of receiving this funding. This has a dual purpose in both facilitating reproducibility and replicability of research and also conceptualises publicly funded research data as a public good which should be accessible to others. However, some of this data cannot be deposited in the UKDS and shared on a totally open and unconstrained basis especially if it is personal data (for privacy reasons), involves government data or, for commercial confidentiality reasons, if the data comes from companies. In this presentation, we consider whether the deposit requirements and reasons for deviation, along with other legal, policy and practical developments in the last 5-10 years alter the dual purpose of the policy, and how we can still ensure publicly funded research produces public data goods. To do so we draw on empirical research conducted in autumn/winter 2023 involving a survey of and focus groups with ESRC stakeholders, and background and scoping desk research conducted by the project team.

Session 1 - 'Accessing Data'	
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## 3. 'Input-output analysis using large-scale payments data' - Vasco Carvalho, Kerstin Hötte, François Lafond, Johannes Luma, Victor Meirinhos, Turing Institute, UK

Recently, the UK Office for National Statistics (ONS) secured access to financial transactions data from the BACS payment system infrastructure, which is used by almost every business in the UK. We start with a prototype anonymised and aggregate dataset comprising >500m Business-to-Business payments worth >£7.5tn and covering 118k unique accounts corresponding to a considerable share of UK businesses in 2015-2022. The data comprises monthly transactions volumes and values between 85 SIC 2-digit industries at the regional level (12 NUTS-1 regions plus 2 islands). While fairly coarse, our data is available in (almost) real time. Transactions are assigned to individual region-industry pairs, providing a much better time and cross-sectional resolution than existing Input-Output tables, which are mostly released at the national level with a time lag of 4 years. In this talk, we will present the results of a comprehensive economic validation exercise at the macro, industry, and network level, and speak about our experiences when working with large-scale highly granular, sensitive and innovative data for public purposes and with the goal to advance official statistics. We will also speak about the major challenges and constraints of making this data publicly available.

## 4. 'Aggregate fluctuations from production networks - evidence from payments data' - Johannes Lumma et al., Turing Institute, UK

The origin of macroeconomic fluctuations is a key question of concern for macroeconomists. In particular, there is an on-going debate on the importance of microeconomic shocks and whether shocks at the firm- or sectorial-level can lead to sizable aggregate fluctuations in GDP. Approaches, where shocks to the economy are of idiosyncratic, i.e. of microscopic, nature are sometimes dismissed as it is argued that the individual shocks at the firm- or industry-level should average out on macroscopic scales according to the central limit theorem. One way to evade these arguments, however, is by modeling the economy as a network. Historically, economists working on a network approach to explain macroeconomic fluctuations have made use of input-output tables. The compilation of such tables is quite involved. The UK Office for National Statistics (ONS), for instance, publishes them in a yearly manner. Recently, the ONS has been working with the UK payment system operator to acquire anonymised and aggregated data focusing on financial transactions between SIC-5 industries. Starting with this confidential prototype dataset comprising more than >500m financial transactions worth >£ 7.5tn between SIC-5 industries in 11 NUTS-1 regions in the UK ranging from 2015-2022 at a monthly level, we provide an initial assessment of the economic applicability of our data by connecting it to stylized facts in the economic networks literature. In particular, we explore the micro-origins of volatility and investigate how diversification in terms of sales and costs as well as in terms of number of customers and number of suppliers act as an amplifier or as an attenuator of aggregate volatility. Moreover, we investigate business cycle asymmetries in our data. In this context, we look at skewness in the time-series of growth rates of industries at different levels of aggregation along the lines of Miranda-Pinto et al (2023). In line with Miranda-Pinto et al., we find that the absolute value of skewness in the time-series of growth rates of industries increases with the level of aggregation. We propose a theoretical roadmap to understand this phenomenon.

Session 2 - 'Data and Place'	
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# 1. 'Enhancing data readiness in rural areas' - Nataša Božić, Jure Trilar, Nina Cvar, Simona Stojanova, Argene Superina, University of Ljubljana, Slovenia

In rural areas, availability, access and usage of (open) data is lacking, and digital strategies often fail to address this, despite evidence showing that rural communities can significantly benefit from investments in the data economy (EU Commission, 2020). Proposed data approach involves active engagement of (rural) communities in collecting, analysing and utilizing data to address local issues and needs. The community understands that data is an asset to facilitate its autonomy in leveraging smart solutions development, but lacks advanced digital knowledge and skills (Price et al., 2021) in the context of rural data readiness (Mashau et al., 2022).

