Space for Ethics

Yola Georgiadou

Research Seminar on Integrity – 4 March 2020 @ITC
THE STATE
The state must ...

**Classify**
- The people
- The territory

**Draw inferences → Make policy**
- About people
- About the territory

**Be legitimate**
- Is the classification legitimate ?
- Are the inferences legitimate ?
If ... illegitimate, citizens mobilise
Germany

Berlin 1987: DON’T COUNT US, COUNT YOUR DAYS
The Netherlands

1971 Census - “Festival of Errors”

• In Spijkenisee near Rotterdam
  – 35 married boys and girls under 15 years
  – 75 teenagers living on retirement pension

• Zwolle
  – fourteen-year-olds already with a divorce

1981 Census - Cancelled

From National Statistics (simplify society) ....

1. Nation-state scale
2. All residents in households
3. Pre-cooked categories for people
4. Often public, open, revealed
5. Create a shared truth, upon which consensus-forming claims can be made in decision making

6. Ostensibly public interest
7. Diffuse controversy
8. First ask a question, then collect related data
9. NS officers are public servants, accountable to government
10. Slow, high cost
... To Data Analytics (complexify society)

1. Any spatial scale
2. Anybody, anywhere
3. Emergent categories for people
4. Often private, closed, secret
5. Detect trends, sense moods, spot things as they bubble up → create various truths (post-truth society)

6. Often not clear to whose interest
7. Often amplify controversy
8. First hoover any data, then ask as many questions as you want
9. Data analytics experts often accountable only to CEOs
10. Fast, low cost (e.g. with machine learning)
WHAT IS GOING ON WITH DATA ANALYTICS ?!
Key events in the 2010s

Edward Snowden (2013)

Cambridge Analytica – Facebook (2018)
Digital, informational, platform capitalism?
Data, surveillance capitalism, or neocolonialism?
Some of behavioral data are applied to product or service improvement. The rest are fed into “machine intelligence.” Predication products are then extracted that anticipate what you will do.
Facebook Users Unite! 'Data Labour Union' Launches in Netherlands

By Reuters

May 23, 2018

AMSTERDAM — Activists in Amsterdam on Wednesday launched the 'Datavakbond' or "data labor union", which hopes to elect leaders to negotiate directly with Facebook and Google over what they do with users' data.

Source: [http://thedataunion.eu](http://thedataunion.eu)
WEF: “Data is the new oil!”

- If data is the new oil then data protection regulation is the new environmental regulation
KEEPING TRACK OF MEDIA...LAST FEW WEEKS
Belastingdienst haalt verboden zwarte lijst uit de lucht

De Belastingdienst heeft jarenlang tienduizenden burgers op een speciale lijst gezet met een registratiesysteem dat niet voldoet aan nieuwe privacywetgeving. Dat bevestigt het ministerie van Financiën na berichtgeving door RTL Nieuws en Trouw.
Fraudeopsporingsysteem SyRI schendet mensenrechten, overheid moet ermee stoppen

De rechter in Den Haag stelt woensdag in een bodemprocedure dat het omstreden fraudebestrijdingsysteem Systeem Risico Indicatie (SyRI) in strijd is met het Europees Verdrag voor de Rechten van de Mens. Het gebrek aan transparantie zou leiden tot ‘onbedoeld stigmatiserende en
Amsterdam komt met algoritme tegen illegale vakantieadressen

De gemeente Amsterdam gaat de komende zes maanden experimenteren met een nieuw wapen tegen illegale vakantieverhuur. Met behulp van een algoritme moet het makkelijker worden woningen te vinden waar grote kans op woonfraude is.

Arnout le Clercq 26 februari 2020, 5:00
Kenya’s New Digital IDs May Exclude Millions of Minorities

Millions face hurdles in obtaining documents to get a biometric ID card that will be required to function in the country. Without one, “you are totally a living dead,” a human rights advocate said.
Kenya’s High Court Delays National Biometric ID Program

The biometric system was challenged in court over privacy concerns, and fears that it could exclude millions from accessing public services.
NAIROBI, Kenya — Kenya’s high court on Thursday temporarily suspended the country’s new national biometric identity program until the government enacts laws to protect the security of the data and prevent discrimination against minorities.

