Review

- Non sequitur
- Appeal to novelty
- Fallacy fallacy
- Poisoning the well
- Tu quouqe
- Equivocation
- Argument from ignorance
- Complex question
- Begging the question
- Post hoc propter hoc
- Naturalistic fallacy
- Special pleading
- Genetic fallacy
- Composition/Division
- Texas sharpshooter
CS210: Privacy

CS210 Spring 2015
Week 5
What is it?

• Conceptual muddle
  – A space that can be invaded?
  – A possession that can be lost?
  – A right that can be violated?
Three Meanings

• Accessibility Privacy (1800’s)
  – Freedom from unwarranted intrusion
  – Physical access to your person
  – Fourth Amendment (search and seizure)

• Decisional Privacy (1900’s)
  – Freedom from interference in personal affairs
  – Personal choices, plans, and decisions are yours
  – First Amendment, Griswold v. Connecticut, Roe vs. Wade
Three Meanings

• Informational Privacy (present)
  – Control over flow of personal information
  – How can your information be gathered, stored, mined, combined, exchanged?
  – Legal decisions ongoing (policy vacuum)
Moor’s Account

An individual [has] privacy in a situation with regard to others if and only if in that situation the individual is protected from intrusion, interference, and information access by others.

-James Moor
Moor’s Account

• *descriptive privacy*
  – privacy protected by physical means
  – descriptive privacy can be *lost*

• *normative privacy*
  – privacy protected by policies (convention, law)
  – normative privacy can be *violated*
Nissenbaum’s Account

• Privacy as “contextual integrity”
  – Norms depend on context (e.g. school/family)

• Norms of appropriateness
  – Should information be gathered/divulged?

• Norms of distribution
  – Should information be shared?
  – Transfers data to a new context

• Violating norms results in a breach
Importance

• Instrumental value - means to an end
  – Important for trust and friendship
  – Important for free expression and thought

• Intrinsic value - value in and of itself
  – Required for trust, friendship, free thought, etc.
  – Expression of security (Moor)

• Individual vs. social value
  – Required for democracy, innovation
Novel Issues?

- *amount* of information collected
- *speed* information can be transmitted
- *duration* of information stored
- *kind* of information stored
- data can be *merged, matched, and mined*
Gathering

• dataveillance - surveillance and data recording
  – Internet cookies, search history, emails, IP address
  – RFID
  – GPS, WiFi, cell calls, text messages
  – Social interactions
  – Credit history, medical history

• Techniques used by companies and governments
  – If company has it, legal for NSA/CIA to collect
Exchanging

• Data can be *merged*
  – integrating information into a composite

• Data can be *matched*
  – Using unique identifiers to search multiple government databases to classify a person

• Violate contextual integrity
Mining

• *data mining* indirectly gathers personal information through patterns
• Difficult to regulate
  – Patterns are *implicit* in the data
  – Data is typically *nonconfidential*
  – Data is not necessarily *exchanged*
Personal Information

• Personal identifying information (PII) - information used to uniquely identify a person

• Nonpublic personal information (NPI) - confidential and private information about a person

• Public personal information (PPI) - public information about a person
PROTECTION
Informed Consent

- *Informed consent* - user understands and agrees to how the data is used
- Current uses of information are *opaque* to user
  - Do you read TOS?
- Acting on *presumed consent*
  - *opt-in* is the standard default
Privacy-Enhancing Technology (PET)

• Encryption services
  – PGP, Watsapp, iMessage, TextSecure, OTR
  – SSL/TLS

• Anonymizing tools
  – tor, proxies
  – Ghostery, Stealthy
Policies

• Self-Regulation
  – TRUSTe

• US Laws

• European Laws
  – Regulates processing and flow of data
  – Right to be forgotten
There is no man so good that if he placed all his actions and thoughts under the scrutiny of the laws, he would not deserve hanging ten times in his life. - Michel de Montaigne