



Privacy Seminar

Privacy - An Introduction

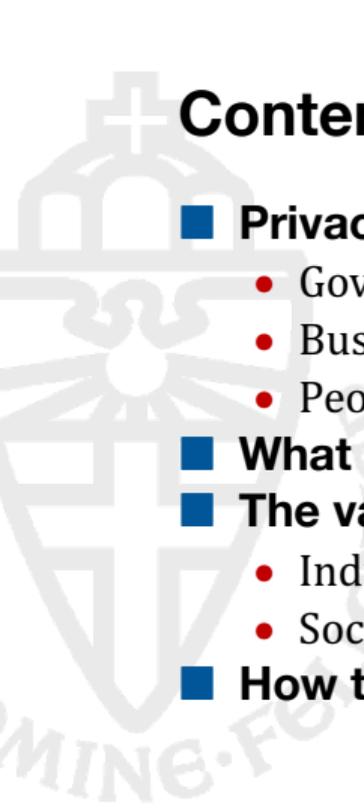
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Contents

■ Privacy under threat

- Government
- Business
- People

■ What is privacy?

■ The value of privacy

- Individual liberty
- Social value

■ How the law protects privacy



Government surveillance



Snowden



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The NSA files

NSA files decoded / Edward Snowden's surveillance revelations explained



All stories

Fraud detection, policing

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NIEUWS STAKING FRAUDEONDERZOEK

Rotterdam stopt omstreken fraudeonderzoek met SyRI

Rotterdam stopt met het fraudeonderzoek met het risico-indicatiesysteem SyRI in de wijken Bloemhof en Hillesluis. De gemeente krijgt de opzet van het onderzoek niet rond vanwege de juridische onduidelijkheid of het gewenste onderzoek niet in strijd is met privacywetten.

Charlotte Huisman 3 juli 2019, 20:32



Trouw

Gemeente Amsterdam

Politie Amsterdam loerde onterecht in data van milieucamera's



Belastingdienst

Data driven governance

Use location data to make policy decisions on if/when/how to invest in certain (commercial) areas.

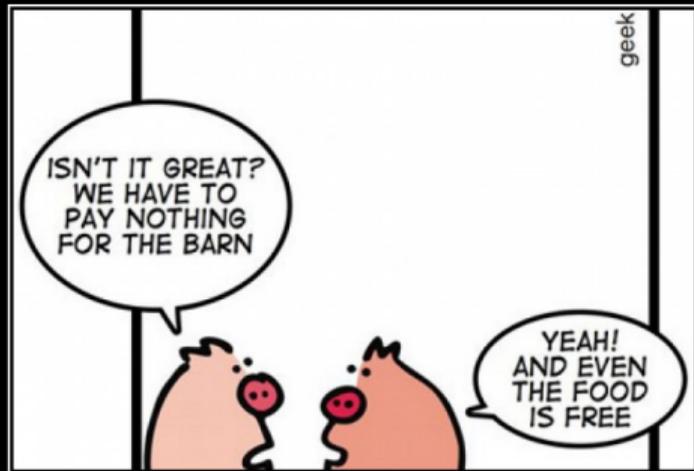
- **measure number of visitors per hour**
- **measure returning visitors**
- **determine origin of visitors**
 - postal code
 - municipality
- **determine cross-visits (% of people that visited A also visit B)**
 - if A is a border, you can measure foreign visitors.

More examples?