This presentation will introduce good practices, developed within EU projects (Horizon, Interreg), that identify opportunities for data capacity building in rural territories, improving necessary infrastructure, digital skills and policy support. Identifying communities' needs related to digital data solutions involves assessing socio-economic and environmental return on investment, using methodology that supports public and private bodies in developing new products and services to meet communities' needs (Interreg Europe, 2018). To foster usable rural use case (agriculture), data collection sensor infrastructure has been deployed in several Slovenian pilot areas (EU Commission, 2022), to support existing monitoring and predicative applications and create capacity for future development of data-based solutions. Amidst building rural data ecosystems and addressing the digital skills and infrastructure gap, the role of rural data steward is proposed, aligning with established concepts in EU data initiatives (EU Commission, 2023a, 2023b). Rural data steward lives and works in their local community, maintains sensor and digital infrastructure, translates digital concepts and challenges into the local context and connects the community's needs with regional/national innovation hubs and research institutions (Interreg Alpine Space, 2023). Proposed good practices in rural community-based data approach acknowledge the importance of sustainable data ecosystems for future resilience and wellbeing of rural communities (Stojanova et al., 2022).

# 2. 'Improving information literacy and public benefit among Polish metropolis' citizens – case study: information management of data regarding air quality in Poland' - Hanna Gaweł, Institute of Information Studies, Jagiellonian University, Poland

This presentation aims to present the research results for the doctoral dissertation. The aim of this research was to determine how air quality information in the form of public data is managed and presented in the biggest Polish metropolises and to conduct targeted research for national and regional options for collecting, analysing and presenting air quality information in the civic infosphere.

By examining how these aspects of information management are woven into the infosphere of Polish metropolises, an in-depth view of the dynamics of the information generation process and its implications for cities, citizens and beyond was gained. The research strategy I adopted was based on a composite study, using such research methods and techniques as an interview, a research questionnaire, a field survey with real-time air quality measurement using dedicated equipment, observation and analysis of source materials. I analysed the observed air quality information management solutions using the author's prepared categorisation key developed for the studied cities, treated as independent but related case studies.

The results of the study present social benefits to the recipients of the information of the different groups, increased awareness of the importance and impact of air pollution on human health, and the deterioration of the economic value of cities (flight of the rich to the suburbs and to the countryside, which translates into reduced tax revenues). The study also indicates the formation of information literacy in reading and interpreting information from public data.

#### Session 2 - 'Data and Place'

## 3. 'Collating local sustainability data; challenges and opportunities' - Eirini Gallou, University of Strathclyde, and Michael Butler, HI UN House, Scotland/UK

Research with the ability to effectively influence decision making comes through the use of high quality data that may cross more than one thematic areas. The creation of Voluntary National Reviews (VNRs) is a core part of the SDG attainment process, which asks United Nations Member States to review and report on their progress towards the Goals. The Scottish Government, COSLA and the SDG Network Scotland have worked together to contribute to the UK Government's VNR.

This presentation and discussion session (online) will provide insights on the role of public data in the process of developing VLR reports for Scotland, with insights from empirical work undertaken by UN House Scotland (Michael Butler) to compile and assess different sets of publicly available datasets pertaining to SDG 8 and 10 for Scotland at local authority level (focusing on targets identified in and aligning with NPF Scotland) with the support of Strathclyde and the Centre for Sustainable development (Eirini Gallou).

Research data protocols and approaches to assess relevance and suitability will be discussed together with learning from practice and other examples of interconnected datasets. The links between socio-economic-environmental data to activate value and issues around levels of disaggregation will be on focus.

