

Ethics of Privacy II

Privacy Technology in Context

David Sidi (dsidi@email.arizona.edu)

Administrative

- Server challenge, write-up due Thursday
- Since we'll talk about cryptographic hashes a bit today:
 - https://www.explainxkcd.com/wiki/index.php/1193:_Externalities

Today

- Were the Snowden revelations a case of civil disobedience? What is the relationship of civil disobedience to ethics?
- Is Snowden courageous, empowering the American public with knowledge of secret abuses of power; or is he cowardly, hiding from punishment? Was he far-sighted in his evaluation of the documents, or just the opposite, endangering spies necessary to the defense of the US? What other virtues or vices might be ascribed to him (and other whistleblowers), now that we have the benefit of hindsight?

“The 4th and 5th Amendments to the Constitution of my country, Article 12 of the Universal Declaration of Human Rights, and numerous statutes and treaties forbid such systems of massive, pervasive surveillance. While the US Constitution marks these programs as illegal, my government argues that secret court rulings, which the world is not permitted to see, somehow legitimize an illegal affair. These rulings simply corrupt the most basic notion of justice---that it must be seen to be done. *The immoral cannot be made moral through the use of secret law.*” (emph. added)

“...[the] *moral decision* to tell the public about spying that affects all of us has been costly, but it was the right thing to do and I have no regrets.”
[emph. added]

- Edward Snowden

The components of civil disobedience

- When is it moral for a person to engage in civil disobedience?
- What is civil disobedience?
- Under what circumstances should a person engage in civil disobedience?

John Rawls's description of civil disobedience: a working definition

“public, nonviolent, conscientious yet political act contrary to law usually done with the aim of bringing about a change in the law or policies of the government”

Public

- Snowden acted publicly, for reasons he made public (video @ 3:41)
 - “I want to identify myself as the person behind these disclosures. I believe I have an obligation to explain why I’m doing this and what I hope to achieve.”
- Revealed his name to the press ([The Guardian](#), [The Washington Post](#)), made forensic evaluation of his activity easy for the NSA

“The stuff I saw really began to disturb me I watched the NSA tracking people Internet activities as they typed. I became aware of just how invasive US surveillance capabilities had become. I realized the true breadth of this system. And almost nobody knew it was happening ...

“Basically, the Internet allowed me to experience freedom and explore my full capacity as a human being. For many kids, the Internet is a means of self-actualization. [...] I worry that mine is the last generation to enjoy that freedom.”

Snowden

Nonviolent

- Not only were Snowden's actions directly nonviolent, but he was careful to prevent violence downstream of his actions
- "I have carefully evaluated every single document I disclose to ensure that each was in the public interest."
- "When you leak the CIA's secrets, you can harm people. I wasn't willing to do that. But when you leak the NSA's secrets, you only harm abusive systems. I was much more comfortable with that." (43)

Conscientious

- He incurred personal cost of making the revelations:
“I had a family, a home in paradise, and I lived in great comfort.”
- “I burned my life to the ground”
- “I understand that I will be made to suffer for my actions, and that the return of this information to the public marks my end.”
- What about accepting punishment?
 - The Espionage Act

As I continued reading, two things struck me about the archive. The first was how extraordinarily well organized it was. The source had created countless folders and then sub-folders and sub-sub-folders. Every last document had been placed exactly where it belonged. I never found a single misplaced or misfiled document.

I had spent years defending what I view as the heroic acts of Chelsea (then Bradley) Manning, the army private and whistle-blower who became so horrified at the behavior of the US government—its war crimes and other systematic deceit—that she risked her liberty to disclose classified documents to the world through WikiLeaks. But Manning was criticized (unfairly and inaccurately, I believe) for supposedly leaking documents that she had not first reviewed—in contrast to Daniel Ellsberg, the critics speculated. This argument, baseless though it was (Ellsberg was one of Manning's most devoted defenders, and it seemed clear that Manning had at least surveyed the documents), was frequently used to undermine the notion that Manning's actions were heroic.

It was clear that nothing of the sort could be said about our NSA source. There was no question that he had carefully reviewed every document he had given us, that he had understood their meaning, then meticulously placed each one in an elegantly organized structure.

