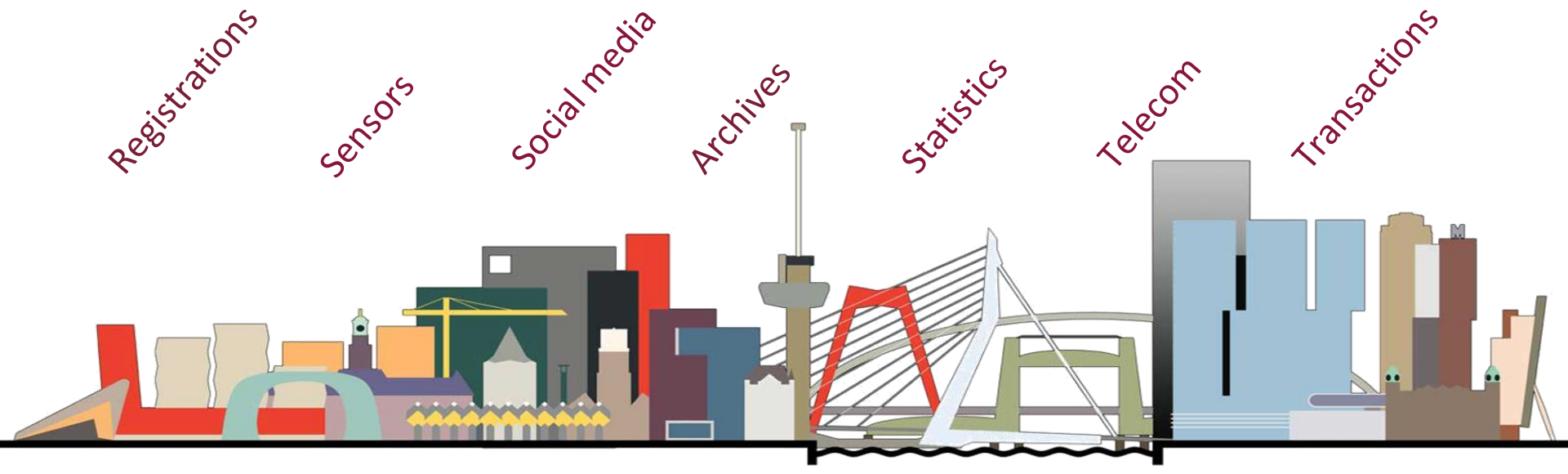
BIG, OPEN AND LINKED DATA (BOLD) CITIES

Liesbet van Zoonen, Erasmus University Rotterdam



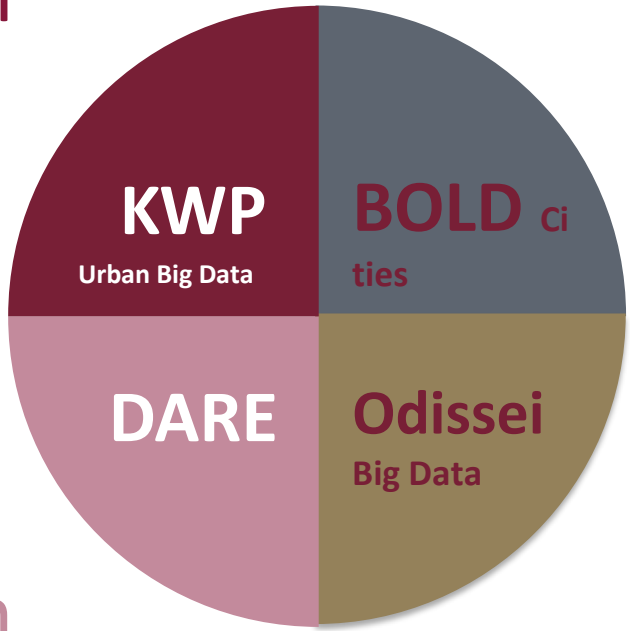
BOLD CITIES: MULTIPLE STAKEHOLDERS AND CONNECTIONS

Rotterdam

Knowledge Lab UBD

Regional

Erasmus Universiteit
TU Delft
Universiteit van Leiden



Data Alliance
Rotterdam Erasmus

Rotterdam

Office of Dutch Statistics
Data platform Social Sciences

National

WHERE ????


0 25 50 km
Noordzee
Delfzijl
Leeuwarden
Groningen
Den Helder
Assen
Zwolle
IJmuiden
Haarlem
AMSTERDAM
Den Haag
Utrecht
Amhem
Rotterdam
Europoort
Dordrecht
Nijmegen
DUITSLAND
Tilburg
Terneuzen
Eindhoven
BELGIË
Maastricht

OUR RESEARCH

BOLD Trials

- Big data for vulnerable groups

BIG DATA FOR VULNERABLE GROUPS

- **People on benefits**
  - Personalising reintegration – linking data - Rotterdam
  - Predicting fraud risk – machine learning - Rotterdam
- **Working poor**
  - Preventing poverty plunge – linking data – The Hague
- **Young people**
  - Finding NEETS – geo and social urban data - Rotterdam

OUR RESEARCH

BOLD Trials

- Big data for vulnerable groups
- Technical and analytical challenges
- Ethical and epistemological issues
- Cost-benefit assessment

