

# Privacy and Politics

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## Outline

Introduction

Computer Security and privacy

Tenets

Fallacies

Recommendations

Conclusions

## Where we are, so far

Introduction

Computer Security and privacy

Tenets

Fallacies

Recommendations

Conclusions

## Who is this guy?

- ▶ Professor at Nijmegen (NL), in computer security
  - studied mathematics & philosophy (not law!)
- ▶ security research with societal relevance, eg. in **e-passports, voting, road pricing, smart meters, e-ticketing, privacy**
- ▶ regular role in media on security/privacy/intelligence issues, and occasionally in parliamentary expert meetings
- ▶ member of the Cyber Security Board in NL, but also of the Advise Board of Bits of Freedom, and Expert Board of Independent Intelligence supervision committee

## Plan for today

- (1) Some **background** on security and privacy
- (2) **Tenets** (*Stellingen*)
  - Basic truths about the digital world
- (3) **Fallacies**
  - Common misconceptions and framings
- (4) **Recommendations**
  - Own opinions and suggestions

## Where we are, so far

Introduction

Computer Security and privacy

Tenets

Fallacies

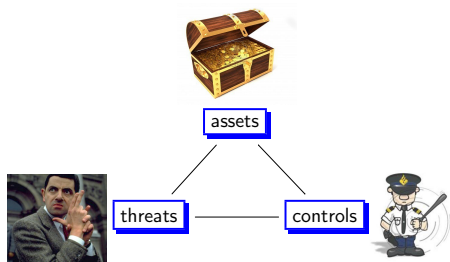
Recommendations

Conclusions

## What is computer security about?

My favourite definition:

regulating access to digital assets



Personal data is among the assets that you may want to protect

## Societal relevance

- ▶ Traditional view:
  - computer scientists are architects of the **digital** world
- ▶ Modern view:
  - computer scientists are architects of the **social** world

Computer security and privacy issues can make or break developments in:

- ▶ communication
- ▶ transportation
- ▶ health care
- ▶ finance & insurance
- ▶ government *etc.*

## Privacy and contexts, after Helen Nissenbaum

- ▶ We naturally live in different **contexts**
  - home, work, sports club, in church, with friends ...
- ▶ We naturally want to keep information in context
  - what we tell to our doctor should not end up in a supermarket
- ▶ People get upset when **contextual integrity** is broken
  - recall anger: about selling customer financial data (ING), about speeding data ending up at the police (TomTom), about school children's performances in online tests ending up at publishers
- ▶ When explained like this, almost **everybody** cares about privacy
- ▶ The Google's and Facebook's of this world make us use the **same identifier** everywhere or track us via **Like** and **cookies**
  - they break-up contexts, and destroy our basic privacy intuitions
  - Mark Zuckerberg: "Having two identities for yourself is a lack of integrity" 😞😞😞

## Privacy differences between EU and US

- ▶ **EU**
  - Privacy is a **fundamental right** (National/Charter/Convention)
  - It gives **opacity** (obscurity, impenetrability): a sphere of unmonitored freedom
  - Breaking this sphere can only happen if there is a law for it
- ▶ **US**
  - In practice a matter of negotiation
  - Laws exist, but mostly per sector (health care, finance, ...)
  - Privacy requires others to refrain from infringements ("The right to be let alone", Warren and Brandeis, 1890)

## EU Judges are the new privacy heroes

The European Court of Justice ("Luxembourg") is very influential, based on the EU Charter of Fundamental Rights

- ▶ **data retention** directive invalid: telecoms no longer obliged to store everyone's metadata
- ▶ **right to be forgotten** introduced: search engines must remove stigmatising links on request
- ▶ **Safe Harbour agreement** rejected: European data are not safe in the US.

This shows the need for a NL constitutional court, as protection against national politicians

## Where we are, so far

Introduction

Computer Security and privacy

Tenets

Fallacies

Recommendations

Conclusions

## Tenet I

Power relations in society are determined by (access to) data flows

- ▶ In the past, if you wanted to understand power: “follow the money!”
- ▶ Nowadays: “follow the data!”
- ▶ The Google / Facebook / Amazon’s have understood this all too well
- ▶ Learn to think in terms of data flows — and also of how to protect these flows

## Tenet II

If we wish to keep some level of privacy, we will have to use technical means to protect it

- ▶ This goes much further than **privacy-by-design-and-default** and **security-by-design** requirements, as in the GDPR
  - those principles apply to general ICT-systems, with other goals
- ▶ Tenet I is about ICT-systems dedicated to privacy protection
  - it is insufficiently acknowledged by the privacy movement
- ▶ following Nissenbaum: ICT-systems must **keep data in context**
  - More generally, EU fundamental rights must be embodied in technology

**Aside:** my own research is based on this tenet, especially **IRMA** and **PEP**, see also [www.privacybydesign.foundation](http://www.privacybydesign.foundation)

## Tenet III

ICT is highly political; its developments can (and should) be steered by regulation

- ▶ Very few politicians seem to recognise the political nature of ICT.
- ▶ Leaving all choices to “Silicon Valley” is also a political choice
- ▶ Large tech-firms lobby heavily **not** to intervene.
- ▶ Who is defending the public cause/interests in the digital world?
  - see also Rathenau report (*Opwaarderen*, feb’2017)

## Tenet IV

The early-day optimism about the internet giving individual freedom and transparency of the powerful has turned out to be so naive