Aiming to bring about a change in the law or policies

- Snowden emphasizes the importance of spies to the US, and that his aim was specific reforms to stop the practices of bulk surveillance detailed in the revelations
- Appeal to U.S. constitutional and international human rights law
- Snowden's view is that the higher law of the Constitution, as well as international human rights law, is in conflict with his obligations to secrecy as
- This echoes other civil disobedients

“Higher Law” has a role in civil disobedience

William Seward, Lincoln's Secretary of State, appeals to law above the constitution in support of abolition: “there is a higher law than the Constitution, which regulates our authority over the domain, and devotes it to the same noble purposes. The territory is a part... of the common heritage of mankind, bestowed upon them by the Creator of the universe. We are his stewards.”

we have both "a legal [and] a moral responsibility to obey just laws," we have "a moral responsibility to disobey unjust laws. I would agree with St. Augustine that 'an unjust law is no law at all.'"

(Martin Luther King, Jr., 'Letter from a Birmingham Jail')

...yet political

- Why couldn't the normal processes for the evolution of law and policy have worked?
- Lack of transparency: surveillance was conducted under “a federation of secret law, unequal pardon, and irresistible executive power”
- secret law: FISA Courts (FISC)
- unequal pardon: Stellarwind retroactive immunity (see [FAA](#), Title II: Protections for Electronic Communication Service Providers), [David Patraeus](#)
- irresistible executive power: EO 12333, President's Surveillance Program (PSP)
“raw presidential authority” preceding section 215 of USAPA

“Snowden should have used appropriate channels set up for whistleblowers”

- Anonymity protections for whistleblowers have failed
- Binney, Wiebe, Loomis
 - went to Crane, the Pentagon IG
 - "I witnessed a dramatic example of what can happen to a whistleblower if he behaves as stipulated and turns to the official channels," --Crane
- Thomas Drake
 - Anonymously went to the NSA IG
 - He was not protected. He was identified, and charged with 35 years in prison under the Espionage Act of 1917
 - Judge: actions were “unconscionable”
- Pentagon IG himself became a whistleblower
- Snowden worked under corporate cover, so his protection as a whistleblower was uncertain

“Snowden should have used appropriate channels set up for whistleblowers”

- “They would say this isn’t your job, or you’d be told you don’t have enough information to make those kinds of judgments. You’d basically be instructed not to worry about it.” (NPtH 42)
- "When I was at NSA, everybody knew that for anything more serious than workplace harassment, going through the official process was a career-ender at best. It's a part of the culture," Snowden told SPIEGEL and the Guardian when asked about the Crane case. "If your boss in the mail room lies on his time sheets, the inspector general might look into it. But if you're Thomas Drake, and you find out the president of the United States ordered the warrantless wiretapping of everyone in the country, what's the inspector general going to do? They're going to flush it -- and you with it."

Are whistleblowers inevitable?

- How can the public provide meaningful oversight to an organization like the NSA, whose effectiveness depends on secrecy?
- Gen. Mike Hayden: “translucence”

“I agree with Chris [Soghoian]: somewhere between 2006 and 2014 somebody in my old community should have ... said ... the next thing we need to do to give this ...[PRISM] program more political sustainability is to show a little more ankle, maybe a little bit more leg on what it is we’re doing to the broader American public. And that was a mistake We could have, and should have been more transparent or at least translucent in what this program entailed.”

Gen. Michael Hayden, Former Director of NSA and CIA

<https://www.youtube.com/watch?v=6aRklrv3r34> @ 46:58

- “I selected these documents based on what’s in the public interest, but I’m relying on you to use your journalistic judgment to only publish those documents that the public should see and that can be revealed without any harm to any innocent people.”

Snowden (53)

The role of “public interest”

- Hayden: more “translucence” to the general public by the NSA itself would have sufficed to gain acceptance
- Snowden: full “transparency” of leaked documents, carefully curated by him and then judged by journalists to be in the public interest, was needed
- Question: who should decide, in different contexts, what it is in the public’s interest to know?
 - Should this be reserved for the intelligence agencies? For the (secret/nonsecret) courts? Should journalists ever do this? Should organizations like Wikileaks?

an ethic of respect for privacy

What's new about the ethics of privacy?

