

ODISSEI @ SSHOC-CH

18 January 2023

dr. Tom Emery - ODISSEI Deputy Director



ODISSEI

Open Data Infrastructure for Social Science and Economic Innovations

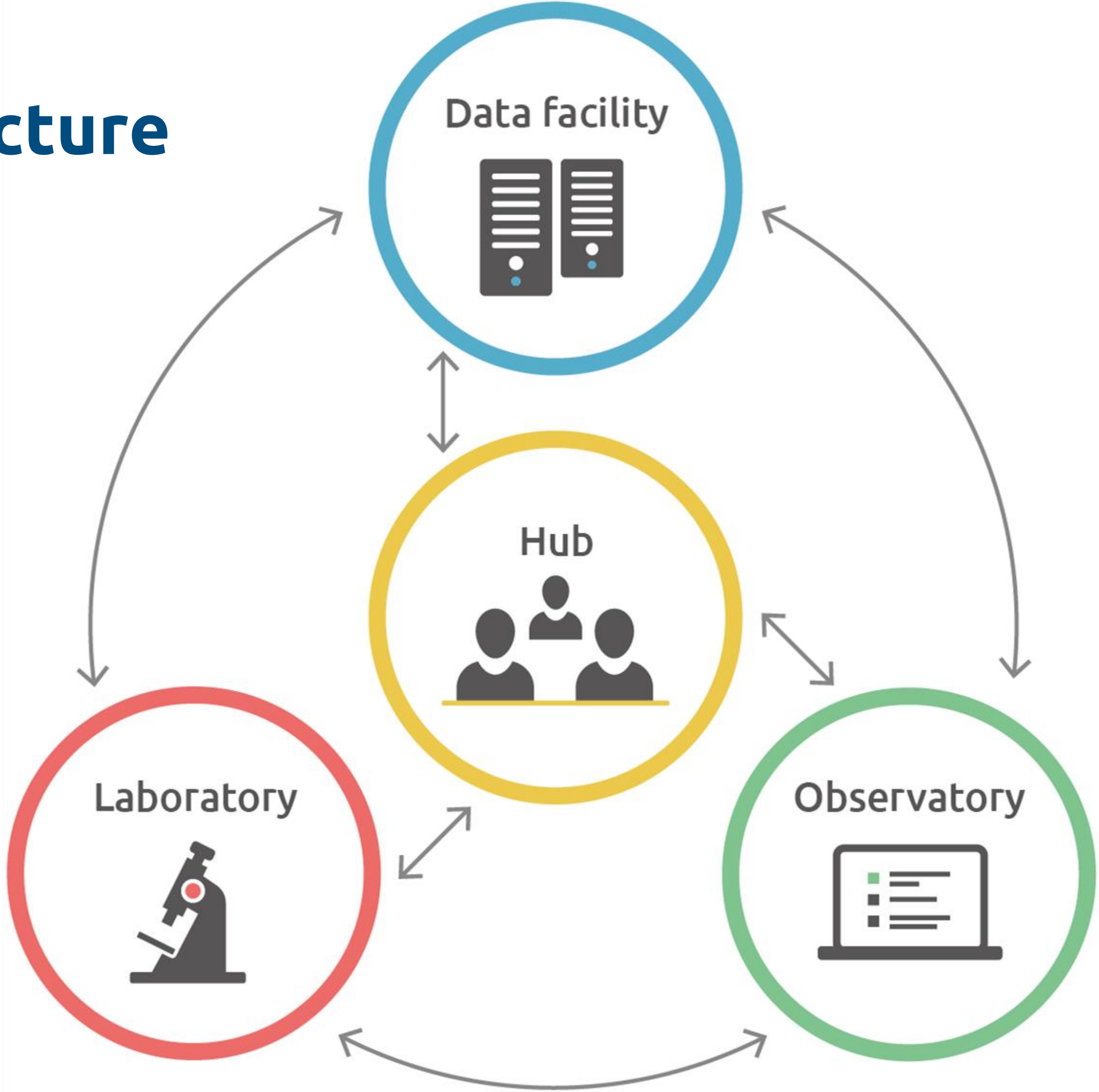
National Infrastructure for Social Science

ODISSEI is a federated data infrastructure for the social and economic sciences in the Netherlands, representing 45 member organizations. 13 deliver services. Structural funding of €1 million per annum, LSRI funding of €9.4 million, plus additional grants