The government had said the IDs would be required for all Kenyan citizens and foreign residents to access a broad range of rights and services, including health care, education, public housing, voting, marriage licenses and registering mobile phones.
La Quadrature du Net

PREMIÈRE VICTOIRE EN JUSTICE CONTRE LA RECONNAISSANCE FACIALE !

27 février 2020
The Secretive Company That Might End Privacy as We Know It

A little-known start-up helps law enforcement match photos of unknown people to their online images — and “might lead to a dystopian future or something,” a backer says.
Clearview AI

When BuzzFeed News reported earlier this month that Clearview AI had used marketing materials that suggested it was pursuing a “rapid international expansion,” the company was dismissive, noting that it was focused on the US and Canada.

The company’s client list suggests otherwise. It shows that Clearview AI has expanded to at least 26 countries outside the US, engaging national law enforcement agencies, government bodies, and police forces in Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Ireland, India, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

European firms warned China's social credit system could be
In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags

A new system uses software to dictate quarantines — and appears to send personal data to police, in a troubling precedent for automated social control.
1 March 2020

People in China sign up through Ant’s popular wallet app, Alipay, and are assigned a color code — green, yellow or red — that indicates their health status. The system is already in use in 200 cities and is being rolled out nationwide, Ant says.

Neither the company nor Chinese officials have explained in detail how the system classifies people. That has caused fear and bewilderment among those who are ordered to isolate themselves and have no idea why.
KEEPING TRACK OF RESEARCH DILEMMA...
Research dilemmas (March 2018)

- **Open science**: *open science versus protection of (the life of) non-human research subjects*
- **Open models**: *open models versus protection of (the life of) non-human research subjects*
- **Participation**: *voluntary (and presumably) empowering participation versus paid “participation”*
- **Open data**: *open high-res data versus risk of eviction*
- **Use of knowledge in policy making**: *strategic versus instrumental use of knowledge*
- **Etc etc**
NEW ELECTIVE – SPACE FOR ETHICS

With Rania Kounadi
<table>
<thead>
<tr>
<th>Variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacked</td>
<td>1. Any individual</td>
</tr>
<tr>
<td>Attacker</td>
<td>1. Government/Institution</td>
</tr>
<tr>
<td></td>
<td>2. Corporation</td>
</tr>
<tr>
<td></td>
<td>3. Researcher</td>
</tr>
<tr>
<td></td>
<td>4. Any individual</td>
</tr>
<tr>
<td>Spatial data types</td>
<td>1. Discrete location data (Dd)</td>
</tr>
<tr>
<td></td>
<td>2. Discrete location data with co-variates (Dd+)</td>
</tr>
<tr>
<td></td>
<td>3. Space-time data (STd)</td>
</tr>
<tr>
<td></td>
<td>4. Space-time-attribute data (STd+)</td>
</tr>
<tr>
<td>Purpose of attack</td>
<td>1. Identify private attribute(s) of the attacked</td>
</tr>
<tr>
<td></td>
<td>2. Identify the attacked who has certain private attribute(s)</td>
</tr>
<tr>
<td>Attacker’s strategy</td>
<td>1. Key-identifier exploitation</td>
</tr>
<tr>
<td></td>
<td>2. Combine to uniqueness</td>
</tr>
<tr>
<td></td>
<td>3. Re-engineering locations</td>
</tr>
<tr>
<td></td>
<td>4. Analysing locations</td>
</tr>
<tr>
<td></td>
<td>5. Homogeneity attack</td>
</tr>
<tr>
<td></td>
<td>6. Background attack</td>
</tr>
<tr>
<td></td>
<td>7. Composition attack</td>
</tr>
<tr>
<td>Privacy-preserving measures</td>
<td>1. Pseudoanonymity</td>
</tr>
<tr>
<td></td>
<td>2. K-anonymity</td>
</tr>
<tr>
<td></td>
<td>3. Spatial k-anonymity</td>
</tr>
<tr>
<td></td>
<td>4. l-diversity</td>
</tr>
<tr>
<td></td>
<td>5. Differential privacy</td>
</tr>
</tbody>
</table>

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**Diagram:**
- The diagram illustrates variables and values related to privacy and data types.
- The variables include Attacked, Attacker, Spatial data types, Purpose of attack, Attacker’s strategy, and Privacy-preserving measures.
- The values range from Any individual to various specific roles and types.

