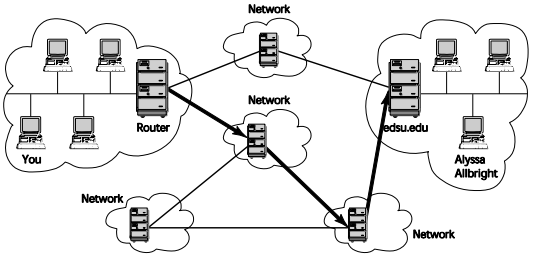
Computers and Society

Networked Communications
Email Spam and Censorship

Notice: This set of slides is based on the notes by Professor Guattery of Bucknell and by the textbook author Michael Quinn

Email and Spam

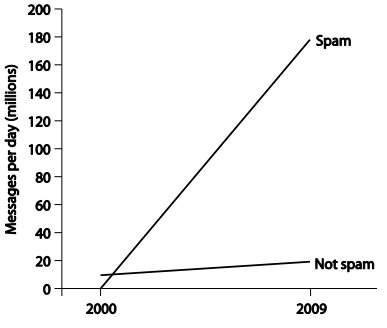
Routers Pass Email from LAN to LAN



The Spam Epidemic (1/3)

- Spam: Unsolicited, bulk email
- Spam is profitable
  - More than 100 times cheaper than "junk postal mail"
  - Profitable even if only 1 in 100,000 buys product
- Amount of email that is spam has ballooned
  - 8% in 2001
  - 90% in 2009

The Spam Epidemic (2/3)



The Spam Epidemic (3/3)

- How firms get email addresses
  - Web sites, chat-room conversations, newsgroups, social networks
  - Computer viruses harvest addresses from PC address books
  - Dictionary attacks
  - Contests
- Most spam sent out by bot herders who control huge networks of computers
- Spam filters block most spam before it reaches users' inboxes

Need for Socio-Technical Solutions

- New technologies sometimes cause new social situations to emerge
  - Calculators → feminization of bookkeeping
  - Telephones → blurred work/home boundaries
- Spam an example of this phenomenon
  - Email messages practically free
  - Profits increase with number of messages sent
  - Strong motivation to send more messages
- Internet design allows unfair, one-way communications

Case Study: Ann the Acme Accountant

- Ann: Accountant at Acme Corporation
- She distributes paychecks to all 50 employees
- Ann sends email advertising Girl Scout cookie sale
- 9 recipients order cookies; average 4 boxes each
- Other 40 recipients unhappy to get email; half complain to a co-worker
- Did Ann do anything wrong?

Kantian Analysis

- We should always respect autonomy of others, treating them as ends in themselves and never only as the means to an end (2nd formulation of Categorical Imperative)
- Ann didn't misrepresent what she was doing
- She didn't force anyone to read the entire email
- Some who read her email chose to order cookies
- Therefore, she didn't "use" others, and her action was not strictly wrong
- An "opt in" approach would have been better
  - Really? (think of the case of the "cabin boy" on the open sea …)
  - Is "opt in" a spam?

Act Utilitarian Analysis

- Benefit to Girls Scouts = $108
  - $3 profit per box of cookies
  - 36 boxes sold
- Harm to company: time wasted
  - Orders taken during breaks
  - Lost productivity from complaining: $70
    - 20 employees × 2 × 5 minutes/employee = 200 minutes
    - 3.5 hours × $20/hour = $70
- Benefits exceed harms, so action good
- Company may create policy against future fundraisers

Rule Utilitarian Analysis

- Q: What would be consequences of everyone in company used email to solicit donations?
- A: Plenty of employee grumbling and lower morale
- If all doing it, unlikely any one cause would do well
- Harms greater than benefits, so Ann's action was wrong

Social Contract Theory Analysis

- Acme Corporation has no prohibition against using its email system this way (social contract?)
- Ann was exercising her right to express herself
- Some people didn't appreciate message, but she didn't act like a spammer
  - She didn't conceal her identity
  - She wasn't selling a fraudulent product
- Ann did nothing wrong

Summary

- Analyses reached different conclusions, but Ann could have taken a less controversial course
- She could have posted a sign-up sheet to identify those interested in cookie sale
- That way, she would have sent email only to those interested, avoiding the problems of grumbling and lost productivity

Any Comments or Thoughts?

- Do you receive electronic solicitation for purchasing products or joining some organizations?

Censorship on the Internet

Governmental Control: Too Much or Too Little?

- Burma (Myanmar), Cuba, North Korea: Internet virtually inaccessible
  - It appears no longer true for Myanmar
    - http://en.wikipedia.org/wiki/Internet_in_Burma
    - http://www.forbes.com/sites/techonomy/2013/11/05/myanmars-promising-experiment-with-internet-freedom/
  - Cuba's case is evolving
    - http://en.wikipedia.org/wiki/Internet_in_Cuba
    - http://www.cnn.com/2013/08/05/world/americas/cuba-online-access/

Governmental Control: Too Much or Too Little?