- Is it like the case Hursthouse makes for an ethic of environmentalism?
- What is that case? How did people in Aristotle's time relate to the environment differently than we do today? Can something similar be said for privacy?
 - Consider the role of technology

for the sake of human beings. We can—that is, it is possible for us to—make use of plants and animals and indeed minerals and other inanimate things, but the old idea that we can do so without restraint, and that bountiful nature would somehow make good our depredations has now been proved to be a fantasy. (It is a notable fact, which might strike one as enragingly arrogant, or heart-wrenchingly innocent, that Aristotle believed that no species could be destroyed.) Our power over nature, we have discovered, is much more limited than we supposed when we first got modern science going, mostly because, as we discovered rather recently, our knowledge and understanding of the biosphere is in its infancy. (I think it is correct to say that the

1960's saw increased public concern about privacy

- Rise of the personal computer and greater potential for efficient use of large data sets
 - The “mother of all demos” had a privacy session after it
- Books out
 - Packard, *The Naked Society*
 - Brenton, *The Privacy Invaders*
 - Westin, *Privacy and Freedom*
- FIPPS in 1973

Fair Information Practices (FIPs)

- 1973
- US Dept. of Health Education and Welfare (HEW) report, “Records, Computers, and the Rights of Citizens ...”

“An individual must increasingly give information about himself to large and relatively faceless institutions, for handling and use by strangers---unknown, unseen, and, all too frequently, unresponsive. Sometimes the individual does not even know that an organization maintains a record about him. Often he may not see it, much less contest its accuracy, control its dissemination, or challenge its use by others.”

Fair Information Practice Principles (FIPs)

- (“Notice”) There must be no personal data record-keeping systems whose very existence is secret
- (“Notice”) There must be a way for an individual to find out what information about him is in a record and how it is used
- (“Secondary use”) There must be a way for an individual to prevent information about him obtained for one purpose from being used or made available for other purposes without his consent
- (“Control”) There must be a way for an individual to correct or amend a record of identifiable information about him [sic]
- (“Accuracy, Security”) Any organization creating, maintaining, using, or disseminating records of identifiable personal data must assure the reliability of the data for their intended use and must take reasonable precautions to prevent misuse.

The Younger Committee safeguards

1. Information should be regarded as held for a specific purpose and not to be used, without appropriate authorization, for other purposes.
2. Access to information should be confined to those authorized to have it for the purpose for which it was supplied.
3. The amount of information collected and held should be the minimum necessary for the achievement of the specified purpose.
4. In computerized systems handling information for statistical purposes, adequate provision should be made in their design and programs for separating identities from the rest of the data.
5. There should be arrangements whereby the subject could be told about the information held concerning him.

A new virtue?