Commercial surveillance

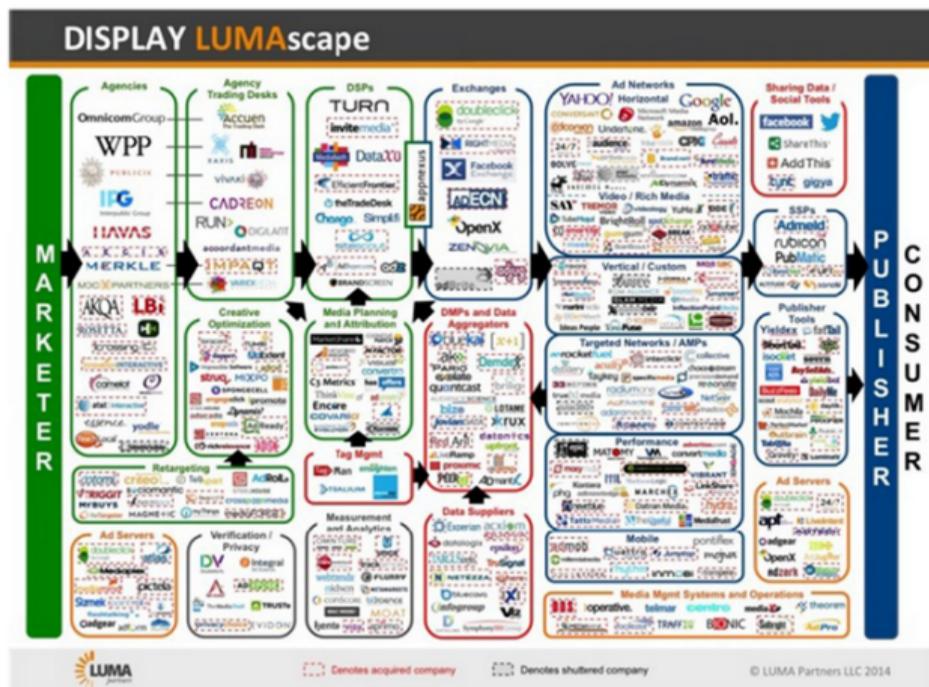




FACEBOOK AND YOU

If you're not paying for it, you're not the customer. You're the product being sold.

Advertising (cookies, fingerprinting and more)



Cambridge Analytica

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Cambridge Analytica

January 2020



MPs call for unlimited fines for those who breach electoral law

18 Jan 2020



Fresh Cambridge Analytica leak 'shows global manipulation is out of control'

4 Jan 2020

<https://www.theguardian.com/uk-news/cambridge-analytica>

Targetted campaigning, Dutch 2021 elections



<https://www.nrc.nl/nieuws/2021/02/22/de-rode-roos-maakt-plaats-voor-het-online-filmpje-a4032842>

Microtargeting is een splijtzwam tussen partijen tijdens de campagne

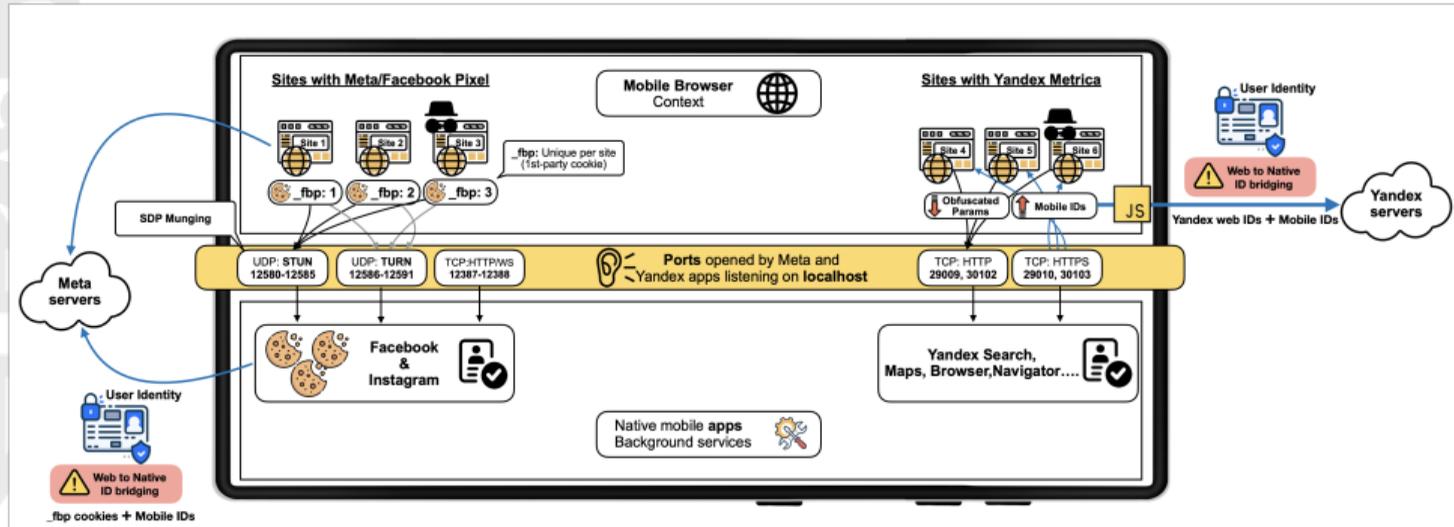
Politieke advertenties Dankzij het coronavirus is de verkiezingscampagne van politieke partijen nog meer dan eerst op sociale media gericht. Maar de verschillen tussen de online strategieën zijn groot. Wat de ene partij acceptabel vindt, is voor een andere partij een overschrijding van een ethische grens.

Wouter van Loon & Rik Wassens 22 februari 2021
Leestijd 5 minuten



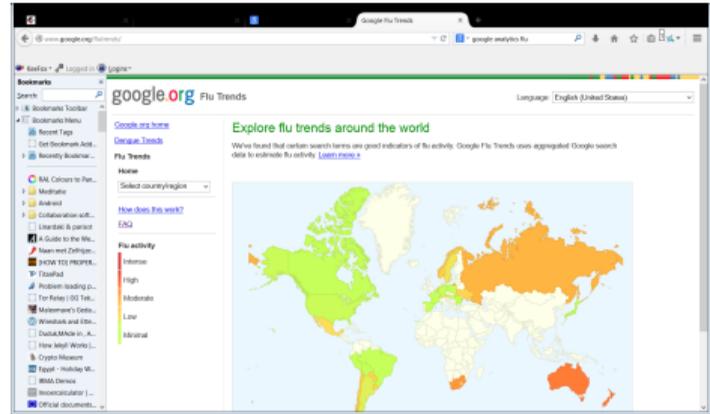
<https://www.volkskrant.nl/nieuws-achtergrond/politieke-partijen-willen-liever-niet-dat-u-dit-weet-de-geruisloze-strijd-om-uw-stem-via-facebook~bcdbf993/>

Localmess (Mlummens et al. 2026)



More examples?