- Saudi Arabia: centralized control center
- People's Republic of China: "one of most sophisticated filtering systems in the world" as well as censorship
  - http://en.wikipedia.org/wiki/Golden_Shield_Project
- Germany: Forbids access to neo-Nazi sites
- United States: Repeated efforts to limit access of minors to pornography

Forms of Direct Censorship

- Government monopolization
- Prepublication review
- Licensing and registration

Self-censorship

- Most common form of censorship
- Group decides for itself not to publish
- Reasons
  - Avoid subsequent persecution
  - Maintain good relations with government officials (sources of information)
- Ratings systems created to advise potential audience
  - Movies, TVs, CDs, video games
  - ***Not*** the Web

Challenges Posed by the Internet

- Many-to-many communications
- Dynamic connections
- Huge numbers of Web sites
- Extends beyond national borders and laws
- Hard to distinguish between minors and adults

Ethical Perspectives on Censorship

- Kant opposed censorship
  - Enlightenment thinker
  - "Have courage to use your own reason"
- Mill opposed censorship
  - No one is infallible
  - Any opinion may contain a kernel of truth
  - Truth revealed in class of ideas
  - Ideas resulting from discourse are more influential

Mill's Principle of Harm

"The only ground on which intervention is justified is to prevent harm to others; the individual's own good is not a sufficient condition."

Your Thoughts and Comments?

- Certain forms of censorship help cleaning the communications media, including the internet and the web?

Freedom of Expression

Freedom of Expression: History

- *De Scandalis Magnatum* (England, 1275)
- Court of Star Chamber
- 18th century
  - No prior restraints on publication
  - People could be punished for sedition or libel
- American states adopted bills of rights including freedom of expression
- Freedom of expression in 1st amendment to U.S. Constitution

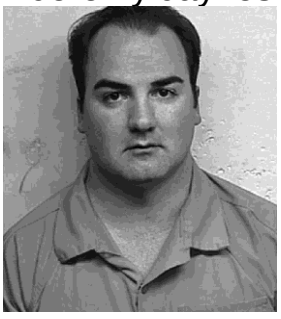
1st Amendment to U.S. Constitution

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

Freedom of Expression Not an Absolute Right

- 1st Amendment covers political and nonpolitical speech
- Right to freedom of expression must be balanced against the public good
- Various restrictions on freedom of expression exist

Jeremy Jaynes



AP Photo/Loudoun County Sheriff's office

http://en.wikipedia.org/wiki/Jeremy_Jaynes

Jayne's Email Spam Story

Jeremy Jaynes (born 1974) was a prolific e-mail spammer, broadcasting junk e-mail from his home in North Carolina, United States. He became the first person in the world to be convicted of "felony spam," i.e., convicted of a felony for sending spam without allegation of any accompanying illegal conduct such as theft, fraud, trespass, defamation, or obscenity. His conviction was later overturned by the Virginia Supreme Court ruling unanimously the law Jaynes was prosecuted under violated the First Amendment. On March 30, 2009, the Supreme Court of the United States refused the Virginia Attorney General's petition for a writ of certiorari to review the decision of the Supreme Court of Virginia overturning the anti-spam statute. Jaynes never served any of his prison sentence for the overturned conviction.

http://en.wikipedia.org/wiki/Jeremy_Jaynes

FCC v. Pacifica Foundation et al.

- George Carlin records "Filthy Words"
- WBAI in New York airs "Filthy Words" (1973)
- FCC issues declaratory order to Pacifica
- Pacifica sues
- U.S. Supreme Court ruled FCC did not violate 1st Amendment (5-4 decision)
  - Broadcast media "uniquely pervasive"
  - Broadcasting uniquely accessible to children

http://en.wikipedia.org/wiki/George_Carlin

http://en.wikipedia.org/wiki/F.C.C._v._Pacifica_Foundation

Case Study: Kate's Blog

- Kate: Maintains a popular "life on campus" blog
- Jerry: Another student; active in Whig Party
- At private birthday party, someone gives Jerry a Tory Party T-shirt as a gag, and Jerry puts it on
- Kate uses cell phone to take picture of Jerry when he isn't looking, posts it on her blog
- Story read by many people on and off campus
- Jerry confronts Kate and demands she remove photo; she complies, and they remain friends
- Kate's blog and Jerry both become more popular

Kantian Analysis

- Kate uploaded Jerry's photo to her blog without asking his permission
- She treated him as a means to her end of increasing the readership of her Web site
- Her action was wrong

Social Contract Theory Analysis

- Birthday party held in apartment of one of Jerry's friends
- Jerry had a reasonable expectation of privacy
- Kate violated Jerry's right to privacy
- Kate's action was wrong

