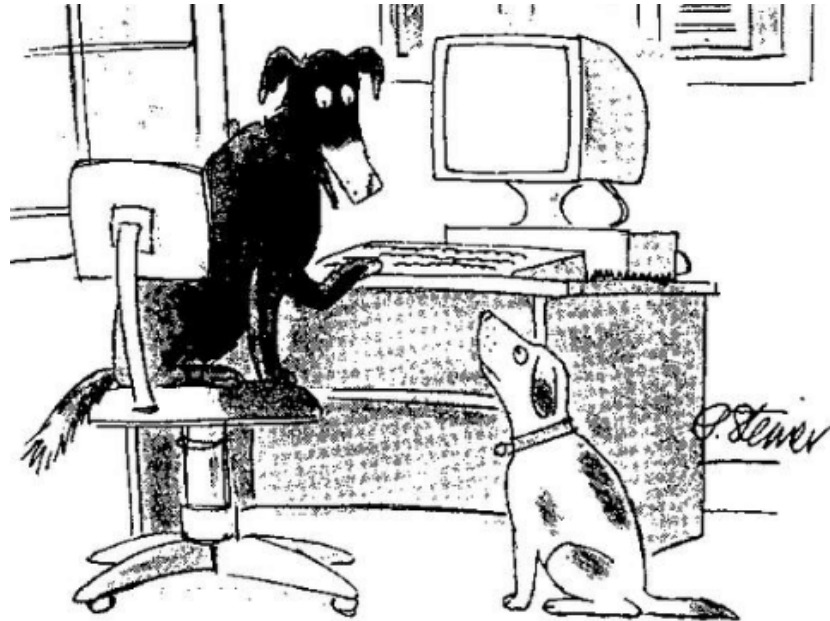# Monday 7/11 - Privacy in the Digital Age

"On the Internet, nobody knows you're a dog."

Important link with more important links:

Announcements:

In the News:
-

Agenda:
- Privacy - what does the law say?
  - Phone searches, the 4th amendment, and public spaces
- Beanie Baby Fraud and Sea Creatures
- The Cookie Monster is a Stalker

Do not edit above this line.

Questions or Things to Share?
-

4th and 5th Amendment

The 4th amendment reads:
The right of the people to be secure in their persons, houses, papers,
and effects, against unreasonable searches and seizures, shall not be
violated, and no warrants shall issue, but upon probable cause, supported
by oath or affirmation, and particularly describing the place to
be searched, and the persons or things to be seized.

The 5th amendment reads:
No person shall be held to answer for a capital, or otherwise infamous
crime, unless on a presentment or indictment of a Grand Jury, except
in cases arising in the land or naval forces, or in the Militia, when in
actual service in time of War or public danger; nor shall any person be
subject for the same offence to be twice put in jeopardy of life or limb;
nor shall be compelled in any criminal case to be a witness against
himself, nor be deprived of life, liberty, or property, without due
process of law; nor shall private property be taken for public use,
without just compensation.

Physical v Digital Searches
What makes a search of your phone unique from a search of your apartment? Write down your
name and some initial thoughts about the key differences between a digital object, like a cell
phone, and a physical object, like the contents of your home.

You got evidence on your phone?

In Riley V. California the defendant, David Riley was pulled over for driving with expired
registration tags. During the stop, officers realized Riley was driving with an expired
license so they impounded the car and seized the contents. During a search of the car,
they found firearms in the car and a smartphone on Riley. The officers saw some
incoming text messages on the lock screen that indicated Riley was associated with the
Bloods gang and further searched the phone. Officers found a photo of Riley posing in
front of a car that was suspected to be involved in a shooting a few weeks earlier. Riley
was charged in connection to the earlier shooting with attempted murder.

Was Riley's 4th amendment right violated during this process? Did the officers have a right to further investigate the smart phone after seeing the initial suspicious text messages on the lock screen? Discuss with your group & write down your names.

But I Saw Something!!!!!

An police officer visiting a local Boulder coffee shop. The officer walk by an unattended computer while in line for coffee and notice some nude images pop up that look like they're of young children. A guy comes out of the bathroom and sees the officer looking at his laptop. He quickly runs up, grabs his laptop and leaves the shop. The officer runs after him and arrests him.

You're the district attorney for Boulder and this case gets brought to you. Given the circumstances, do you think the arrest was constitutional? What evidence would you need to determine whether or not the arrest was constitutional? Discuss with your group.

Beanie Baby Fraud and Sea Creatures

This past year, Netflix released a documentary about crimes that happen using the Internet. One of the episodes is focused on some individuals who were engaged in beanie baby and other (more serious) types of wirefraud facilitated through online forums. One of the people committing fraud was Steven Travis Brawner aka "The Hacker" who was suspected of running a crime ring that filed illegal tax returns & laundered money. The government caught The Hacker using a piece of technology, without an explicitly warrant, called a Stingray, which acts as a cell tower and intercepts any calls in its vicinity. The Hacker was able to push back against charges by accusing the government of using technology (the Stingray) that violated the 4th amendment.