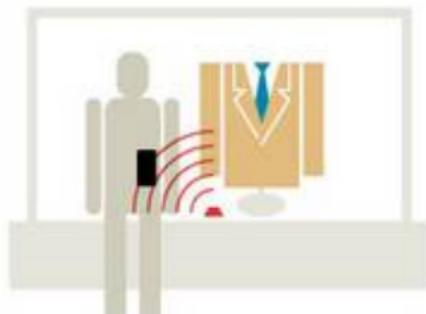
They know things before you yourself do ??



They track you even in real shops

De winkel weet wat u wilt kopen

iBeacon als verklikker loop- en koopgedrag klant

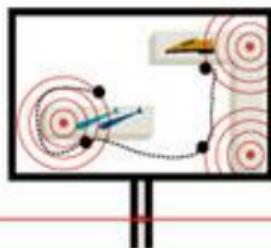


Beacon in etalage herkent via Bluetooth smartphone klant.

283084 © de Volkskrant - wim.



Beacons in winkel registreren positie klant.



Winkel ziet waar klant in is geïnteresseerd.



Bij de kassa kan op basis van interesse koopwaar worden aangeboden.



People

Radboud University



People





People

- **Online 24 hours/day**
- **Do many things over the Internet**
 - Social networking
 - Communications
 - Reading
 - Video
 - Finance
 - Maps
 - Platforms (Airbnb, Uber)