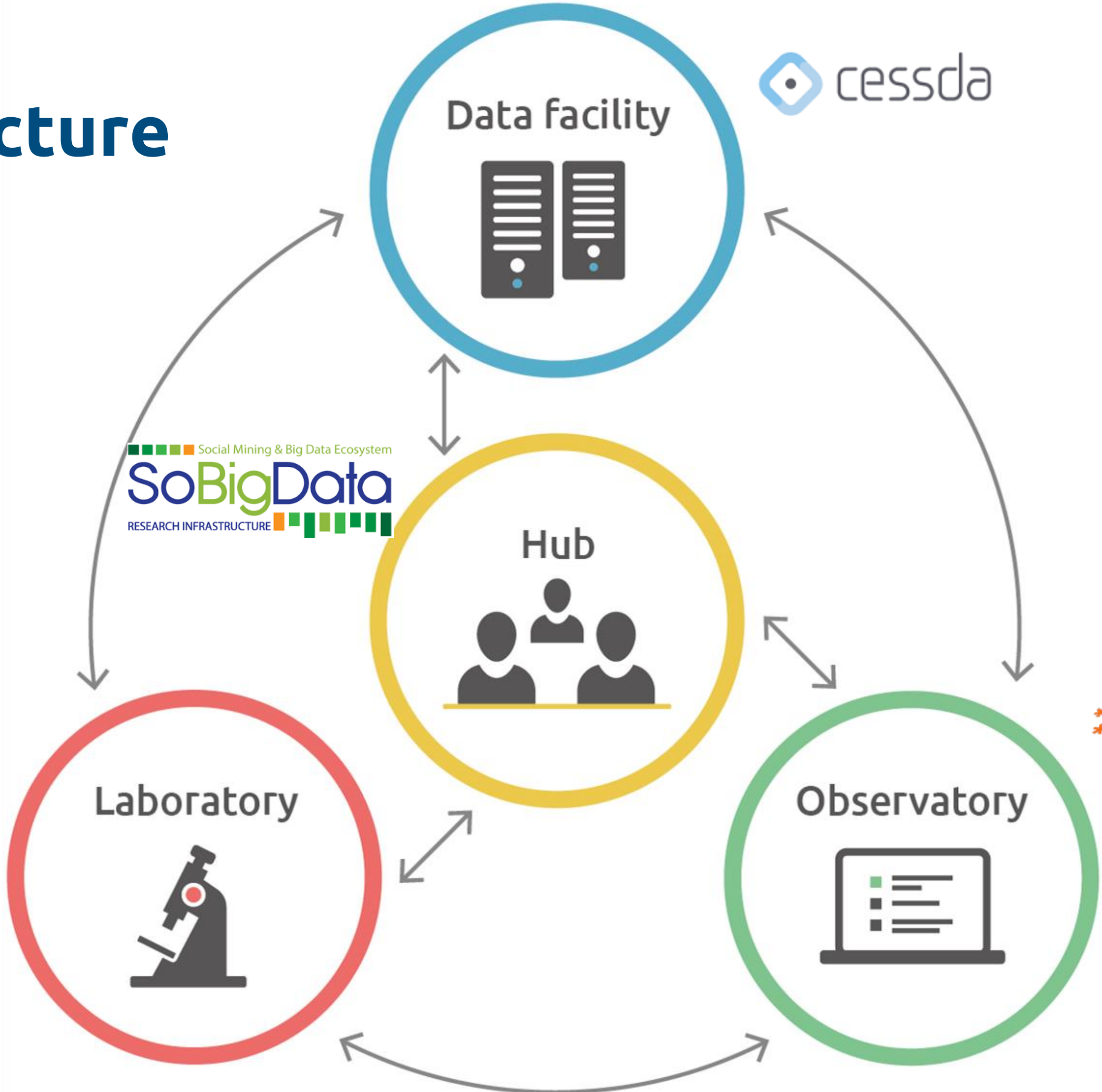
Operation funded by Members, investments funded by NWO.



The ODISSEI Research Infrastructure



The ODISSEI Research Infrastructure



Statistics Netherlands

Administrative Data



ODISSEI

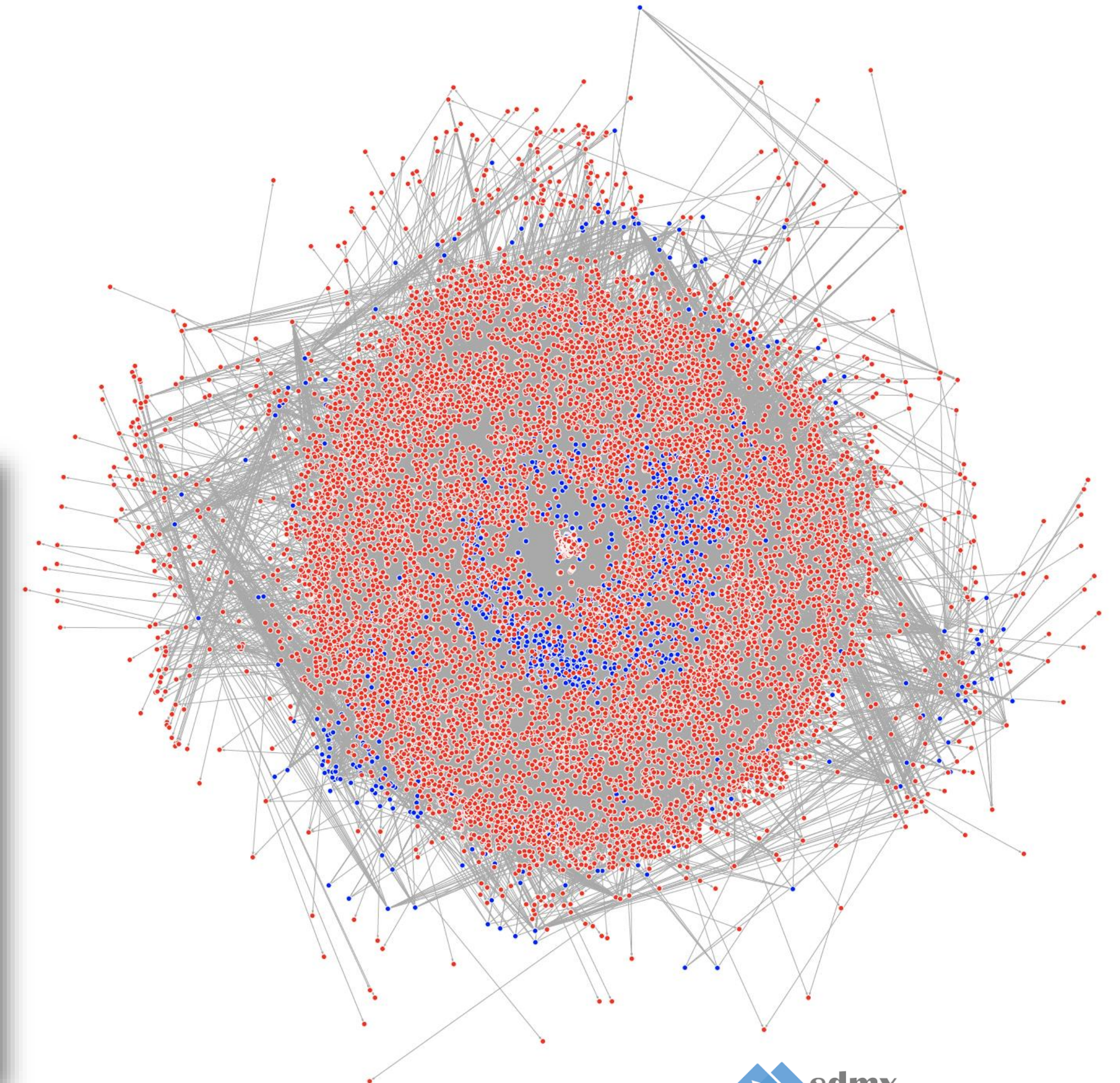
Open Data Infrastructure for Social Science and Economic Innovations

