DS 593: Privacy in Practice

Historical and Modern Contexts for Privacy

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Logistics

- Join the Piazza and Gradescope if you haven't yet
- First set of readings is out today
- Looking into enrollment overrides

Last time

- Syllabus

- Motivation

- Some Technical History

Framing Questions

- What is the cost of data?
  - Especially the non-financial cost

- What does it mean to give user's agency
  - Ability to reason about the technologies around them intuitively
  - And then ability to make usage decisions based on that

- When is **techno-solutionism** appropriate
  - There are many ways to solve problems: technically, legally, socially, etc
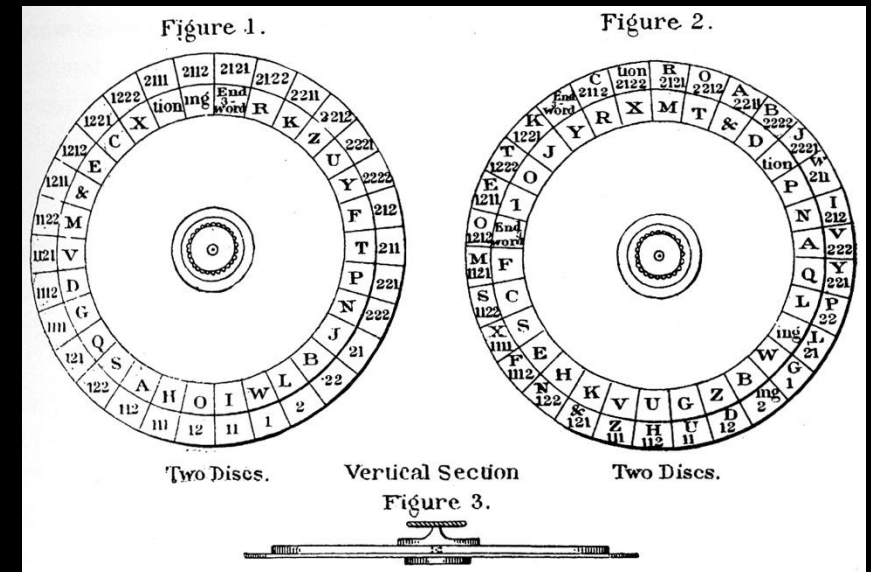
Today

- Privacy Through a different lens

- Privacy In Modern Contexts

Where did Privacy Start?

- Oikos vs Polis

- Sanctity of Family

- A Communal Boundary

Ciphers

- A cipher is an algorithm for transforming information in a secret manner

- Usually quite technical

Cants

- A Cant, also known as a language game, argot, or secret language is a way to speak in a way that is incomprehensible to an untrained listener

- Generally requires no additional tools

- Often organic

Properties [Halliday, *Anti-Languages*]

- An anti-society is a society set up within another society as a conscious alternative to it.
- Like the early records of the languages of exotic cultures, the information usually comes to us as word lists.
- The simplest form taken by an anti-language is that of new words from old: it is a language relexicalised.
- The principle is that of same grammar, different vocabulary.
- Effective communication depends on exchanging meanings that are inaccessible to the layperson.
- The anti-language is not just an optional extra; it is the fundamental element in the existence of the "second life" phenomenon.
- The most important vehicle of reality-maintenance is conversation. All who employ this same form of communication are reality-maintaining others.
- The anti-language is a vehicle of resocialisation.
- There is continuity between language and anti-language.

Nushu

- A secret language from Hunan, China around 15 BCE

- It means "Women's Writing" and was used by women to secretly communicate with each other

- It looks similar to Chinese but characters are phonetic not logographic

- Potentially optimized to fit embroidery patterns

Thieves' Cant

- Arose in Great Britain around the 16th Century

- Used by criminals to escape the notice of law enforcement

- Was also used by lower class and beggars

- Lots of words in modern parlance: Shoplifter, Rascal, Rat, Sham, Slang

Polari

- Builds on the elements of various Cants and languages

- Was used prominently by queer communities in English speaking regions up until the late 1960s

- Was a source of community, identity, and critique

Operation Vula

- Initiated by the African National Congress in 1986 as part of their efforts to end apartheid in South Africa

- A custom built, flexible, grassroots secret communication network

- "cryptology was an arcane science for bored mathematicians, not for underground activists" (Jenkin, 1995)

What do we see from this history?

What do we see from this history?