Privacy

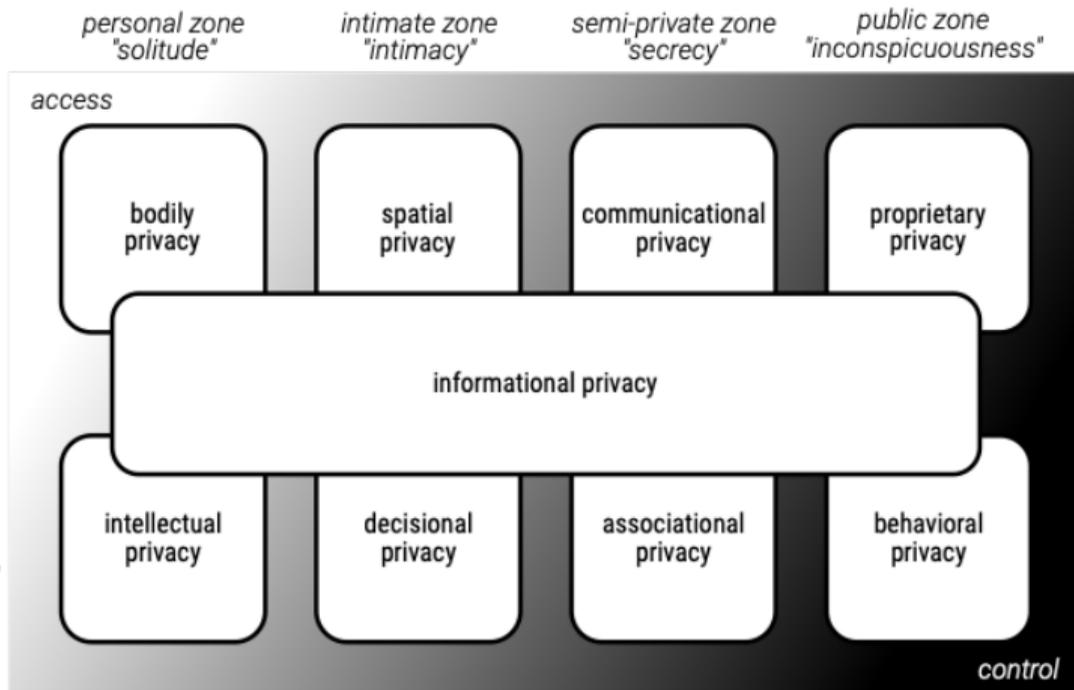


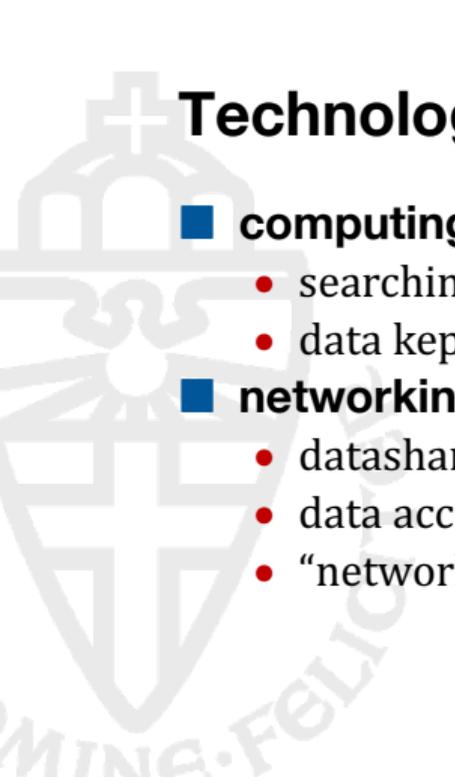
What is privacy according to you?

Privacy typology (Koops et al. 2017)

(emphasis on)
freedom from
"being let alone"

(emphasis on)
freedom to
"self-development"





Technology impacted privacy

■ computing (1950-)

- searching becomes efficient
- data kept forever

■ networking (1980-)

- datasharing becomes easy
- data accessible on-line
- “network effect”

Different definitions

- **The right to be let alone**

- (Warren and Brandeis 1890)

- **Informational self-determination: The right to determine for yourself when, how and to what extent information about you is communicated to others**

- (Westin 1967)

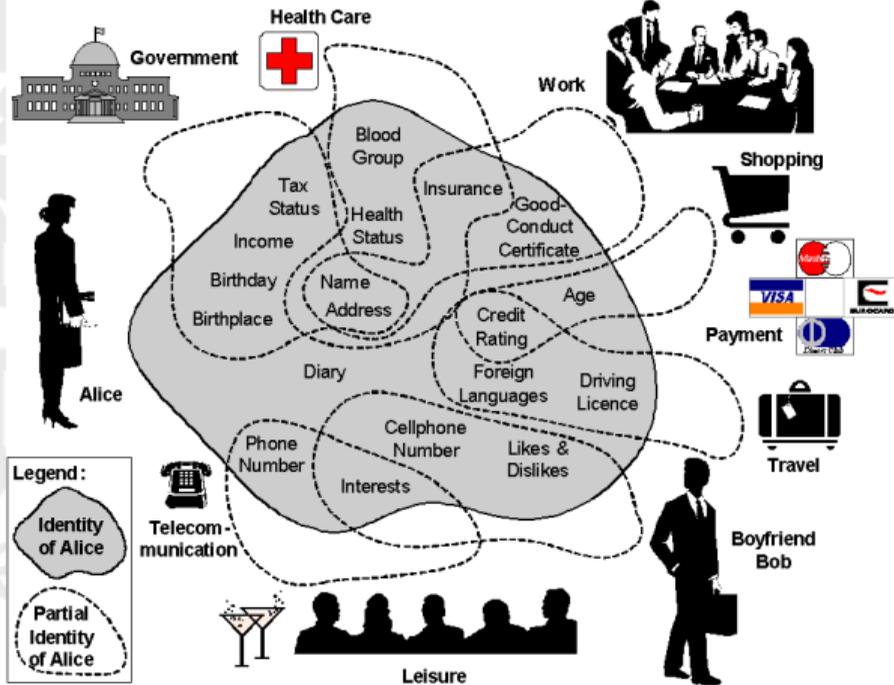
- **The freedom from unreasonable constraints on the construction of one's identity**

- (Agre and Rotenberg 1998)