A single, large-scale, relational database



The screenshot shows the Dataverse search interface. At the top, there's a search bar with 'RINPERSOON' entered. Below it, there are filters for 'Dataverses (0)', 'Datasets (76)', and 'Files (423)'. The search results section shows '1 to 10 of 499 Results'. The first result is 'Volgtijdelijk vergelijkbare Persoon_id's van personen' from Dec 13, 2021. The second result is 'Enquête Werkgelegenheid en Lonen (EWL)' from Dec 13, 2021. The third result is 'In de Gemeentelijke Basisadministratie' from Dec 13, 2021. The fourth result is 'Kenmerken van AKW-uitkeringen van' from Dec 13, 2021.

The screenshot shows the 'Catalogus microdata' page. It has a navigation bar with 'Algemeen', 'Aanvullend onderzoek', 'Zelf onderzoek doen & microdata', and 'Publicaties'. The main heading is 'Catalogus microdata'. Below it, there's a paragraph: 'Onder strikte voorwaarden kunnen instanties microdata gebruiken om zelf onderzoek te doen. Hieronder ziet u per thema de recentste documentatierapporten van de beschikbare microdatabestanden:'. Below this, there's a list of themes: 'Arbeid en sociale zekerheid', 'Bedrijven', 'Bevolking', 'Bouwen en wonen', 'Financiële en zakelijke diensten', 'Gezondheid en welzijn', 'Handel en horeca', 'Inkomen en bestedingen', 'Internationale handel', 'Industrie en energie', 'Landbouw', 'Macro-economie', 'Natuur en milieu', 'Onderwijs', 'Overheid en politiek', 'Prijzen', 'Veiligheid en recht', 'Verkeer en vervoer', and 'Vrije tijd en cultuur'.



The LISS Panel

An Online, representative, open access panel



ODISSEI

Open Data Infrastructure for Social Science and Economic Innovations

The LISS panel

An online panel of 5,000 households, comprising of 7,500 individuals.

Based on a true probability sample by Statistics NL (CBS)