#### Workshop

## 'A gifted Account Information Service Provider (AISP) for banking account research data' - Facilitator: Daniel Broby, Ulster University, Northern Ireland/UK

This study explores the intricacies of utilizing financial data in academic research through open banking protocols, with a primary focus on compliance with data protection laws, including the GDPR and the Data Protection Act 2018. Central to the investigation is the gifting of third-party financial records to a Data Trust, acting as a neutral intermediary with a pivotal role in data definition and anonymization. Using a collaborative workshop approach, we detail methods to ensure alignment with legal and ethical standards. This involves determining a valid lawful basis for the use of third-party financial data in academic research, encompassing considerations of consent, legitimate interest, and public interest tasks. We investigate privacy protection measures and safeguards for the benefit of both researchers and data contributors. Our study's contribution lies in the examination of diverse options for making processed data available for research, including anonymized or synthesized data. Additionally, we assess the potential implications of open banking protocols in this context. The adoption of open banking protocols in the UK plays a pivotal role in enabling the seamless and secure transfer of third-party financial data through standardized APIs, fostering collaboration between financial institutions and academic researchers. Our research sheds light on the intricacies of utilizing financial data for academic purposes, while adhering to robust legal and ethical frameworks. Our goal is to facilitate responsible data usage in financial research in order to promote economic, environmental and social development.

#### **Evening public event**

#### Joy and ethics in making AI art, or how I found the universe in my data self

An evening with <u>Tim Murray-Browne</u>, an artist, engineer and coder whose work connects AI, dance and generative audio-visuals. Tim will take us through his recent chronological journey of projects involving AI, including translating dance into sound, training an AI on his entire life archive of photos, finding beauty by amplifying the glitches and using the intuitions of his body as a means to navigate the overwhelmingly infinite possibilities. We will gain insight into the various ethical hurdles Tim hit along the way, and how his artistic practice helped him through these challenges. Tim will also discuss some of his more recent visual work, involving how glitches can reveal something about the nature of (AI) perception itself, and leaning into the glitches to get something new rather than something derivative.

### Friday 26 January

### Session 3 - 'Contesting, Challenging and Debating Data Governance'

# 1. 'Data-driven research and healthcare: public trust, data governance and the NHS' - Angeliki Kerasidou & Xaroula Kerasidou, University of Oxford, UK

Trust is important for the acceptability of data-sharing practices and new technologies in health research and healthcare. Yet there is an increased distrust in this domain. In this paper, we use the UK's NHS as a case study to examine the question of, what it is about sharing public healthcare data for research and innovation that challenges public trust. To do this, we provide an account of public trust to explain the trust-relationship between the public and the NHS within a democratic context. We examine whether the way in which the NHS is managing patient data and collaborations with the private sector fit under this trust-based relationship. We argue that the digitisation of the NHS and the broader 'health and wealth' agenda adopted in the UK represent a major shift in the institutional character of the NHS. This questions the meaning of public good the NHS is expected to provide, challenging public trust. We conclude that a theoretical and empirical examination of the benefits and costs associated with this shift, as well as an open public conversation to determine what values should be promoted by a public institution, like the NHS, are necessary to address the public trust deficit.

## 2. 'Mapping the social impact of surveillance capitalism beyond privacy' - Alessandro Caliandro, Dario Pizzul & Emma Garavaglia, Università degli Studi di Pavia, Italy

In 2023 the 65.7% of the World population is connected to the Internet, through a multiplicity of devices. Being constantly online, people generate enormous quantities of data on basically everything: shopping behaviours, political orientations, health status, etc. This huge amount of data is the 'fuel' of the contemporary digital economy. The leaders of the digital economy are private companies structured as platforms (i.e., GAFAM), which, on the one hand, intermediate relations among different groups of actors (consumers, advertisers, etc.), while, on the other hand, extract data from these very groups they host. This new form of economic and socio-technical organization is defined as surveillance capitalism. The term refers to an emergent economic logic based on a unilateral extraction of digital data from citizens, which are used to predict, personalise, customise, and ultimately constrain their behaviours for business purposes. Empirical research and the public debate on surveillance capitalism seem to focus mainly on issues privacy, overlooking other relevant social issues. Matters of data protection are of great concern, since privacy is a human right connected to human dignity. Nevertheless, issues related to value appropriation are equally important, since digital data generated by citizens through their online activities produce a conspicuous economic value that is extracted from the social but not redistributed within the social. Drawing on a computational thematic analysis of 400 newspaper articles about digital platforms, we show that not only surveillance capitalism rarely redistributes value within society, but mostly generates negative externalities for the society. Specifically, by taking advantage of the concept of group privacy (cfr. Floridi), we demonstrate that digital platforms, when managing and treating citizens' personal data, seldom fail in respecting the principles of: 'transparency', 'fairness', and 'non-discrimination'. Through the computational mapping of our dataset, we identify 5 negative externalities for society: tax avoidance, work precarity, gender discrimination, ethnic discrimination, social inequalities.