Act Utilitarian Analysis

- Benefits
  - Popularity of Kate's blog increased (definitely)
  - Jerry become more popular on campus (definitely)
- Harms
  - Jerry's anger at Kate (only temporary)
  - Photo could discredit Jerry at some point in future (unlikely)
- Kate did nothing wrong by posting Jerry's photo

Rule Utilitarian Analysis

- What if everyone were constantly taking photos of people they encountered and posting them?
- Positive consequences
  - People would have more opportunities to keep up with what their friends are doing
  - People might be more reluctant to engage in illegal activities
- Negative consequences
  - People would become more self-conscious
  - Some relationships would be harmed
- Negative consequences more weighty than positive consequences, so Kate's action was bad

Summary

- Three out of four analyses: Wrong for Kate to post the photo without asking Jerry's permission
- Kate figured it would be better to beg for forgiveness than ask for permission, but she cut Jerry out of a decision that affected both of them, and that's no way to treat a friend
- Kate should have tried to get Jerry's consent

Your Stories to Share?

Researched Story By Bucknell Students

Sexting

- "Sexting refers to sending sexually suggestive text messages or emails containing nude or nearly nude photographs" (Quinn 134).
- 2009 survey of American teens (Quinn 134-5)
  - 9% sent a sext
    - 11% sent to stranger
  - 17% received a sext
  - 3% forwarded a sext

Sexting *(cont.)*

- Jesse Logan (Quinn 135)
  - Sent nude photos to her boyfriend
  - Boyfriend sent photos to other girls
  - Jesse ultimately committed suicide
- Phillip Alpert (Quinn 135)
  - Emailed nude photos of his girlfriend to her friends and family
  - Sentenced to five years probation
  - Registered sex offender

Sexting *(cont.)*

- VA, MA, etc. → sexts from minors are considered child pornography
- 20 years in prison and registered sex offender
- Distinguish sexts from child porn
  - "educating teenagers, not punishing them"

Sexting *(cont.)*

- "Those concerns [about lessening penalty] have to be weighted against the impact on a victim when a sexted image or video goes public" (Jouvenal).
- Sexted images can be found by child pornographers (Jouvenal)
- New laws may create a loophole to be exploited by pedophiles (Jouvenal)

Sexting *(cont.)*

- Should teenagers be allowed to sext their romantic partners?

Sexting: Kantianism

- Kantianism = “treat others the way you want to be treated”

Sexting: Kantianism

- Consent → opt-in to mutual exchange
- Kant: “Why don’t people think for themselves?” (quoted from Quinn 124-5)
- Sexting is morally acceptable between consenting parties.

Sexting: Act Utilitarianism

- Total benefit of action > total harm of action

Sexting: Act Utilitarianism

Benefits	Harms
Happiness of both parties	Potential for photos to be shared with a third party
	Social embarrassment
	Suicide

- Intensity, duration, certainty, propinquity (closeness), fecundity (self-propagation), purity (of pleasure/pain), extent (number of people affected)

- What is the likelihood that photos will be shared?
- What is the likelihood that if photos are shared, it will lead to suicide?
- Conclusion: Sexting is of debatable morality.

Sexting: Rule Utilitarianism

- Total benefit of moral rule > total harm of moral rule

Sexting: Rule Utilitarianism

- If every consenting couple sexted:
  - More likely that at least one photo would be shared with a third party
  - Social embarrassment (?)
  - Suicide/depression (?)
- Mill's Principle of Harm: "The only ground on which intervention is justified is to prevent harms to others; the individual's own good is not a sufficient condition" (quoted from Quinn 125).
- Conclusion: sexting is of debatable morality

Internet Addiction

- Addiction: "any persistent, compulsive behavior that the addict recognizes to be harmful" (Quinn 143)
- Usually occurs when people are addicted to online games
- Programmers can have a compulsion to program

Internet Addiction *(cont.)*

- Internet addiction causes similar neural changes to physical drugs, like cocaine
- Chuang: died after playing Diablo III for 40 hours without eating or sleeping
- 23-year-old Chen Rong-yu died after playing LoL for 23 hours straight
  - "His hands were still stretched out toward the keyboard and mouse…" (Rudd)
- British Xbox gamer Chris Staniforth died from a blood clot after a long gaming session

Internet Addiction *(cont.)*

- Should internet and video game usage be limited?
- Who do you limit it for? Addicts? Preemptively for everyone?

Internet Addiction: Act Utilitarianism

Benefits	Harms
Better long-term health	Withdrawal
Force person to be themselves in real life (?)	Less social interaction (?)
Family and friends happier if addict gets help	Less access to resources

- Limiting internet usage is of debatable morality

Internet Addiction: Social Contract Theory

- Is unrestricted Internet usage a fundamental right?