Online questionnaire of 15 to 30 minutes, once per month

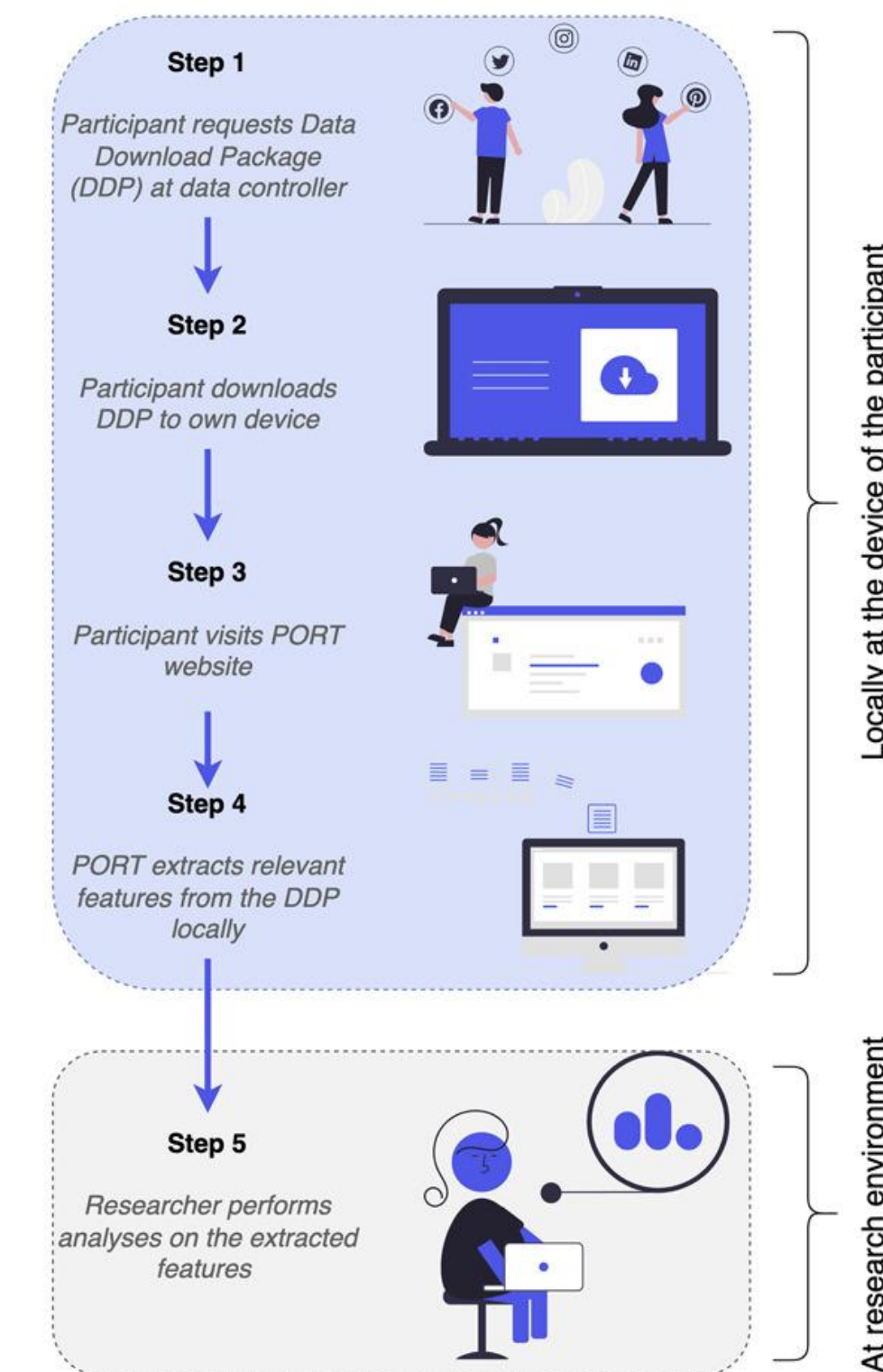
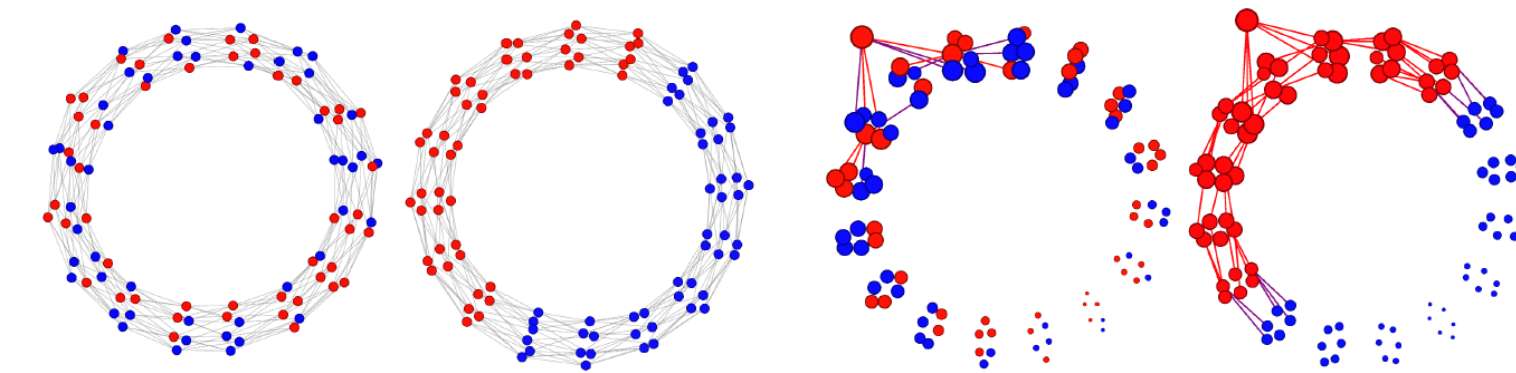
Ask own questions to a large group of respondents

Link data to already existing LISS panel data as well as CBS microdata



Extending LISS Functionality

- Mass Online Experiments in a linkable, representative sample using Otree within LISS. Allows for large group experiments (200+ people) to observe group dynamics.
- PORT - Distributed analytics of locally stored personal data (social, financial, communications, travel, health etc) <https://arxiv.org/pdf/2011.09851>
- Both tools allow social interaction data to be linked to administrative data -> empirically drive ABM



Supporting Researchers



ODISSEI

Open Data Infrastructure for Social Science and Economic Innovations

Netherlands eScience Grants



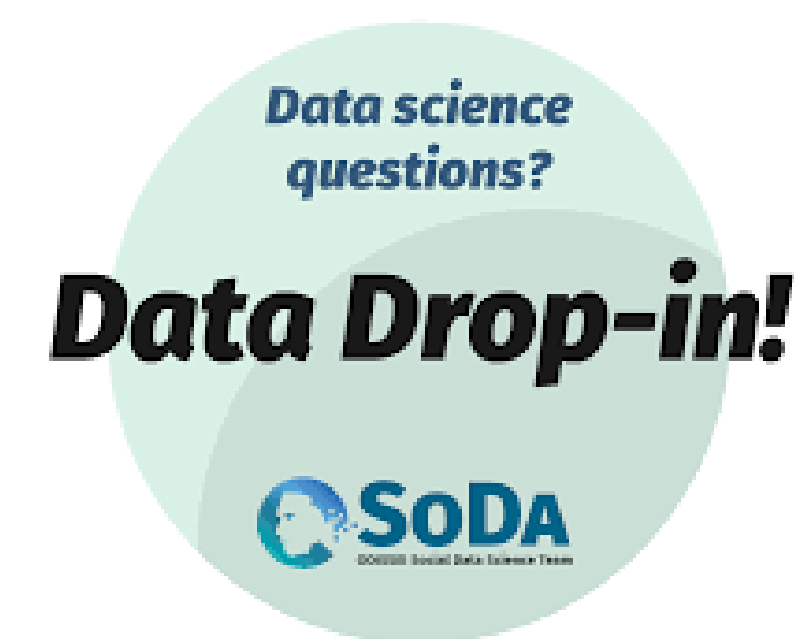
- In cooperation with the Netherlands eScience Center
- 3 months of Research Software Engineer (RSE) time in kind
- In 2021 round 5 projects were awarded. Examples:
 - modelling consequences for school segregation with an agent-based model
 - visualization and tracking tool of (cross-border) investment flows



The ODISSEI Social Data Science Team (SoDa)

