# Conceptions of Privacy

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Engineering & Public Policy



## What does privacy mean to you?



http://cups.cs.cmu.edu/privacyillustrated/

### Concept versus right

- Privacy as concept
  - What is it
  - How and why it is valued
- Privacy as right
  - How it is (or should be) protected
    - By law
    - By policy
    - By technology

#### Hard to define

"Privacy is a value so complex, so entangled in competing and contradictory dimensions, so engorged with various and distinct meanings, that I sometimes despair whether it can be usefully addressed at all."

Robert C. Post, Three Concepts of Privacy, 89 Geo. L.J. 2087 (2001).

## Some definitions of privacy

- Personhood
- Intimacy
- Secrecy
- Contextual integrity
- Limited access to the self
- Control over information

#### Limited access to self



"Being alone."
- Shane (age 4)

#### "the right to be let alone"

- Samuel D. Warren and Louis D. Brandeis, The Right to Privacy, 4 Harv. L. Rev. 193 (1890)

"our concern over our accessibility to others: the extent to which we are known to others, the extent to which others have physical access to us, and the extent to which we are the subject of others attention.

- Ruth Gavison, "Privacy and the Limits of the Law," Yale Law Journal 89 (1980)

#### Control over information

- "Privacy is the claim of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others."
- "...each individual is continually engaged in a personal adjustment process in which he balances the desire for privacy with the desire for disclosure and communication...."

Alan Westin, Privacy and Freedom, 1967

## Realizing limited access and control

- Limited access
  - Laws to prohibit or limit collection, disclosure, contact
  - Technology to facilitate anonymous transactions, minimize disclosure
- Control
  - Laws to mandate choice (opt-in/opt-out)
  - Technology to facilitate informed consent, keep track of and enforce privacy preferences

## Westin's four states of privacy



- Solitude
  - individual separated form the group and freed form the observation of other persons



- Intimacy
  - individual is part of a small unit



- Anonymity
  - individual in public but still seeks and finds freedom from identification and surveillance



- Reserve
  - the creation of a psychological barrier against unwanted intrusion - holding back communication

## Westin's four functions of privacy

- Personal autonomy
  - control when you go public about info
- Emotional release
  - be yourself
  - permissible deviations to social or institutional norms
- Self-evaluation
- Limited and protected communication

## Information vs. decisional privacy

- Information privacy concerns the collection, use, and disclosure of personal information
- Decisional privacy concerns the freedom to make decisions about one's body and family

### Multiple facets of privacy

How can posting personal information about myself on my web site result in a reduction of my privacy? How can it result in an increase in my privacy?

## Privacy as animal instinct?



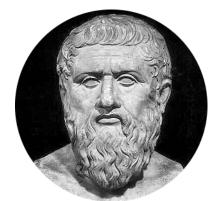
Eagles eating a deer carcass http://www.learner.org/jnorth/tm/eagle/CaptureE63.html

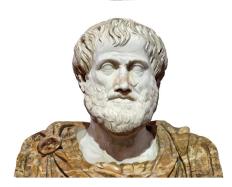
## History

#### **Ancient Greece and China**

- Confucius (China 551-479 BC)
  - Distinguished between public and private life
- Plato (Greece ~428-348 BC)
  - Not valuable to achieve the perfect state
  - No psychological or political value
  - Friends have all things in common
- Aristotle (Greece 384-322 BC)
  - Boundary needed between state and household affairs
  - Need for contemplation, requires solitude







### Information privacy

- In 17th century America, colonists began to collect information about each other
  - Census, birth and death records, school records, tax records
- Informants reported people who behaved badly
  - Disorderly children, nightwalkers, Sabbath breakers, atheists, drunks

#### Privacy of personal space

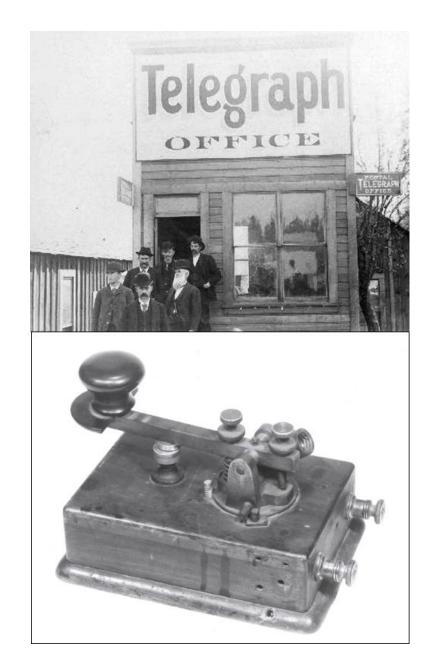
- Historically, depended a lot on the type and proximity of available housing
- In 18th century Europe, most people lived in cities where houses were close together, but few people lived in each house
- In 18th century America, people lived far away from each other but many people lived in each house and even shared beds

### Communication privacy

- When all communication was oral, communication privacy depended on
  - Communicating without someone overhearing
  - Communicating with people who wouldn't tell others
- Written communications brought new opportunities for privacy violations
- In 18th century America, postal mail was not necessarily private
  - Sealing wax, basic encryption used to increase privacy
  - 1782 Congress made it illegal to open other peoples' mail
  - Later the invention of the adhesive envelope increased communications privacy

## Telegraph

- Late nineteenth century: telegraph became popular for long distance communication
- Messages could be coded, but you could not recover damages due to transmission errors if the message was coded
- Telegraph operators were supposed to keep messages confidential
- Occasional subpoenas for telegraph messages



#### Cameras

- Portable "snap" cameras (1888), raised new concerns
- Advances in camera technology keep raising privacy concerns
  - Telephoto lenses
  - Video cameras
  - Hidden cameras
  - Web cams
  - Satellite images
  - Drones

#### The Kodak.



PRICE, \$25 00.

ANYBODY can use the Kodak. The operation of making a picture consists simply of pressing a button. One hundred instantaneous pictures are made without re-loading. No dark room or chemicals are

necessary. A division of labor is offered, whereby all the work of finishing the pictures is done at the factory, where the camera can be sent to be re-loaded. The operator need not learn anything about photography. He can "press the button,"—we do the rest. For sale by all Photo. Stock Dealers.

Send for copy of Kodak Primer, with sample photograph.

#### The Eastman Dry Plate and Film Co.

ROCHESTER, N. Y.

#### Privacy History References

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