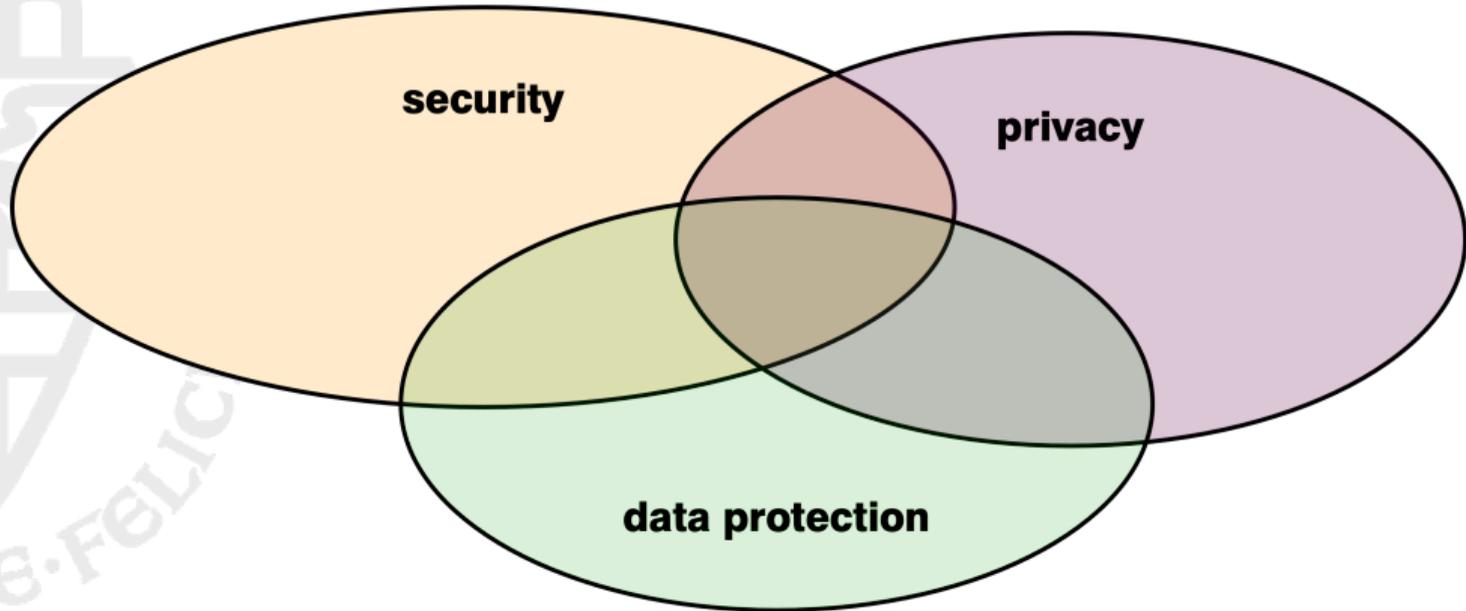
- **Contextual integrity: the right to prevent information to flow from one context to another**

- (Nissenbaum 2004)

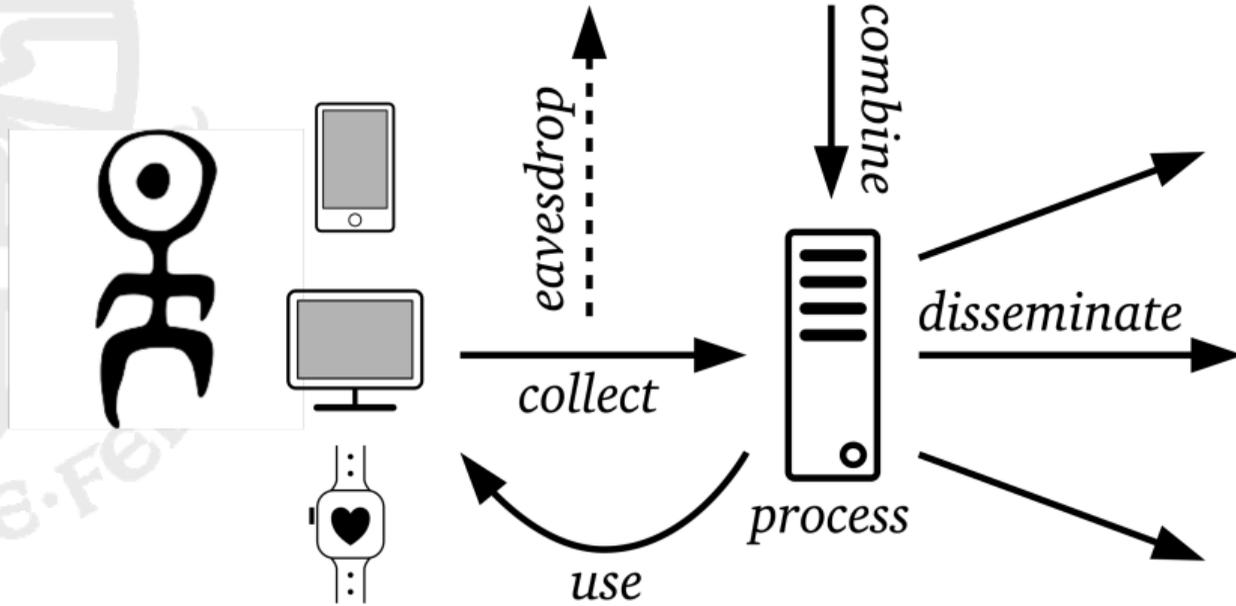
Contextual integrity: beyond context separation

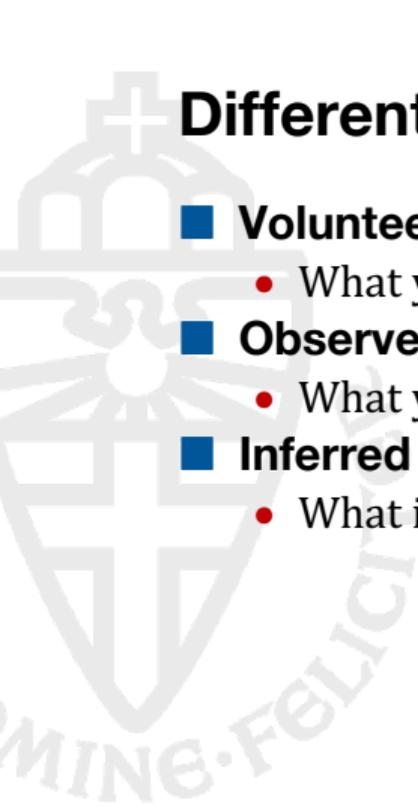


Don't confuse these concepts!