- Forms of support:
 - Collaborative projects or consultations
 - Support in grant applications (ODISSEI eScience but also ERC/NWO and related)
- Data Drop-ins
 - informal (online) meetings to answer all data related questions
 - every third Thursday of the month
 - next meeting on 17 February, 16.00-17.00
 - no registration needed

Support by SoDa - free of charge, subject to availability



The ODISSEI-SICSS Summer School

June 20th - 1st July – Rotterdam



20 Participants, 1 week of hands-on Tutorials, 1 week of Benchmark Challenge

Onboarding: eScience Data Carpentry Workshop for Python

Week 1: ODISSEI, Networks, Machine Learning, Benchmarking

Week 2: Benchmark Challenge on Precarious Employment and Institutional Trust



Sociaal en Cultureel Planbureau



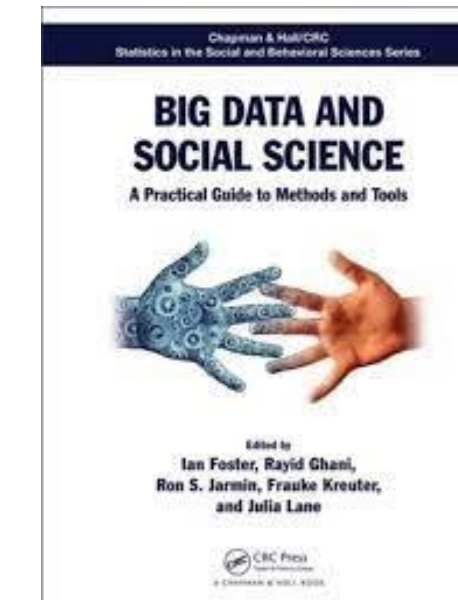
The ODISSEI Conference for Computational Social Science in the Netherlands

November 3rd 2022 - Utrecht

Professor Frauke Kreuter, Social Data Science Center at the University of Maryland and BERD at University of Mannheim

Professor Matt Salganik, Princeton University, author of Bit by Bit, co-Founder SICSS, PI of Fragile Families Challenge

Registration close, but will be streamed (@ODISSEI_nl)



Use Cases of ODISSEI



ODISSEI

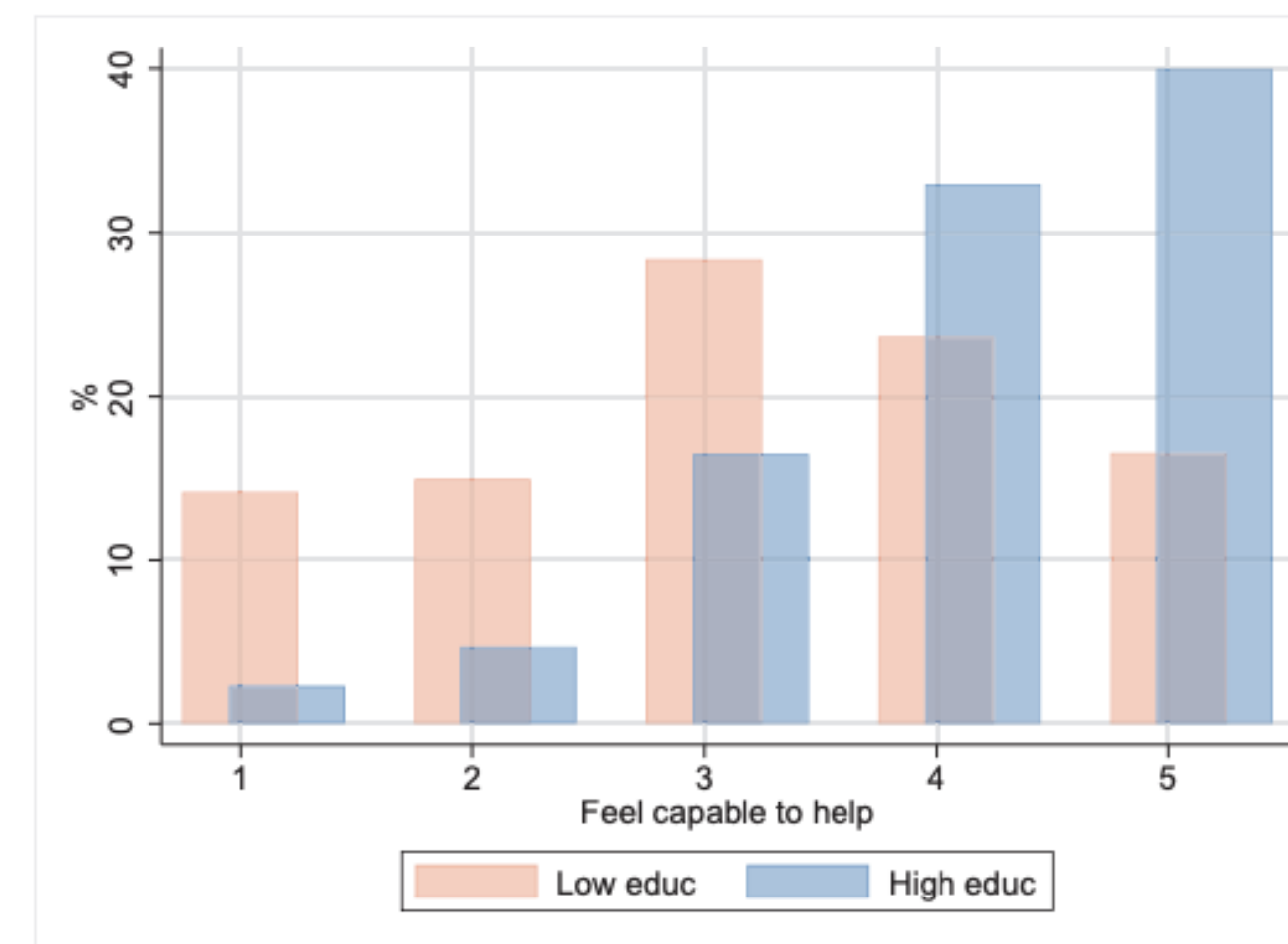
Open Data Infrastructure for Social Science and Economic Innovations