- Focus was on community and organization

- Almost a complete disconnect from more formal and technical cipher techniques

Modern Contexts

- Before we finally try to define privacy, the last thing is understanding how privacy as an issue is coming up today

Surveillance

Data mining and training
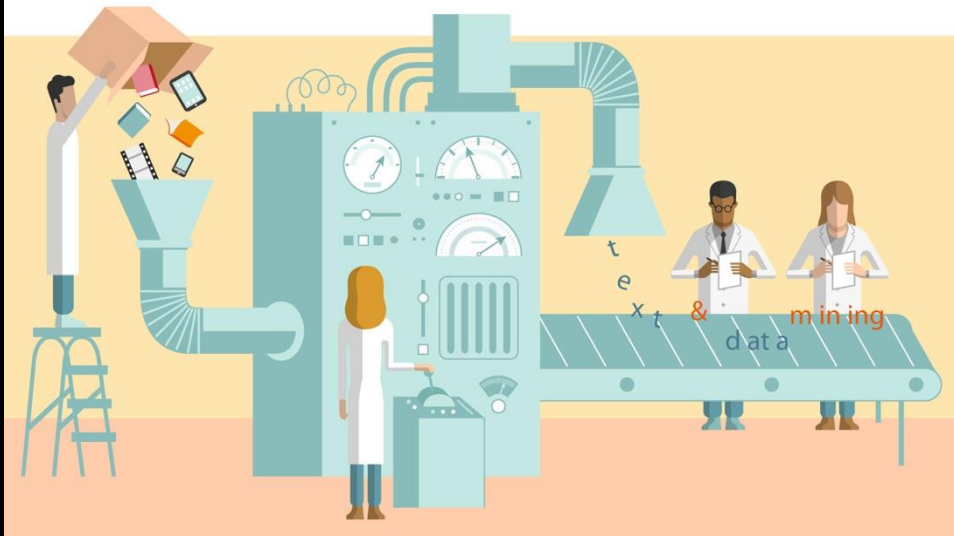
Social Media Privacy