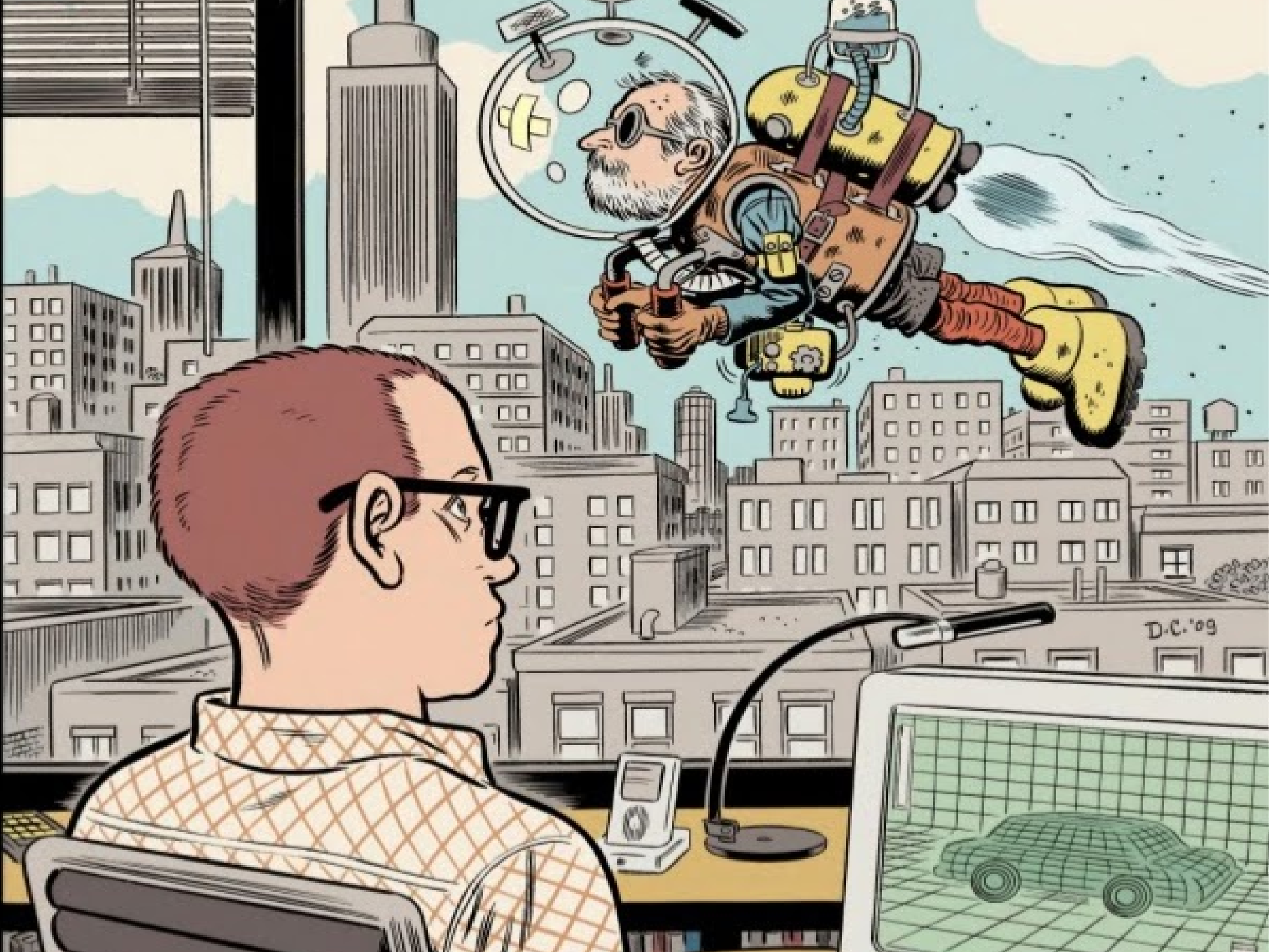
- What do these new circumstances bearing on a loss of privacy force upon us, ethically?
- Can we rest with applying the old virtues surrounding privacy in new ways?
- What are the old and familiar virtues? (Vices?)
 - Let's make a list of candidates
 - Aristotle, Ben Franklin, The Virtues Project

Old virtues in new circumstances

- Which dimensions of these virtues are revealed in application to privacy? What do we learn about old virtues in application to new technologies for data gathering, and protecting privacy?
 - consider: patience, unselfishness, proper humility, courage, compassion

What is involved in a new virtue of being privacy-respecting?

- action
- emotion
- perception
- sensibility
- understanding
- comprehensive moral development of natural traits of character



tmux

- Terminal multiplexer
- start a new session
 - `tmux new -s <session-name>`
- detach from a session you're in
 - `^b` then `d`
- attach to a running session
 - `tmux attach -t <session-name>`
- list your sessions
 - `tmux ls`

Cryptographic hashing

- One important thing about a cryptographic hash function is that it carries different inputs to different outputs---or at least, it's hard to find inputs with the same hash (called collisions)
- If that were it, it would be easy. That's not it: hashes (outputs of hash functions) are smaller than their inputs, and of fixed size
- cryptographic hashes are also one-way
- uses include authentication integrity checking, and password verification

‘foobar’



encryption
method id

salt

\$6\$WLqcta90/\$d1NVAFNKD4luOnQu.3g.u1KZFdYaZuS6yfQeNekvNrIkvrROu1sEkmbBx5FRS8S
DWbdGU6QYxjibVNzgaaN3gu/

ciphertext (86 characters)