LISS Rapid Fielding

- LISS Panel COVID Grant
- Inequalities in home-schooling during lockdown
- Not just immediate effects but also long term effects become observable
- <https://osf.io/preprints/socarxiv/hf32>



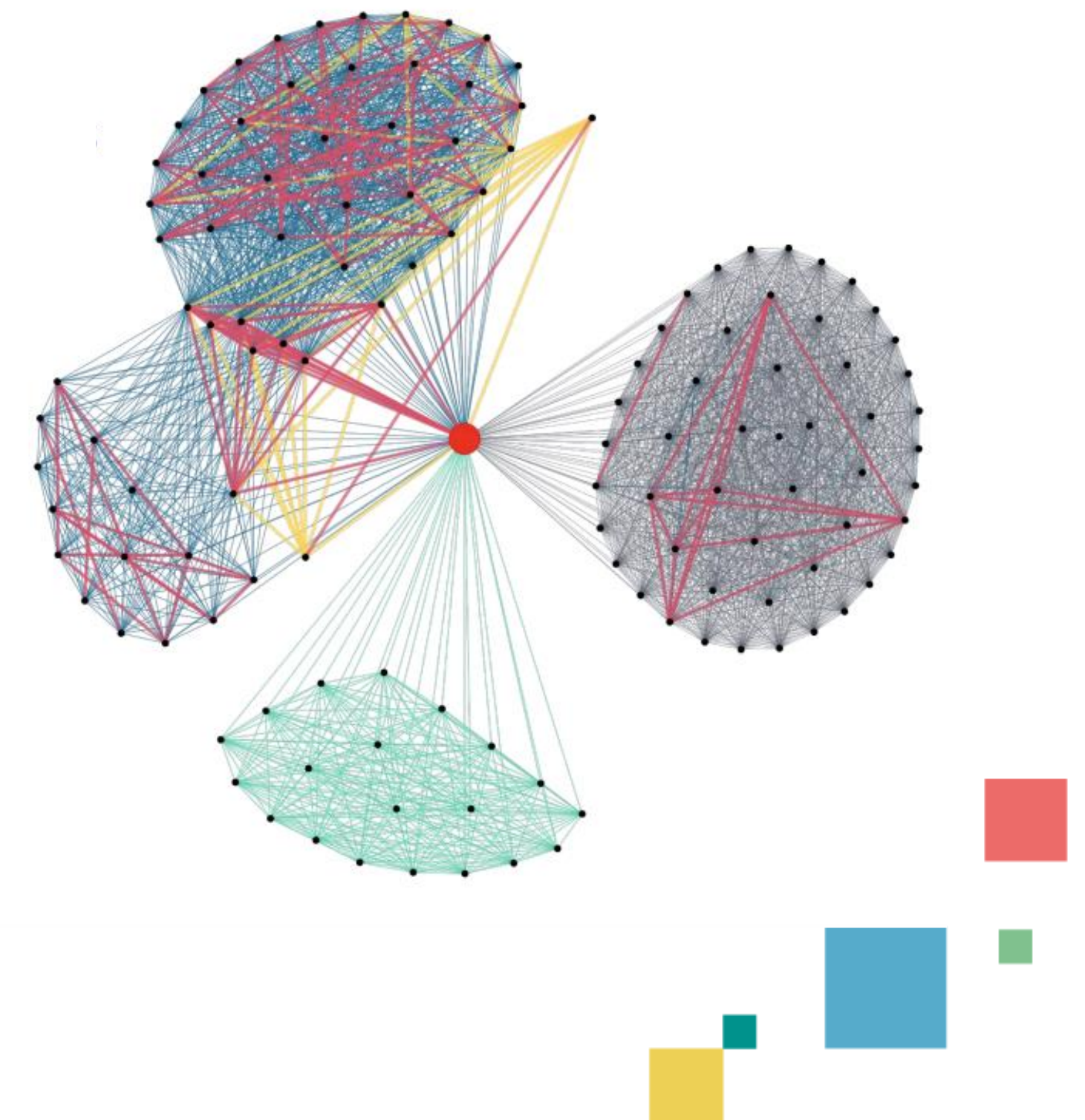
Figure 10: Capability to help (secondary education)