- ▶ The internet has become a tool for mass surveillance
  - in the commercial sector, eg. via tracking cookies
  - in the public sector, as we learned from Snowden
- ▶ Individuals have become transparent, via Facebook and profiling, instead of the people in control
- ▶ the prevalent business model is economically and politically destructive, leading to excessive, concentrated wealth and power
  - if Zuckerberg decides to run for president, he can make it happen himself — that’s Berlusconi on steroids, via personalisation
- ▶ Pervasive profiling has led to filter-bubbles and easy manipulation — e.g. via fake news and differential pricing

(Read e.g. Evgeny Morozov or Andrew Keene)

## Where we are, so far

Introduction

Computer Security and privacy

Tenets

Fallacies

Recommendations

Conclusions

## Fallacy I

Everyone puts everything on Facebook anyway

- ▶ Usually this a precursor to a very privacy-unfriendly proposal
- ▶ Some people are careless indeed, but many are not
  - usually, after some deception, kids become rather careful
- ▶ If some people **choose** to go around naked, that is no excuse to **force** others to be naked too.

## Fallacy II

We will seek a **balance** between security and privacy

- ▶ Especially popular among politicians
  - if you see this, you can bet on it that **privacy will lose**
- ▶ Contrasting security and privacy is the lazy solution
  - remember: privacy is essential for personal security
- ▶ What we need is **both** privacy and security
  - that is where real innovation lies!
  - indeed, tough regulation often inspires innovation

## Fallacy III

We're good, since we've got user **consent**

- ▶ The consent mechanism **fails** in so many ways
  - many people agree blindly (always hit 'OK')
  - conditions are often unreadable 'legalese'
  - conditions are sometimes simply illegal, dumping responsibility on users
  - there is no real choice left, if the product (eg. a TV or car) has already been bought
- ▶ The consent mechanism fails **epically** in health care
  - agreement of sick people hardly reduces one's own responsibility
- ▶ Many IT-giants are moving into healthcare:
  - margins are highest
  - sick people don't whine about privacy

## Fallacy IV

We simply need all data for better healthcare

- ▶ First: be careful of such "big data cowboys", see the NL tax office scandal (Zembla, 1 feb. 2017)
  - ▶ Variations & generalisations: "useful data must be usable"
    - **but**: useful for whom? For whose benefit? Don't be naive!
  - ▶ Sure, everyone wants better healthcare, but also healthcare without:
    - **discrimination**
    - **risk-based selection**
    - **secondary usage of the data**
    - **breaking contextual integrity**
    - **big-IT becoming controller instead of processor**
    - **lock-in dependence on data handlers** (think of big-pharma)
- But all of this is part of the "better healthcare" vision!

## Fallacy V

If we cannot use all data, we loose from US companies who can, without restriction

- ▶ Twisted representation of a serious problem
  - well-intending companies should not be scrutinised and penalised whereas cowboys get away
- ▶ What's really needed is a **level playing field**
  - GDPR will apply broadly, to every one doing business in EU
  - broad and uniform enforcement will be needed

## Fallacy VI

We send you only the ads that **you** want to see

- ▶ NO, NO, NO — so naive again!
- ▶ They send you the adds that **they** want you to see!
  - and they adapt the prices to what they think you will pay
  - moreover, they selectively show you options
- ▶ This is called **price discrimination** or **targeted pricing**

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Tenets

Fallacies

Recommendations

Conclusions

## Recommendation I

See privacy and data protection as the new “green”, powering innovation

- ▶ When the first environmental protection laws appeared in the 1980s, after several big pollution scandals, industry complained bitterly about economic loss through these laws
- ▶ Nowadays “green” is widely accepted and a driver of economic growth: innovation through tough regulation
- ▶ We should copy the success of the green movement
  - The GDPR prepares the ground

## Recommendation II

Protect people, possibly even against themselves

- ▶ Freedom is most advantageous for people with money **and** data
- ▶ Sometimes you have to protect people against themselves
  - in civilised countries it is forbidden to sell your own organs (*buiten de handel geplaatst*)
  - maybe it should also be forbidden to sell your own medical data
- ▶ Counter-power against “Big-IT” requires some level of enlightened **paternalism** and also **duty of care**

## Recommendation III

Privacy protection must be an integral part of the cyber security agenda

- ▶ The next cabinet will most likely invest much more in cyber security
  - current slogan: *NL is a safe place to do business*
- ▶ Add slogan: *privacy protection is a license to do business*
  - required by GDPR, which will have huge impact
- ▶ Follow German rule: in all ICT-projects 10% of the budget must go to security **and** privacy.

## Recommendation IV

Recognise and defend the “public interests” in the digital world

- ▶ The **healthcare** sector is being colonised by Google, Apple, Philips ...
  - who in politics defends that personal data should remain in a medical context?
- ▶ Same story for cars, or TVs, toys, internet-of-things, ...
  - if you buy a Tesla, you have to sign that all your data goes to Tesla; will this be the norm?
- ▶ The essence of **smart cities** is plundering data of citizens and municipalities
- ▶ Strengthen the law, and its enforcement
  - e.g. disconnect/delete buttons

## Recommendation V

Introduce new rights to receive information, without any monitoring or profiling

- ▶ Traditional freedoms of expression focus on **sending** information
- ▶ In a time of filter-bubbles we need new rights to **receive**,
  - without personalised pre-selection
  - without monitoring
- ▶ We need a right **not-to-be-profiled**, just like a right-to-be-forgotten

## Recommendation VI

Treat big-IT as utilities and break them up

- ▶ Use the power of the law, existing and new, ...
- ▶ ... based on a critical vision and a sharp view on what is happening.

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## Main point



Individual dignity, autonomy, freedom and privacy are at stake!

Thanks for your attention. Questions/remarks?