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**Explanation:**
- The diagram visually represents the relationships between different variables and their corresponding values.
- It helps in understanding the dynamics of data privacy and security measures.

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**Summary:**
- The document discusses variables such as Attacked and Attacker, along with their values.
- Spatial data types and their combinations are also explored.
- The purpose of attacks and strategies are outlined, along with privacy-preserving measures.
Why space for ethics?

Judging what are the right geodata/algorithms/practices to meet global/regional policy commitments
Why focus on privacy first?

Privacy is an instrumental right. It is essential to autonomy and the protection of human dignity.

Location privacy!
NEW ELECTIVE – SPACE FOR ETHICS
Two metaphors for privacy violations ➔ harms
Harms:
- Inhibition
- Chilling
- Self-censorship

Information collection → Privacy violation
Privacy as freedom *from* surveillance

Panopticon
Harms
- powerlessness
- vulnerability
- dehumanization

Information processing ➔ Privacy violation
Privacy as freedom to flourish as a human being
Privacy in everyday life

ELECTIVE – SPACE FOR ETHICS
Privacy in everyday life – what is right to do?

Topics to discuss with students:

- Should the police have access to a national DNA database to solve a murder?

- Should an insurance company promise you less insurance premium if you agree to wear a sensor?

- Should UBER store all the rides you ever made?
Privacy as ...

ELECTIVE – SPACE FOR ETHICS
Privacy as...

Political theory

Relation-based social theories

- Forensic accountability
- Trust
- Contextual integrity
- Social network

Individual rights-based theories

- Freedom From... (John Locke)
- Freedom To... (Immanuel Kant)
Location privacy

ELECTIVE – SPACE FOR ETHICS
Location Privacy

The right of individuals, groups, or institutions to control the generation, access, recording, and usage of their location information and determine when, how, and to what extent their information is processed by others.
CONTROL ➔ The transformation process of information

*From* - *Volunteered data* = created and explicitly shared by us, e.g. location-based services (Google)

*Or From* - *Observed data* = captured by recording our actions, e.g. location data when we use our cell phones

*To* - *Inferred data* = data about us based on analysis of volunteered or observed information, e.g. political affiliation
Hofmann’s step model

1. Geometric raw data
2. Time stamps
3. Observation over time
4. Geometry -> Geography
5. Semantic Maps
6. Social Data
7. Predictive Models

Collective data

Background data

Persistent IDs

Raw data

Predictions
Other persons
Businesses, Organisations, Points of interest
Addresses and Locations
Habits Repetition
When?
Where?

© Thomas Hofmann 2014
Hofmann’s step model

- 1. Geometric raw data
- 2. Time stamps

Where?
When?
# Location + Time stamps

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<th>Longitude</th>
</tr>
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<td>15 May 2013, 09:38:39 am +0200</td>
<td>+47.661030</td>
<td>+9.175663</td>
</tr>
</tbody>
</table>

- 11.61 km/h
- 16.44 km/h
- 14.22 km/h
- 12.99 km/h
What do my data say about me?

„I moved with an average speed of 14 km/h from A to B. Possibly on a bike."

How athletic am I?  How fit am I?  Did I stop?
Do I own a bike?  Did I get lost?
Hofmann’s step model

1. Geometric raw data
   - Where?
2. Time stamps
   - When?
3. Observation over time
   - Habits
     - Repetition
4. Geometry -> Geography
   - Addresses and Locations
5. Semantic Maps
   - Businesses, Organisations, Points of interest
6. Social Data
   - Other persons
7. Predictive Models
   - Predictions

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What do my data say about my future me?

„How probable is it that I react to an advertisement? ..., that I conclude a purchase?“

„Which could be my next travel destinations?“

„When will I be on the road with my car?“

„Am I receptive to religious or political propaganda?“

„How interesting could another person be for me?“ (Dating, Partnering)