Privacy invasions (Solove 2006)





Different types of data/information (WEF 2011)

- **Volunteered**

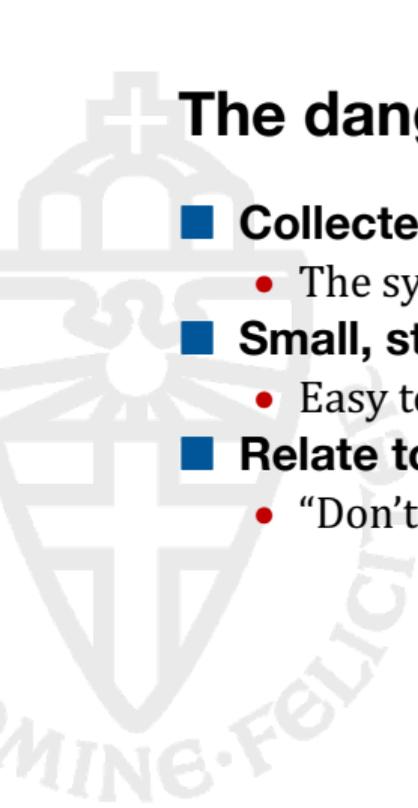
- What you reveal *explicitly* when asked

- **Observed**

- What you reveal *implicitly* by your behaviour

- **Inferred**

- What is derived from other data about you



The dangers of metadata

- **Collected surreptitiously**

- The systems we use radiate personal data continually

- **Small, structured, pieces of data**

- Easy to collect, store, process and analyse

- **Relate to behaviour**

- “Don’t listen to what a man says; look at what he does”



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Why is privacy important

In the late 20th century Romania was ruled by the dictator Nicolae Ceaușescu, with the help of his brutal secret police, the Securitate, and its half a million informers. In the 1980's there was a big shortage of food and fuel in Romania. As a result the Romanians suffered from hunger and cold. The Romanians feared the Securitate so much, that they were afraid to even talk among each other about the fact that they were hungry and cold. The risk that an informant would hear them and accuse them of criticising the government was simply too high. A study by a Romanian psychologist Radu Clit later found that the Romanians suffered most from the fact that they couldn't even talk about the fact that they were hungry and cold. Even more than that they suffered from being hungry and cold itself!

(Zanfir-Fortuna 2012)

Moral basis for data protection (Hoven and Vermaas 2007)

- **prevention of information-based harm**
 - Like guns, information may kill people
- **prevention of informational inequality**
 - The “market” of information
 - Non-discrimination
- **prevention of informational injustice**
 - Spheres of privacy must be protected
- **respect for moral autonomy.**
 - People change

The value of privacy

As a personal right

■ Protect

- Personal freedom
- Autonomy

■ Restore power balance

- Kafka's "The Trial"

As a societal need

■ Protect democratic process

- Prevent meddling with elections
- Freedom to vote without interference
- Consistent public political campaign

■ Debate status quo

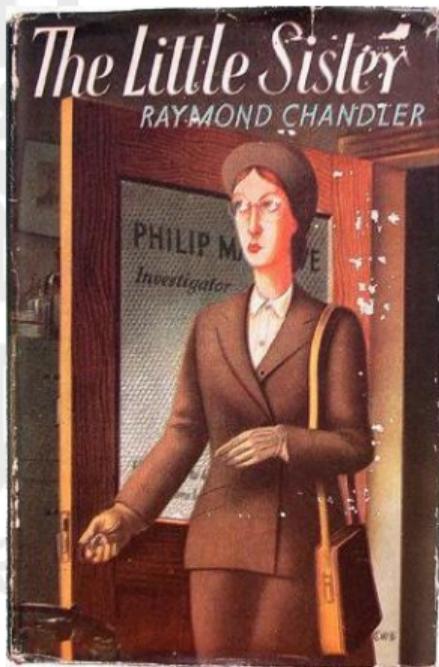
- Labour rights
- Women voting rights
- Gay rights

”