### Session 3 - 'Contesting, Challenging and Debating Data Governance'

#### 3. 'The battle for sovereign and democratic data' - Laeed Zaghlami, Algiers University, Algeria

Through this introduction, my intention is to recall that the energy and digital transition sectors are above all generators of data, and that statistics and foresight work in one way or another to collect, analyse and store data, which facilitates the rational governance of data on a practical and strategic level. It is also about highlighting the importance of data; personal, social, economic, geographical and political data that are contained in society and the country as a whole. In these areas, data are extremely crucial for policy and strategy. It is a question of valuing data and exploiting it to enrich ourselves. It is no coincidence to say that the next battle in the world is that of Big Data, which are rightly described as a new form of wealth. The question is whether, through the implementation of these new structures, we will be able to collect data in a methodological and real way, analyse it objectively, manage, store, anticipate and take appropriate and sustainable decisions.

In addition to the process of collecting, analysing and storing data, the challenge is to build databases and data banks at the national level in order to have a right of review, authority, independence and sovereignty over our own territory. Today, growing tensions over the issue of data and its localisation are arising between a large and growing number of emerging economies with giant populations, such as China, India, Nigeria, Indonesia and South Africa, especially with the US because of its control over global data. Data localisation is a serious matter to be ignored. How many strategic national institutions have their sites and data hosted and located in Algeria. CERIST is one of the renters and hosts for scientific and technical information, but what about other types of economic and strategic information? Customs, for example, have their own database. However, the problem is to provide the country with a network of reliable interconnected databases; something that the new ministers of digitisation, statistics and forecasting will work on materialising as long as they are now 'free' from political and economic interference and pressure.

# 4. 'The value of data created during multiple-stakeholder workshops for the public sector' - Noella Edelmann, Lucille Tetley-Brown & Mariana Lameiras, University of Continuing Education Krems, Austria & UN University, Portugal

Bridging research and practice while seeking evidence-based policy-making is increasingly proclaimed by international and national organisations. However, there is still room to show the real interest, practicality and impact of this sort of alliance. Little research has been done to demonstrate the added value of stimulating practice-oriented research. Baldassarre et al. (2020) recommend collaborations between academics and practitioners in real projects in order to support the public sector address those challenges that require different types of knowledge, perspectives, and collective efforts to support action. Workshops can be used to collect data by providing an environment as well as a method that fosters engagement, collaborative discussions, and constructive feedback between the participants similar to co-creation processes (Lain, 2017). The workshop co-constructs a place for collaborative negotiation of meaning – not only between participants, but also between facilitators (the researchers) and participants. They also provide a platform that can aid researchers in identifying and exploring relevant factors that are not always obvious (Ørngreen & Levinsen, 2017). In this presentation, we would like to consider the key dimensions of using multiple-stakeholder workshops in order to collect, analyse and develop reliable, valid and valuable data for the public sector. On the basis of 4 workshops held between September 2022 – October 2023 with the stakeholders of a Horizon 2020 project including academics, public administration practitioners and IT companies we aim to show the contribution of multi-stakeholder workshops in the generation of valuable public data.