Does the use of a Stingray require a warrant? Was The Hacker's arrest constitutional? What are some potential ways that the Stingray device could violate people's 4th amendment right? Discuss with your group.

HE SEES YOU WHEN YOU'RE SLEEPING, HE SEES YOU WHEN YOU'RE PRAYING

In 2021 the ACLU filed several FOIA requests to access records documenting how the [U.S government was purchasing location information from Muslim prayer apps](). The U.S government bought services from two companies, Babel Street and X-Mode. Babel Street provided the government with access to its service, "Locate-X" which allows investigators to closely track the movement of cell phones. The company claims that the data is anonymized but can be easily de-anonymized. X-Mode works by paying apps to let them skim location data from users while they use the app. End users are often unaware about the app's presence. The app, Muslim Pro, allowed X-mode to operate within its mobile application but stopped providing access once the news story broke. The government claims that it uses these technologies in accordance with constitutional rights for U.S citizens. ACLU claims that the government's use of these technologies is an intrusion into religious freedom.

Discuss the following in your groups:
  (1) Is the U.S government's use of these two location tracking services constitutional?
  (2) Is one method of acquiring location data worse than the other (e.g. is Locate-X worse than X-mode or vice versa)?
  (3) What responsibility does the Muslim Pro app have for allowing X-mode to operate in its mobile application?

READING/WATCHING FOR TONIGHT

Tuesday 7/12 - Becoming Known

Announcements:

In the News:
  ●

Agenda:
  ● Balancing privacy & being known in the 21st century
  ● What are the dangers of exclusion?
  ● Anonymous for whom?

Additional Resources
  ● The Known Citizen - Sarah Igo (Looooong but fabulous book if you're interested in how conceptions of privacy have changed)
  ● [Enter the Digital Dragnet]() - Logic Magazine Dec 2020 Edition

Do not edit above this line.

Individual Reflection
Write your name down and answer the following prompts:

(1) What does privacy mean to you?
(2) Do you feel as if you have a right to privacy?
(3) Are able to exercise that right to privacy effectively? Why or why not?

TO BE AN UNKNOWN CITIZEN

"Writers focused on surveillance often neglect this crucial fact: that concerns about intrusion have often been accompanied by a desire for visibility," (Igo pg.15)

Many surveillance and privacy scholars often fret about the "end of privacy" in the modern world. However, this concern neglects the perspective that being visible, or known, also entails access to goods and services that could not be provided unless one was known.

Imagine a world in which the government had absolutely no information about its population. Brainstorm with your group and come up with a short fictional scenario about what a day in the life would look like in this situation. Think about the very basics of everyday life (e.g. the public infrastructures we use to get places, like roads, access to public schools, etc.). Would this imagined scenario be better than the situation in which we currently live?

UWILLINGLY KNOWN

When applying for SNAP benefits (aka food stamps), applicants must list information such as their social security number (or other state ID), address, birthday, etc,. When a house goes into foreclosure, owner information is collected by foreclosure agencies. When credit card payments are late, debtor information is collected by credit bureaus.

In 2009 the Joint Regional Intelligence Center (JRIC), a multiagency, multidisciplinary surveillance organization started using Palantir to connect and analyze Suspicious Activity Reports (SARs). One of perks of Palantir's service was its access to and ability to integrate many different data sources into on cohesive searchable database. Social welfare program data, foreclosure data, and credit bureau data were among the data sources integrated into the JRIC's Palantir database.

Consider the following prompts in your groups:
(1) What dangers does this "dragnet" style approach to surveillance pose? Who is endangered by this approach?
(2) What are the benefits to this approach? And who benefits?
(3) At what point does access to and incorporation of disparate datasets yield diminishing returns — basically does the utility of data continue to increase with the scale of data? Why or why not?

TO BE (UN)KNOWN

Consider the following two scenarios:

Scenario 1: You could have a social media feed (e.g. Reddit, Twitter, Instagram, TikTok) feed that catered **perfectly** to your tastes and preferences but you had to give the social media company complete access to your entire digital footprint, starting from when you first started using the Internet.

Scenario 2: You maintain complete privacy regarding your digital footprint but none of your social media feeds show you content that you're really interested in. Instead you have to scroll for long periods of time to find interesting content and the platform doesn't even remember your likes and saves so you can't "intentionally" curate content.

Which of the two scenarios is more appealing to you? Why? Obviously, both are extremes; what would an ideal middle ground look like for you? Write your name down below and reflect on the above prompts.

THE COSTS OF EXCLUSION

Last night you read an article about data exclusion, or the situation in which a person's habits, preferences, and information are not collected and incorporated into a digital dataset. To recap, the author introduced two characters, one who's every move is accounted for and captured in a digital footprint and another who is invisible to digital tracking surveillance.

Consider the following in your groups:
  (1) Which person would you rather be?
  (2) What are the pros and cons of being "invisible" to digital surveillance?
  (3) What are the parallels between this example from the article and current movements towards a "cash-less" economy.

Group 1 -

Group 2 -

Group 3 -

Group 4 -

ANONYMOUS FOR WHOM?
Latayana Sweeny highlighted how in her experiments, her team concluded that nearly every person is uniquely identifiable if you know their birthdate and zipcode.