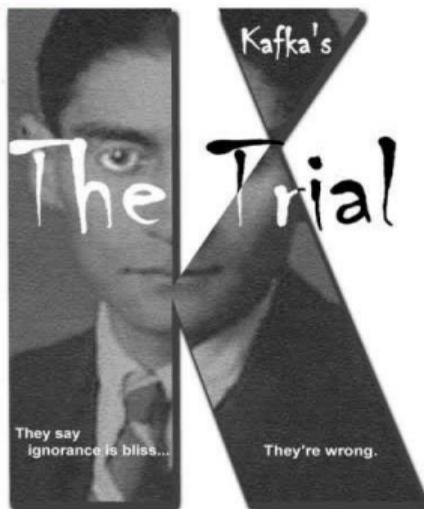
Privacy is essential for freedom, democracy, psychological well-being, individuality and creativity"

(Solove 2008)

Searching for the right metaphor



orwell / big brother



chandler / little sister

BIG BROTHER



**IS WATCHING
YOU**

kafka / the trial

You've got nothing to hide



FOKKE & SUKKE
WORDEN MET DE DAG PARANOÏDER



Have you!!??



I have nothing to hide.... (Solove 2007)

■ Hiding is natural

- There is no “I”, no self, without privacy
- It is impossible to be fully transparent

■ Freedom of thought

- That job offer looks interesting...
- That woman looks “interesting”...

■ Necessary to build relationships

- Contexts matter!

■ What is the data used for: investigation, anti-terrorism, or ...??

- Function creep

■ Everybody has something to be embarrassed about

- And everybody breaks the law a lot of times

■ Assumes that the problem is data you want to hide

- even “innocent” data can harm you

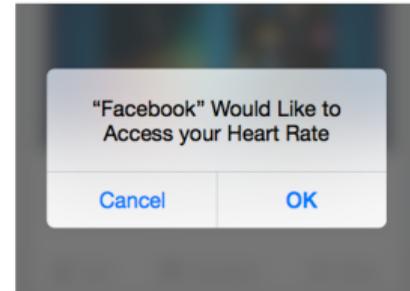
■ No distinction between illegal (legal) vs disgraceful (moral) vs ...:

- data is data

■ Norms change

- Pedophilia in NL

Beyond privacy: autonomy





The GDPR in 5 minutes



Applies when you process personal data?

- (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;

■ So...

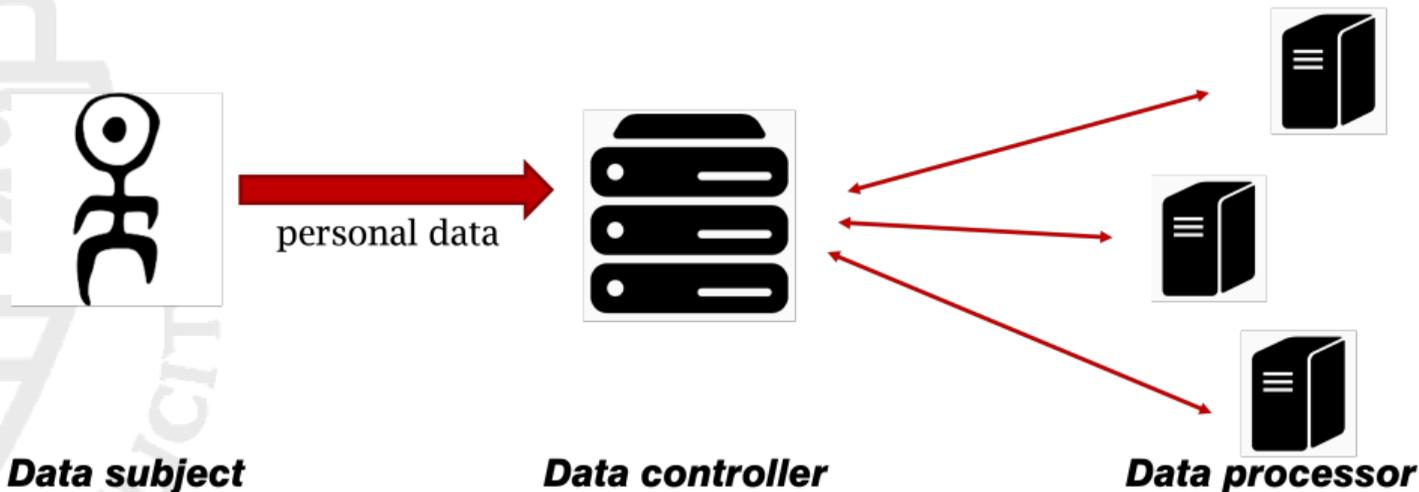
- Name
- Social security number
- Email address

■ But also...

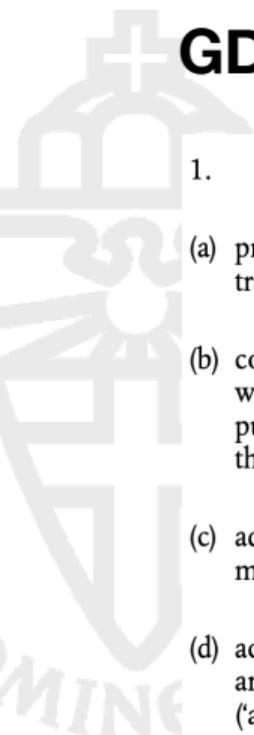
- License plate
- IP Address
- Likes
- Tweets
- Search terms

- 
- (2) 'processing' means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction;

Subject / controller / processor



(7) 'controller' means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its nomination may be provided for by Union or Member State law;



GDPR principles (art 5.)