Facial Recognition
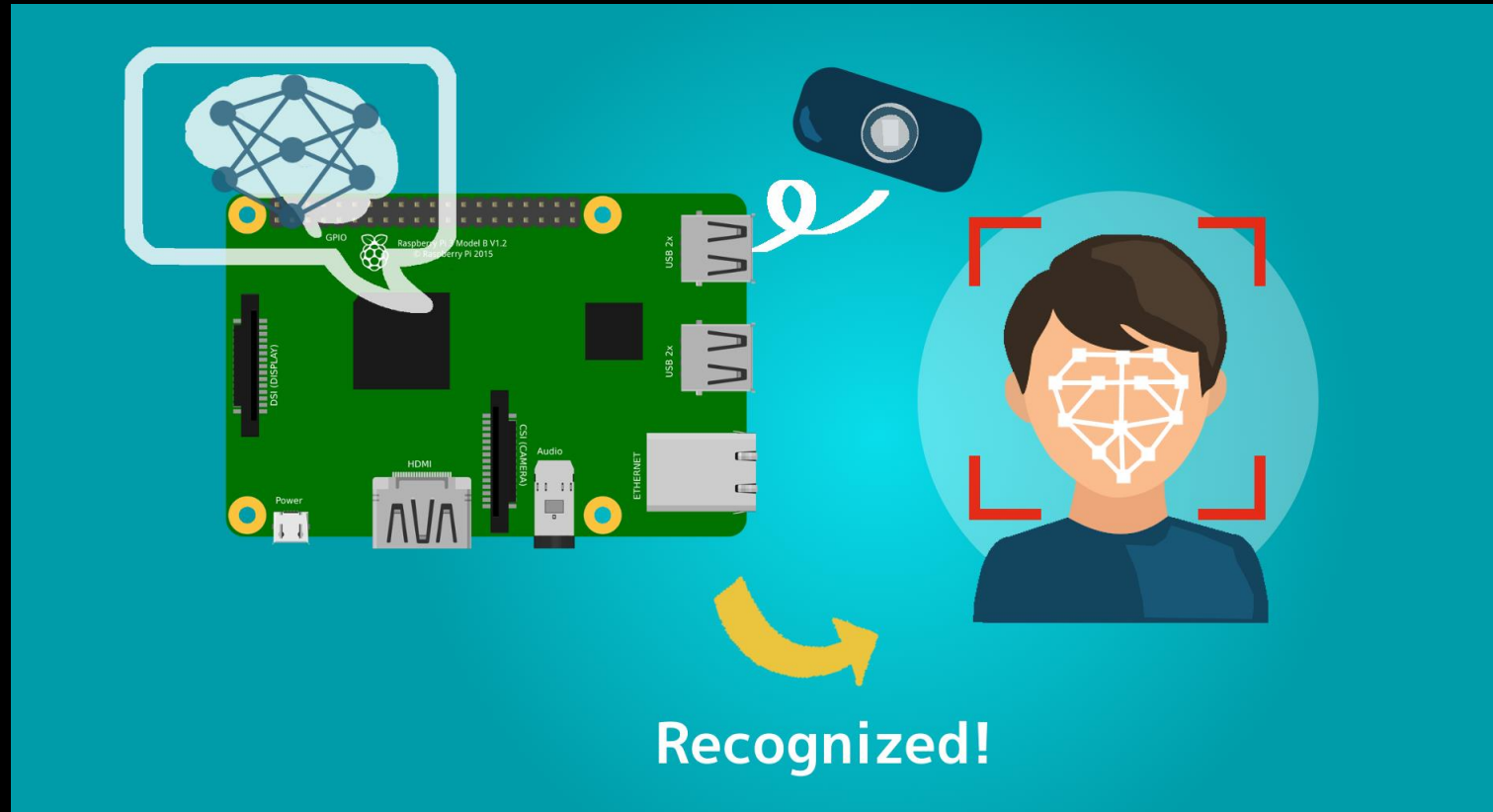
Data Breaches
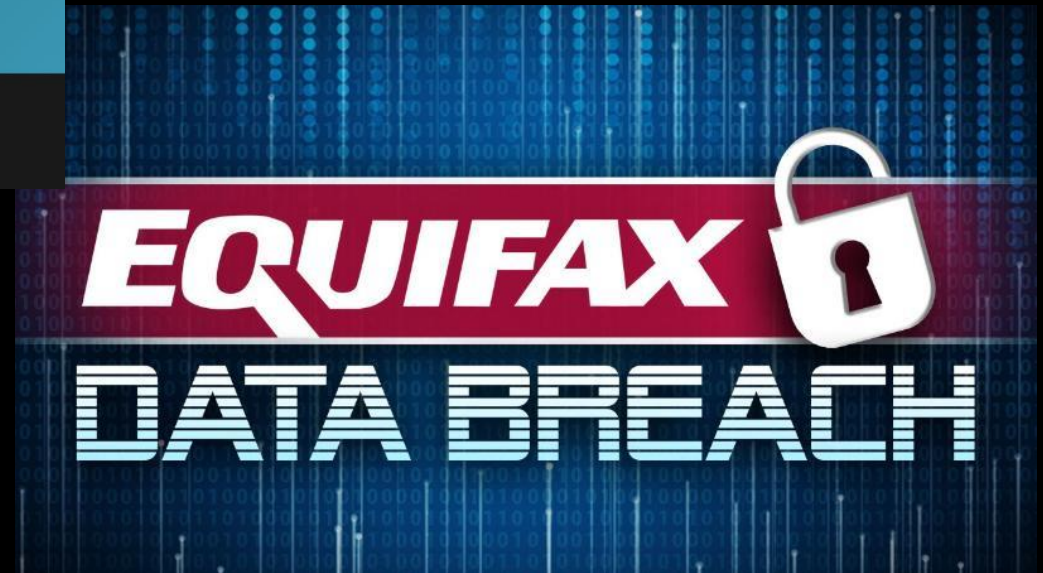
Regulation

Privacy and Law Enforcement

Digital Identity and Anonymity
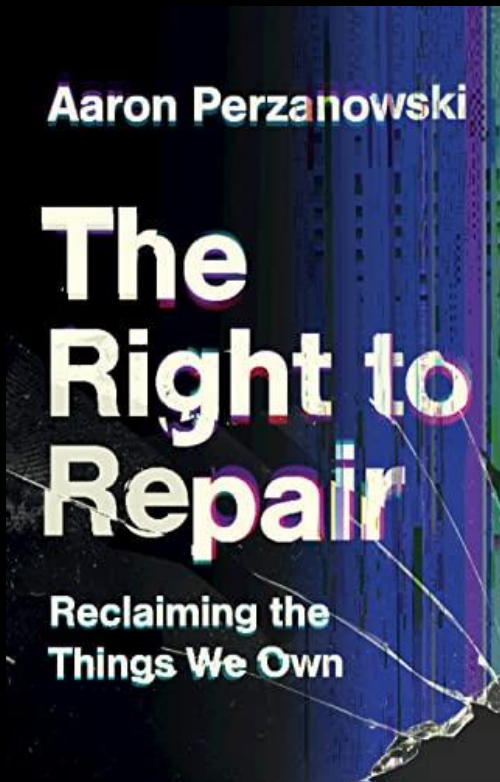
Digital Footprint

- Right to be Forgotten

- Persistence of data on the internet

Right to Repair, Copyright, and Piracy

Next time

- Lets define some things!