Data Empowerment

- Civil service lags behind
- Co-creation with municipality
- Data dialogues
- Data walks

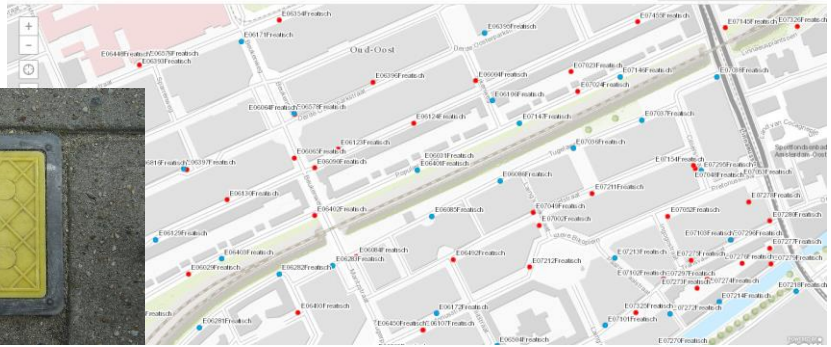
- **Big Four: Amsterdam, Rotterdam, Utrecht, Den Haag**
  - 16 groups of about 5 people each
  - Contrast group of 20 students
- **Questions**
  - What do you see: digital, datafied, smart, etcetera?
  - What is its purpose, goal, usage
  - Who owns it?
  - Which are the public interests/values at stake?

WHY WALK?

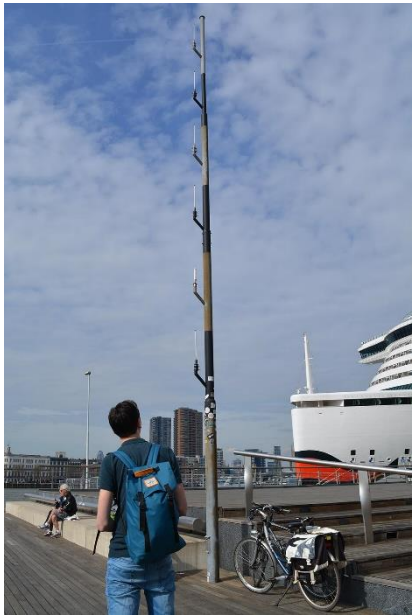
- **Common method in urban studies**
  - City is embodied experience
- **Contrast**
  - Smart city, datafication and digitization = invisible, disembodied
- **Action research:**
  - Identify and generate collective knowledge
  - Raise awareness, invite reflection
- **Towards designing a data empowerment tool**

WHAT DO YOU SEE?

CCTV, traffic cameras, sensors, lamp posts, ATM’s, mobile phones, free Wi-Fi, pa rking meters and garages, stock management in stores, customer loyalty cards, t elecom masts, antennas, building permits, boat permits,
cadastre, police cars, cars, some bicycles, post and package delivery,
selfies, *unknowns* and *invisibles*



Connected measuring tube groundwater level



PURPOSE AND USAGE

PURPOSE AND USAGE

(Say they) Know nothing	Have some sense Or a hunch	Claimers	Sector specialists	Know much

NOBODY HAS A FULL PICTURE

WHO OWNS THE DATA?

- **Municipal silos**
  - Public transport, Environment, Harbour, Public health
- **QUESTIONS, QUESTIONS, QUESTIONS**
  - Cameras > public or private? Regulation?
  - Residential buildings with electronic door systems
  - When can the police request data?

NOBODY HAS A FULL PICTURE

PUBLIC VALUES AND INTERESTS

- **Transparency comes before privacy**
  - Strong belief in existing and upcoming regulation (GDPR)
  - Privacy officers regularly experienced as limiting
- **Who is responsible for transparency**
  - Individual frameworks
    - *I should know more, better*
    - *It does not affect me (students)*
  - No sense of collective or political responsibilities (civil servants)
- **Generic focus on citizen participation and engagement**
  - Little sense of why, how and tensions (Netherlands)

NEXT STEPS

- **Design training and teaching instrument**
  - Guided tour for professionals, students and pupils
  - Use also as data collection
- **Elaborate co-creation and data literacy**
  - Boundary crossing: safe/unsafe, privacy/surveillance
  - Working with vulnerable youth
- **Health warnings for civil servants**
  - Epistemological and control fallacies
  - Cost effectiveness
- **Theorize and publish**

ACADEMIC CONTEXT

- Multistakeholder governance
  - Meijer, A., & Bolívar, M. P. R. (2016). Governing the smart city: a review of the literature on smart urban governance. *International Review of Administrative Sciences*, *82*(2), 392-408.
- Actor network theory
  - Campbell, T. (2013). *Beyond smart cities: how cities network, learn and innovate*. Routledge.
- Innovation studies
  - Leydesdorff, L., & Deakin, M. (2011). The triple-helix model of smart cities: A neo-evolutionary perspective. *Journal of Urban Technology*, *18*(2), 53-63.
- Critical data studies
  - Kitchin, R. (2014). The real-time city? Big data and smart urbanism. *GeoJournal*, *79*(1), 1-14.

THANK YOU

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