Whole Population Network

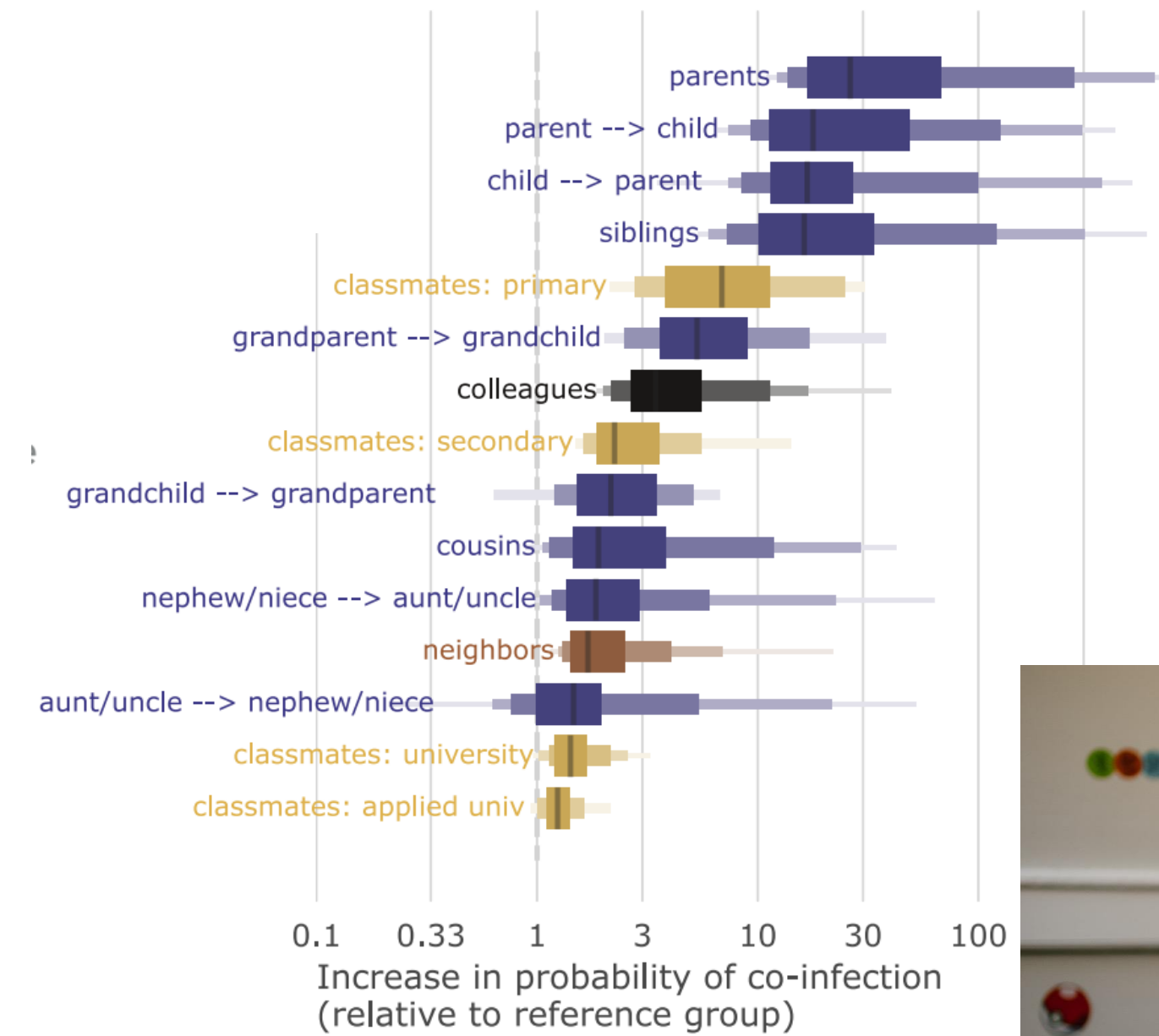
- Whole Population Network of the Netherlands
- 17 million people, 1.4 billion links
- Constructed in the OSSC, linking diverse data together to understand social structures
- <https://www.popnet.io/>
- <https://www.cbs.nl/en-gb/background/2022/20/a-person-network-of-the-netherlands>

POPNET



Use Cases – COVID transmission

- Do we observe increased risk of COVID transmission through the network?
- Which Layers and which Relationships are associated with transmission risk?
- Does this vary over the duration of the pandemic?
- Missing link between ‘administrative’ links and actual relationships and interactions