Consider the following decentralized identity verification system: In light of identity theft and relative high-value/high-risk nature of a centralized idnentification system such as social security numbers, a group of researchers proposed a decentralized identity verfication system. This systems follows the same logic of Sweeney's original study, a person is identifiable through a combination of demographic factors. The way the system works is that a person can be identified if 3 other people, who are themselves identified, can provide three key pieces of demographic information about the person (e.g. birthdate, current zipcode, mother's maiden name).

Debate the potential pros and cons of this decentralized approach to identity verification in your groups.

READING/WATCHING FOR TONIGHT

-

REFLECTION (end-of-class)

Please take a moment to leave a note about something interesting you thought about or learned in class today and/or questions that the class raised for you. (Please include your name by default, but you are also welcome to include an anonymous note.)

Wednesday 7/13 - Context Matters!

Announcements:
-

In the News:
-

Agenda:
- Is it justified?
- Have you thought about?
- Open office hours

Additional Resources
- [Physiognomic Artificial Intelligence](#) - Luke Stark & Jevan Huston (Fordham Law Journal) 2022

- [Deepfake porn is ruining women's lives. Now the law may finally ban it.](#) - Karen Hao (MIT Tech Review) 2021
- [What is AI? We drew you a flowchart to work it out](#) - Karen Hao (MIT Tech Review) 2018

INDIVIDUAL REFLECTION

An AI scientist is working on building a large language model that they claim will be able to convincing pass as a human ([see this article written by GPT-3](#)) when writing.

Write down your name and imagine what could go wrong.

I SPY WITH MY LITTLE NEURAL NETWORK…

The NYTimes article you read last night talked about two Stanford researchers' image recognition technology that they claimed could identify gay people through facial images with a high level of accuracy. The researchers claimed that they had done the study to **grow awareness** of the potential dangers of facial recognition.

Unlike previous studies done by one of the researchers (Dr. Kosinski) on identifying correlations between Facebook likes and demographic information, this facial recognition took things one step further by **asserting the predictiveness of facial features on sexual orientation**. Dr. Kosinski said that the link between facial features and sexul orientation could be explained by the prenatal hormone theory. This theory has been highly contested by experts in gender studies.

The technology underlying facial recognition is highly contested, with many experts identifying its roots in the pseudo-sciences of physiognomy and phrenology. Given that the core assumptions of facial recognition technology are based in pseudo-science, experts say that Dr. Kosinksi's study further propagated this fake science in a way that endangered the LGBTQ community.

Discuss the following with your group:
  (1) Do you think that Kosinki's rationale that he was just trying to raise awareness of the dangers of facial recognition is sufficient reason to justify the development of the "gaydar"?
  (2) Do you see any problems with the researchers' claim that they can **predict** sexuality based on facial images?
  (3) Was the development of this technology ethical? How would you justify it using one of the ethical frameworks we learned last week?

"If I DON'T DO IT, SOMEONE ELSE WILL"

In 2019 a company called DeepNude was called out for [using deepfake technology to let users easily create nude images](#). Users would upload an image of a clothed person and DeepNude's neural network technology would allow them to remove the clothes and simulate images of naked body parts. Journalists discovered that this technology was being used to create deepfake pornographic images. Privacy experts rang the alarm that while these nude images were "fake" they could used as revenge porn & posed a potentially massive violation of privacy.

When interviewed, the creator of DeepNude claimed that they were primarily motivated by the technical challenge to see if it could be done and that if they didn't do it now, someone else would do it in a year.

Discuss with your group if you think the creator's rationale for creating this technology justifies it. Reflect on how narratives of "pushing the envelope" (aka extending the limits of what is possible) influence what types of technology is funded and built.

TEMPERING THE HYPE

Lately, there has been a ton of coverage in the popular press about artificial general intelligence. Industry leaders, like Sam Altman at OpenAI, make claims about the potential for large language models that "understand" language, planting the seeds for hype around the possibility of sentient AI. Journalists latch onto these narratives and often promote them without conducting proper due diligence to vet these claims.

Write your name down and reflect on the following:
   (1) Is the claim that "sentient" AI is achievable in the near future a responsible one to make?

   (2) What responsibility do journalists and the general public have when circulating these claims?

HAVE YOU THOUGHT ABOUT?

Bruckman's article brings up the important point that "Ethics are discursive—ethical understandings emerge from conversation.". In your groups, give a brief explanation of the **specific** technology you're analyzing for your final project. It might help for each person in the group to first take 1-2 minutes to write down a brief summary of their proposal in this doc. Then, take turns offering each other feedback in the "have you thought about format". Make sure to write down notes as this might be helpful for you as you move forward in your final project!

READING/WATCHING FOR TONIGHT

REFLECTION (end-of-class)

Please take a moment to leave a note about something interesting you thought about or learned in class today and/or questions that the class raised for you. (Please include your name by default, but you are also welcome to include an anonymous note.)

Thursday 7/14 - Home Assistance Devices

Announcements:
-

In the News:
-

Agenda:
-

Additional Resources

READING/WATCHING FOR TONIGHT

-