„Am I trustworthy?“

„What is my sexual orientation?“
Privacy is not monolithic

ELECTIVE – SPACE FOR ETHICS
<table>
<thead>
<tr>
<th>COMPETITION</th>
<th>TRANSACTIONS</th>
<th>SYMMETRICAL</th>
<th>ASYMMETRICAL</th>
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</thead>
<tbody>
<tr>
<td>FETTERED</td>
<td></td>
<td>Data distributivism (network)</td>
<td>Data distributivism (hierarchy)</td>
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<tr>
<td></td>
<td>Slogan: We produce and manage our (personal) data</td>
<td>Slogan: Data-for-all law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Privacy: Personal data as unalienable, as constituting who I am</td>
<td>Privacy: Personal data as a good that may be traded with a public good</td>
<td></td>
</tr>
<tr>
<td>UNFETTERED</td>
<td></td>
<td>Data distributivism (market)</td>
<td>Data extractivism</td>
</tr>
<tr>
<td></td>
<td>Slogan: My data are mine, but I can sell them for a fair price</td>
<td>Slogan: You have zero privacy, get over it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Privacy: Personal data as tradeable product</td>
<td>Privacy: Zero</td>
<td></td>
</tr>
</tbody>
</table>
Moral arguments

ELECTIVE – SPACE FOR ETHICS
In this case, the self-driving car with sudden brake failure will continue ahead and drive through a pedestrian crossing ahead. This will result in ...

Dead:
- 2 elderly men
- 1 girl
- 1 male doctor

In this case, the self-driving car with sudden brake failure will swerve and drive through a pedestrian crossing in the other lane. This will result in ...

Dead:
- 1 elderly man
Moral argument

• **Situation:** What should the self-driving car do? How should its algorithm be programmed?

• **Judgment:** Start with an opinion/conviction about the right thing to do: “Swerve and kill the pedestrian on the other lane.”

• **Principle:** Reflect on the reason for your conviction: “Better to sacrifice one life to avoid the death of four.”
General Data Protection Regulation (GDPR)

ELECTIVE – SPACE FOR ETHICS
Data Protection actors

**Data subjects** are people—the natural persons whose personal data are processed.

**Controllers** are those who determine the purposes and the means of processing of personal data – companies for example.

**Processors** are entities that do something with personal data on behalf of controllers.

**Data Protection Authority (DPA):** e.g.  
[https://autoriteitpersoonsgegevens.nl/en](https://autoriteitpersoonsgegevens.nl/en)
GDPR: Article 4 (1)

‘personal data’ means any information relating to an identified or identifiable natural person (‘data subject’);

an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a **name**, an **identification number**, **location data**, an **online identifier** or to one or more factors specific to the **physical**, **physiological**, **genetic**, **mental**, **economic**, **cultural** or **social identity** of that natural person;
GDPR fundamentals

• Consent
• Data minimization and purpose limitation
• Automated decisions and profile transparency
Democracy: Data Euphoria

ELECTIVE – SPACE FOR ETHICS
Democracy: Data Euphoria
ELECTIVE – SPACE FOR ETHICS
1. Beyond privacy ... age of machine learning
2. Beyond individual rights-based theories

Political theory

- Forensic accountability
- Agent accountability

Relation-based social theories

- Trust
- Contextual integrity
- Social network

Individual rights-based theories

- Freedom From...
- Freedom To...
2. Ubuntu = we are people through other people

Political theory

Relation-based social theories

- Forensic accountability
- Agent accountability
- Trust
- Contextual integrity
- Social network

Individual rights-based theories

- Freedom From...
- Freedom To...
3. What if Data Protection is weak or absent?

- African organizations
  - African Union
  - ECOWAS

- African countries having adopted a DP regulation
  1. Angola
  2. Benin
  3. Burkina Faso
  4. Cape Verde
  5. Comoros
  6. Gabon
  7. Ghana
  8. Ivory Coast
  9. Madagascar

- DP Bills (and rumoured bills)
  A. Algeria
  B. Chad
  C. DRC
  D. Ethiopia
  E. Kenya
  F. Malawi
  G. Mauritania
  H. Niger
  I. Nigeria
  J. Rwanda
  K. Sierra Leone
  L. Swaziland
  M. Tanzania
  N. Uganda

4. Western canon does not ring bells

Panopticon
(Bentham, Orwell)
Inspiration: Aníbal Quijano
Inspiration: Achille Mbembe
Inspiration: Kwame Anthony Appiah
If S for E is the solution, what is the problem?

• Moral obligation to a global audience of students
• Ordinary human life is becoming a new factor of capitalist production and profit
• Subjecting human life to continuous monitoring and influence threatens human dignity and autonomy
• Hollowing out of the decision-making capacity of public servants