### Friday 26 January

## 1. 'Human-centric personal data sharing: my data or our data?' - Johan Linåker & Alina Östling, RISE Research Institutes of Sweden

The amount of data generated is growing. Control over personal data - data about people and their behaviours - is increasingly a subject of research and of public debate. In this presentation, we examine a related phenomena called "human-centric personal data sharing" (HPDS) and its practical development led by the MyData movement and Tim Berners-Lee's Socially Linked Data project (SOLID). We use an ecosystem perspective and qualitatively investigate the opportunities and risks of the HPDS-approach, from the market, individual and collective perspectives. While the current HPDS-approach aims at enabling people to have more agency over their data, it comes with several challenges, including technical (e.g. common identification systems, standardisation); economical (e.g. costs); juridical (e.g. liability, GDPR compliance); and psychological (e.g. trust, digital resignation). Moreover, this raises fundamental questions about the values of data as a common good (beyond market demand) and the governance of data through alternative models, such as data commons.

# 2. 'Governance of open data ecosystems as relational data commons' - Mélanie Dulong de Rosnay & Ramya Chandrasekhar, French National Centre for Scientific Research (CNRS), France

Open data (a subset of public data) has developed as a movement in opposition to 'closeness', where proprietary terms of use based on copyright or sui generis laws reserve exclusive exploitation rights. Datasets are made available for access and reuse in repositories under permissive open licenses with few to no conditions for reusers, but also with few to no return on investment or value which could be used/reinvested by licensors to guarantee the sustainability, maintenance and further development of the resource or associated infrastructures. Instead, open data becomes a resource to be exploited or mined by its users for data-driven innovations in the pursuit of market returns. We argue for a different positioning of 'open' to overcome open data commodification. In this regard, we propose to develop van Loenen et al (2021, p. 4-5) which identifies four objectives for value-generating and sustainable open data ecosystems – user-centricity, inclusivity, circularity and skill-based. We propose to combine a critical data approach to 'openness' with a commons-inspired governance framework for the achievement of these objectives. We extend the theory of a 'relational' data commons developed by <u>Dulong de Rosnay and Stalder (2020)</u> to open data ecosystems. (See also Purtova and van Maanen, 2023). In this framework, data is not the sole object of governance, but data's relationality to human and non-human actants of an ecosystem is also governed. This framework therefore, allows for rebalancing power relationships sustained by or manifested through data. We will assess existing collective data governance models for stewarding open data commons to achieve the objectives identified above. For this, we will conduct a literature review of existing collective data governance models, such as data altruism, data trusts, data pools, data escrows, etc. We will present a preliminary synthesis of our literature review with some suggestions for translating a vision of open data commons into action in the EU.

### Friday 26 January

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# 3. 'Reuse Datasets - a design concept for waste prevention' - Felipe Schmidt Fonseca, Northumbria University, UK

I have been a practitioner, activist, and researcher on topics related to digital rights and open-source technologies since the early 2000s. During these decades, I have co-founded a series of initiatives in Brazil engaging critically with fields such as digital culture, e-waste, open and collaborative science, social-environmental innovation, rights of indigenous communities, among others. At some point, my activities expanded internationally as well – for instance, co-founding collaborative initiatives like Bricolabs, participating in networks such as GOSH (Gathering for Open Science Hardware), GIG (Global Innovation Gathering) and others, as well as conducting residencies and research on topics related to the circular economy, smart cities, participatory policymaking and conviviality. That background experience was fully incorporated in my PhD research at Northumbria University, part of a cooperation with a consortium of organisations led by the Mozilla Foundation.

The central topic of my PhD thesis successfully defended in September 2023 is "Generous Cities", a designerly exploration of how to pursue waste prevention through community-based practices of reuse – repair, upcycling and re-circulation of goods and materials. During the research, I have created eight design concepts to help seed a needed change in the narrative around excess materials – from industrially-minded recycling to a commons-oriented reuse of materials. One of such concept ideas is called "reuse datasets". It centres on the position that there is a recommended hierarchy of measures to address waste according to which society should prioritise waste prevention and the reuse of materials over recycling. Nonetheless, the majority of data resources on the topic relates to waste collection and recycling only. The Reuse Datasets concept is an attempt to map available resources and the most important gaps, identifying potential ways to address them and sharing such findings publicly.

#### Valuing Public Data for Social, Economic and Environmental Development

This project is funded by the Scottish Universities Insight Institute (SUII) and Scotland Europa.

For more information, visit the project's dedicated page on the SUII website: www.scottishinsight.ac.uk/Programmes/ScotlandinEurope/PublicSectorData.aspx