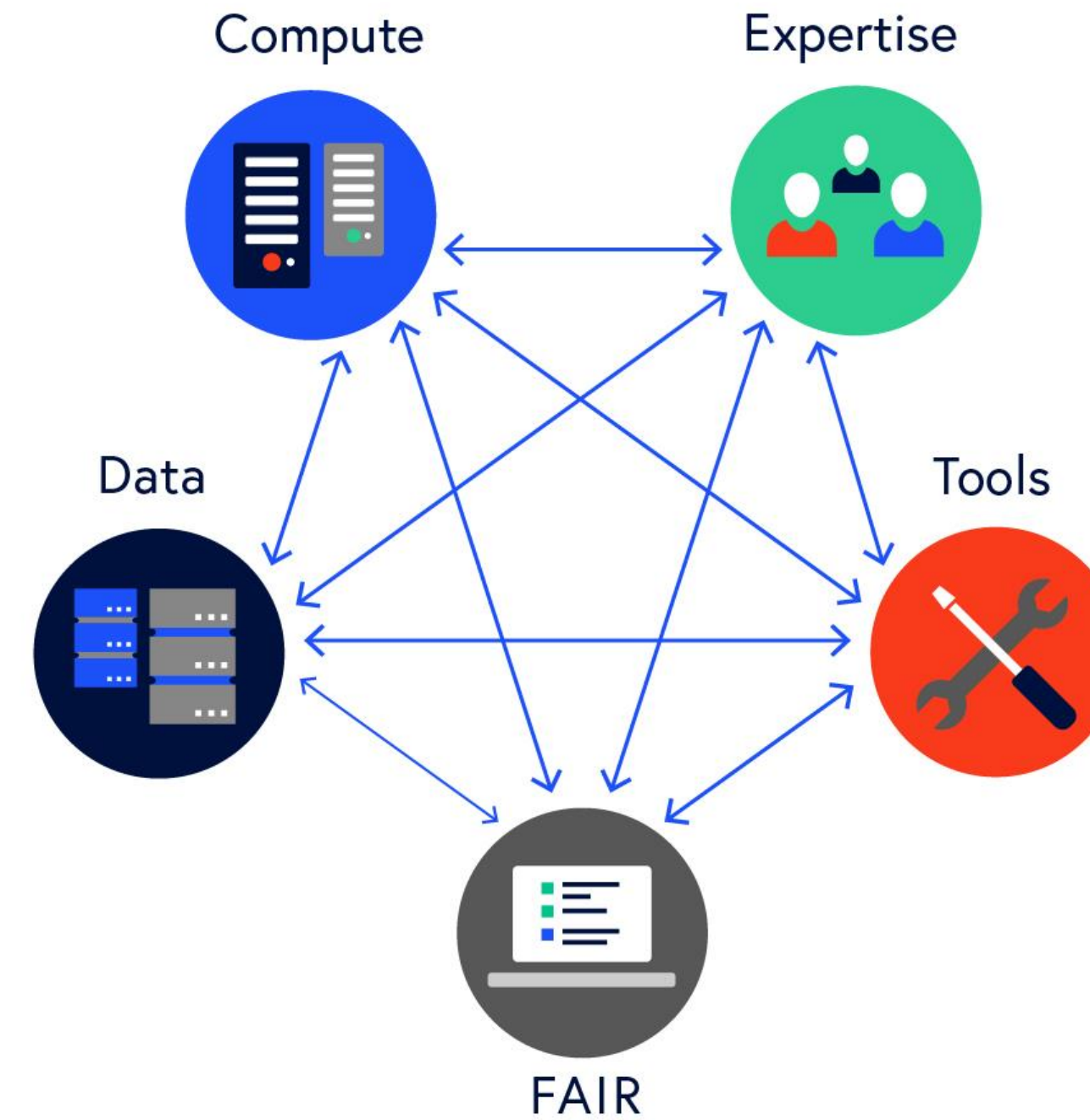
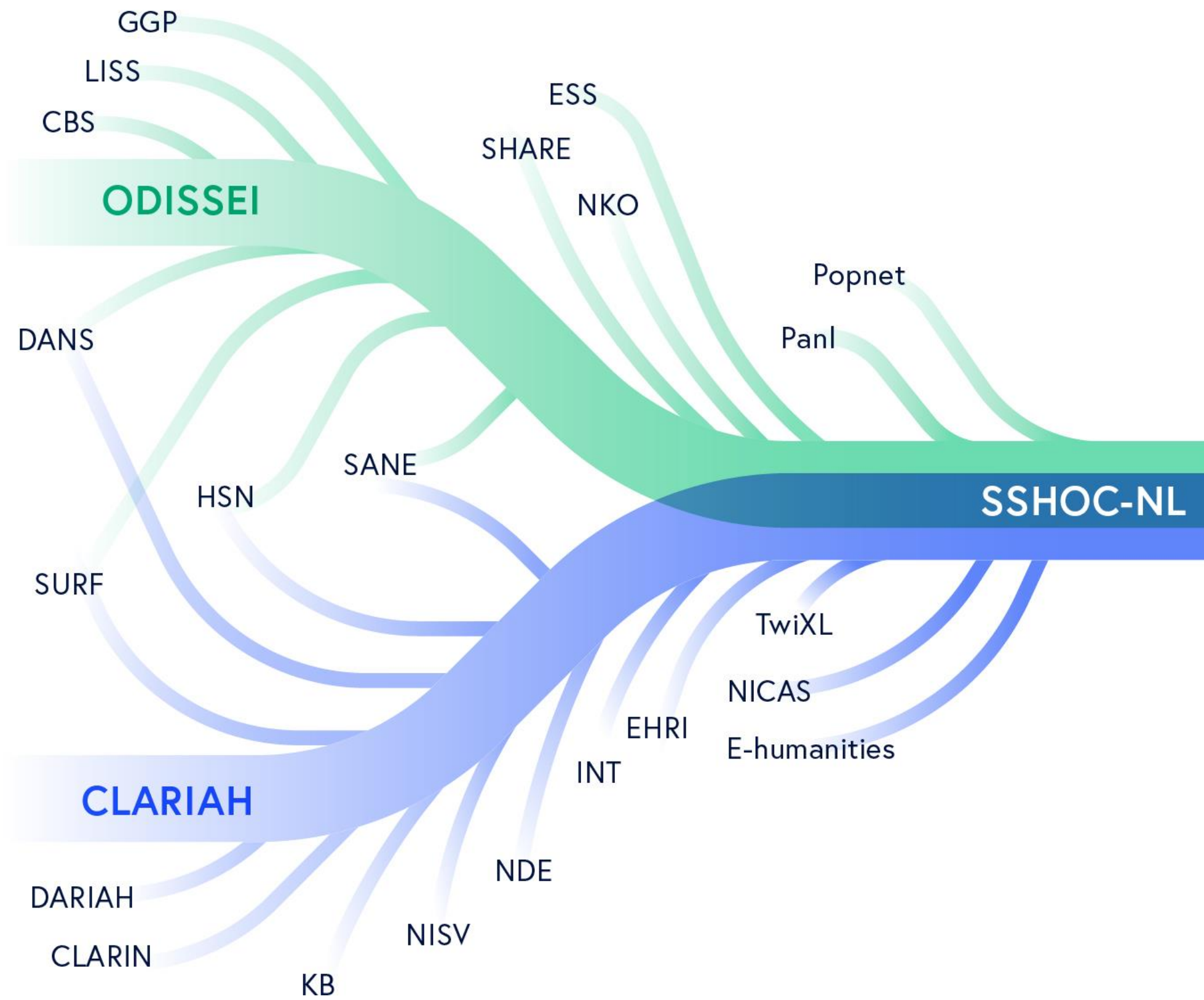
Next Steps



ODISSEI

Open Data Infrastructure for Social Science and Economic Innovations

SSHOC-NL



- Application for €14.5 million for 2024-2029
- ~ same as SSHOC-EU
- Vital for interaction with e-Infra where investments are very large
- Large investment in coordination and managing the AI transition in SSH



Contact

Subscribe to our newsletter via <https://odissei-data.nl>
Follow us on Twitter @ODISSEI_NL

For questions:
info@odissei-data.nl



ODISSEI

Open Data Infrastructure for Social Science and Economic Innovations