CS 4873: Computing, Society & Professionalism

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Week 6: Privacy I February 10, 2020

Midterm Prep

With your permission, you give us more permission. If you give us information about who some of your friends are, we can probably use some of that information, again, with your permission, or improve the quality of our searches. We don't need you to type at all, because we know where you are, with your permission. We know where you have been, with your permission. We an more or less guess what you are thinking about. — *Eric Schmidt, Google CEO (The Atlantic)*

Technology Erodes Privacy

- Information collection, exchange, combination, and distribution easier than ever means less privacy
- Scott McNealy (Sun Microsystems) in 1999:
 "You have zero privacy anyway. Get over it."
- Zuckerberg in 2010 said that the social norm is to share everything, so people are little concerned about their privacy.

- Is privacy really a myth in this information age?
- This class and next: we will consider how we leave an "electronic trail" of information behind us and what others can do with this info

Perspectives on Privacy

An Old Definition of Privacy

- Privacy rights have evolved from property rights: "a man's home is his castle"; no one should be allowed in without permission
- Privacy: "right to be left alone"
 - Samuel Warren (Harvard graduate businessman) and Louis Brandeis (Boston attorney; later Supreme Court justice)
 - Influential paper from 1890
- This led to 3rd Amendment to U.S. Constitution principle of home as a sanctuary in the Bill of Rights:

No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

Is There a Natural Right to Privacy?

- Judith Jarvis Thomson: the definition of privacy as "the right to be left alone" is problematic
 - Smith being monitored at his home with a video camera without his knowledge – he is left alone technically, but it is a privacy violation
- Judith Jarvis Thomson: "Privacy rights" overlap other rights; violation of privacy is often a violation of some other right in this cluster
- Conclusion: Privacy is not a natural right, but it is a prudential right

Modern Definition of Privacy

- Privacy is a "zone of inaccessibility"
- Privacy related to notion of access
 - Privacy is not "being alone", but defining who has access to what
- Access
 - Physical proximity to a person
 - Knowledge about a person
- Regarding access where to draw the line between private and public
- Privacy is a social arrangement that allows individuals to have some level of control over who is able to gain access to their physical selves and their personal information

Alternative Definitions of Privacy

- Privacy violations are an affront to human dignity
 - You violate privacy when you treat a person as a means to an end.
 - Some things ought not be known you look away when your friend is typing their password
- Too much individual privacy can harm society

Benefits of Privacy

- Individual growth
 - Necessary to blossom into a unique individual
- Individual responsibility
- Freedom to be yourself
 - Nobody likes to be videotaped all the time
- Intellectual and spiritual growth
- Development of loving, trusting, caring, intimate relationships

Harms of Privacy

- Cover for illegal or immoral activities
- Burden on the nuclear family
- Hidden dysfunctional families
 - Incidents of domestic violence
- Ignored people on society's fringes
 - People with disability e.g., with mental illness

Class Discussion 1: Secret Monitoring

Rule Utilitarian Evaluation

- If everyone monitored nannies, it would not remain a secret for long
- Consequences
 - Nannies would be on best behavior in front of camera
 - Might reduce child abuse and parents' peace of mind
 - Would also increase stress and reduce job satisfaction of child care providers
 - Might result in higher turnover rate and less experienced pool of nannies, who would provide lowerquality care
- Harms appear greater than benefits, so we conclude action was wrong

Social Contract Theory Evaluation

- It is reasonable for society to give people privacy in their own homes
- Nanny has a reasonable expectation that her interactions with baby inside home are private
- The parents' decision to secretly monitor the nanny is wrong because it violates her privacy

Kantian Evaluation

- Imagine rule, "An employer may secretly monitor the work of an employee who works with vulnerable people"
- If universalized, there would be no expectation of privacy by employees, so secret monitoring would be impossible
- Proposed rule is self-defeating, so it is wrong for the parents to act according to the rule

Summary

- Three analyses have concluded Sullivans were wrong to secretly monitor how well their nanny takes care of their baby
- Morally acceptable options
 - Conduct more comprehensive interview of nanny
 - More thoroughly check nanny's references
 - Spend a day or two at home observing nanny from a distance
 - Be up-front with nanny about desire to install and use surveillance software on laptop

Information Disclosures

Data Gathering and Privacy Implications

- Facebook tags
- Enhanced 911 services
- Rewards or loyalty programs
- Body scanners
- Implanted chips
- OnStar
- Automobile "black boxes"
- Medical records
- Digital video recorders
- Cookies and flash cookies

But where to draw the line?

Public Records

- Public record: information about an incident or action reported to a government agency for purpose of informing the public
- Examples: birth certificates, marriage licenses, motor vehicle records, criminal records, deeds to property
- Computerized databases and Internet have made public records much easier to access

Rewards or Loyalty Programs

- Shoppers who belong to store's rewards program can save money on many of their purchases
- Computers use information about buying habits to provide personalized service
 - ShopRite computerized shopping carts with pop-up ads
- Do card users pay less, or do non-users get overcharged?

Facebook Tags

- Facebook allows users to tag people who are on their list of friends
- New feature from couple of years ago automatic tagging
- About 100 million tags added per day in Facebook
- Facebook uses facial recognition to suggest name of friend appearing in photo
- Does this feature increase risk of improper tagging?

Body Scanners

- Some department stores have 3-D body scanners
- Computer can use this information to recommend clothes
- Scans can also be used to produce custommade clothing
- Can body scanners be misused?

Medical Records

- Advantages of changing from paper-based to electronic medical records
- Quicker and cheaper for information to be shared among caregivers
 - Lower medical costs
 - Improve quality of medical care
- Once information in a database, more difficult to control how it is disseminated
 - What are possible risks?

Implanted Chips

- Taiwan: Every domesticated dog must have an implanted microchip
 - Size of a grain of rice; implanted into ear
 - Chip contains name, address of owner
 - Allows lost dogs to be returned to owners
- RFID tags approved for use in humans
 - Can be used to store medical information
 - Can be used as a "debit card"
- What kind of privacy violations are possible with implanted chips?

The newfound privacy conundrum presented by installing a device that can literally listen to everything you're saying represents a chilling new development in the age of internet-connected things. By buying a smart speaker, you're effectively paying money to let a huge tech company surveil you. And I don't mean to sound overly cynical about this, either. Amazon, Google, Apple, and others say that their devices aren't spying on unsuspecting families. The only problem is that these gadgets are both hackable and prone to bugs.

Gizmodo about Amazon Echo/Google Home etc.

Is using Alexa or Google Home a violation of privacy?