1. Personal data shall be:

- (a) processed lawfully, fairly and in a transparent manner in relation to the data subject ('lawfulness, fairness and transparency');
- (b) collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall, in accordance with Article 89(1), not be considered to be incompatible with the initial purposes ('purpose limitation');
- (c) adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed ('data minimisation');
- (d) accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay ('accuracy');

GDPR principles (art 5.)

- (e) kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) subject to implementation of the appropriate technical and organisational measures required by this Regulation in order to safeguard the rights and freedoms of the data subject ('storage limitation');
 - (f) processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures ('integrity and confidentiality').
2. The controller shall be responsible for, and be able to demonstrate compliance with, paragraph 1 ('accountability').



GDPR lawfulness (art. 6)

1. Processing shall be lawful only if and to the extent that at least one of the following applies:
 - (a) the data subject has given consent to the processing of his or her personal data for one or more specific purposes;
 - (b) processing is necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract;
 - (c) processing is necessary for compliance with a legal obligation to which the controller is subject;
 - (d) processing is necessary in order to protect the vital interests of the data subject or of another natural person;
 - (e) processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
 - (f) processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child.

Point (f) of the first subparagraph shall not apply to processing carried out by public authorities in the performance of their tasks.

GDPR and automated decision making

Article 22

Automated individual decision-making, including profiling

1. The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.
2. Paragraph 1 shall not apply if the decision:
 - (a) is necessary for entering into, or performance of, a contract between the data subject and a data controller;
 - (b) is authorised by Union or Member State law to which the controller is subject and which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests; or
 - (c) is based on the data subject's explicit consent.
3. In the cases referred to in points (a) and (c) of paragraph 2, the data controller shall implement suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.
4. Decisions referred to in paragraph 2 shall not be based on special categories of personal data referred to in Article 9(1), unless point (a) or (g) of Article 9(2) applies and suitable measures to safeguard the data subject's rights and freedoms and legitimate interests are in place.

Data protection law (core principles)

■ Legitimate Processing Grounds

- consent
- necessity

■ Data Subject Rights

- notification
- access
- rectification
- object to profiling

■ Data Protection Principles

- purpose limitation
- data minimisation
- duration of retention
- accuracy of the data

■ Accountability

- risk based-approach
- transparency of processing
- data protection by design
- data protection impact assessment

And no, I am not a luddite



” Technology is neither good nor bad; nor is it neutral.

--- *Melvin Kranzberg, 1985*

Architecture is politics.

--- *Mitch Kapor, 1991*

Resources

PRIVACY IS HARD

AND SEVEN OTHER MYTHS

ACHIEVING PRIVACY
THROUGH CAREFUL DESIGN



Jaap-Henk Hoepman

■ Websites

- <http://wiki.science.ru.nl/privacy/>
- <https://www.eff.org/>
- <https://www.bof.nl>
- My blog <https://blog.xot.nl>

■ Books

- Ilija Trojanow, Juli Zeh “Aanslag op de vrijheid”, de Geus, 2010
- Bart de Koning “Alles onder controle”, Uitgeverij Balans, 2008.
- Jaap-Henk Hoepman “Privacy Is Hard And Seven Other Myths”, MIT Press, October 2021

See also references below

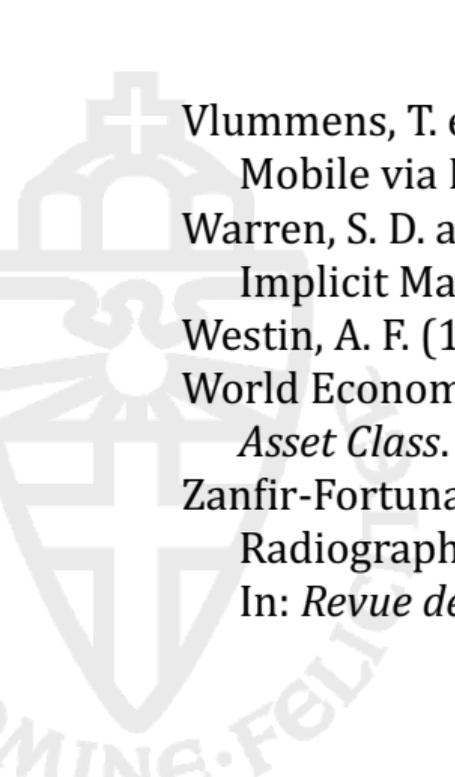
Questions / discussion



[Monty Python's Argument Clinic sketch]

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