

Privacy

1 What is privacy?

- Privacy related to notion of access & ownership
- Access:
 - Physical proximity to a person
 - Knowledge about a person
- Edmund Byrne: *Privacy is a “zone of inaccessibility”*
- Edward Bloustein: *Privacy violations are an affront to human dignity.*
- Too much individual privacy can harm society.

2 History of privacy

- Internal walls: most people didn't have walls.
- Solo beds: One bed shared with the entire family, and guests.
- In 1776, US president's comment on British right to search homes sparked the fight for independence: unjustified violation of privacy.
- Information privacy (1900s)
 - information about citizens were public (the first American census).
 - Post office and privacy: post card without envelope (cheap)

3 The world has changed

- Privacy is the right to “being left alone”.
- We have our privacy as long as we are being left alone by other people, organisations or governments.
- In the era of technology, privacy is more about personal information, not physical boundaries.

4 Do we have a right to privacy?

- “No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation.”
- “Everyone has the right to the protection of the law against such interference or attacks.”
 - Article 12 - Respect for privacy, the home and the family. Universal Declaration of Human Rights, United Nations, 1948. http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf
- “Everyone has the right to respect for his or her private and family life, home and communications.”
 - Article 7 - Respect for private and family life. Charter of Fundamental Rights of the European Union <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12012P/TXT&from=EN>

5 Exaggeration of privacy

- Secrecy versus privacy: what is the difference between them?
- Solving crimes: would information disclosure violate privacy principles?
- Pressure on the nuclear family
 - Loss of pre-industrial age support structures
- Isolation and seclusion
 - meditation in isolation or privately?
- Loneliness

6 Benefits from privacy

- Individuality
 - Separate ‘moral agent’ (capable of acting with reference to right and wrong)
 - Being yourself
 - Time without the public mask
- Invention and creativity
 - Focus
 - Silence
- Building relationships
 - Trust and friendship
 - * Ladder of privacy (different amounts of personal information to different types of people)
 - * Intimacy (How can companies meet the privacy requirements while developing an intimate relationship with their customers?)

7 Privacy and cyber-technology

- Our privacy is affected by cyber-technology whether we owned or even used a networked computer.
- How much personal information can be acquired about us every day?
- Consider the way we have been watched every day almost everywhere.
- Also, consider, web-based applications such as Google Street View.
- Personal data, including our web-browsing interests, can be easily acquired by organisations. Do they always need our personal information?
 - What is the risk? Information can be sold to third parties!
- Privacy concerns now affect many aspects of our day-to-day lives (commerce, healthcare, work, etc.)
- There are many types of privacy:
 - Consumer privacy (privacy-related threats in e-commerce)
 - Employee/workplace privacy (invisible line managers)
 - Location privacy (RFID or GPS)
 - Medical/healthcare privacy (centralized electronic registry of medical records)

8 Identify some of the ways that cyber-technology makes you concerned about your privacy.

- Amount of personal information that can now be collected
- Speed at which personal information can now be transferred and exchanged
- Duration of time in which personal information can now be retained
- Kinds of personal information (such as transactional information) that can be acquired

9 Public safety or privacy

- Edward Snowden revealed US National Security Agency's violation of privacy law.
- Prism (a surveillance programme) used for tracking online communication.
- UK spy agency taps fiber-optic cables.
- Angela Merkel 'warns' Barack Obama! (<http://www.bbc.co.uk/news/world-us-canada-23123964>)
- Watchdog warns about the collection of Big Data with the proliferation of CCTV (<https://www.theguardian.com/uk-news/2017/mar/14/public-faces-mass-invasion-of-privacy-as-big-data-and-surveillance-merge>)
 - in UK, 1 CCTV for every 14 people (we are caught 300 times by them daily). China has 1 CCTV for every 427,000. (<http://www.dailymail.co.uk/news/article-1205607/Shock-figures-reveal-Britain-CCTV-camera-14-people--China.html>)

10 Technologies and Privacy

- Loyalty programs (club cards, rewards card, points cards)
 - data collection
- Body scanners
 - Image creation
 - Video: <https://www.youtube.com/watch?v=BwsWAXo2xmo>
- 'Black boxes'
 - Not just planes

11 Surveillance

- CCTV
- Oyster Cards in London
- Loyalty Cards
- Email
 - Monitored
 - Public key cryptography - make the key available upon request
 - * The assumption is refusal \Rightarrow guilt
 - * always morally correct?

12 Monitoring you

- To ensure that organisation's regulations and procedures are being kept
- To establish facts, e.g. by
 - cameras
 - agents
 - witnesses
- To prevent / detect crime
- To investigate / detect unauthorised use of telecommunication systems
- To ensure the effective operation of the system
 - phone services
- To determine whether a communication within business is personal

13 Biometrics

- What might we measure
 - Easily visible characteristics
 - * Height, weight, structure
 - * Eye colour (Hair colour??)
 - * Glasses, hearing aid, wheelchair user. . .
 - Getting a bit more personal
 - * Fingerprints & handprints: recently: “ear-prints”, “walk-prints”?
 - * Retinal scans
 - * Ear lobe capillary patterns
 - * Skull measurement
 - * DNA
 - * Voice recognition
 - * article: <https://skift.com/2013/05/11/dublin-airport-now-using-biometric-gates-to-quickly-process-passengers/> and video: <https://www.sita.aero/resources/type/videos/sita-smart-path>

14 Regulation of Investigatory Powers Act 2000

- <http://www.legislation.gov.uk/ukpga/2000/23/contents>
- A framework for controlling the lawful interception of computer, telephone and postal and Internet communication.
- Government security and law enforcement authorities can intercept, monitor and investigate electronic data.
- Under the Act and the associated regulations, organisations (those providing telecommunication services) can monitor and record communications.

15 Regulation of Investigatory Powers Act 2000

- <http://www.legislation.gov.uk/ukpga/2000/23/contents>
- The main purpose of the Act is to ensure that the relevant investigatory powers are used in accordance with human rights.
- These powers are:
 - the interception of communications;
 - the acquisition of communications data (e.g. billing data);
 - intrusive surveillance (in private homes/private vehicles);
 - covert surveillance in the course of specific operations;
 - the use of covert human intelligence sources (agents, informants, undercover officers);
 - access to encrypted data

16 Regulation of Investigatory Powers Act 2000

- <http://www.legislation.gov.uk/ukpga/2000/23/contents>
- For each of these powers, the Act will ensure that the law clearly covers:
 - the purposes for which they may be used;
 - which authorities can use the powers;
 - who should authorise each use of the power;
 - the use that can be made of the material gained;
 - independent judicial oversight;

- a means of redress for the individual
- Not all of these matters need be dealt with in this Act - in many cases existing legislation already covers the ground
- The Act will work in conjunction with existing legislation, in particular the *Intelligence Services Act 1994*, the *Police Act 1997* and the *Human Rights Act 1998*

17 The act and the regulations are criticised

- Security experts and some sectors of the telecommunications industry argued that:
 - there are ways in which the act can be rendered ineffective
 - allowing the seizure of encryption keys will undermine the effectiveness of encryption systems.

18 You should be able to:

- Identify a source that helps you gain an understanding of the UK's public and government view on privacy
- Write at least 5 key points about privacy including:
 - Pros and cons of a society that favours privacy (with examples)
 - A summary of the Regulation of Investigatory Powers Act 2000
- Examine your own view on privacy.
- Contrast and compare it to others outside of your immediate circle of family and friends. Perhaps different cultures learned from literature, travel, etc.