



Lecture 3-1

Networked Communications

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Participation Quiz

Which form of electronic communication is most central to your life?

- A. email
- B. facebook
- C. instant messaging
- D. text messaging
- E. other

Upcoming Office Hours:

What: Michael's office hour

When: Thursday 10 September 2013 at 12 noon

Where: X141

Why: Thanksgiving; no office hour on Monday 14 September 2013

What: Michael's office hour

When: Tuesday 15 September 2013 at 12 noon

Where: X139

Why: Thanksgiving; no office hour on Monday 14 September 2013

Recap

- Define:
 - Kantianism
 - Act Utilitarianism
 - Rule Utilitarianism
 - Social Contract Theory
- What's the “right” theory to use?
- Picking up from last time: what's good and bad about social contract theory?

Case for Social Contract Theory

- Framed in language of rights
 - Intuitive and natural
- Explains why people act in self-interest without common agreement
 - Logically, it's the best thing to do (prisoner's dilemma)
- Provides clear analysis of certain citizen/government problems
 - Why is it right to punish someone for a crime?
 - Why is civil disobedience justifiable?

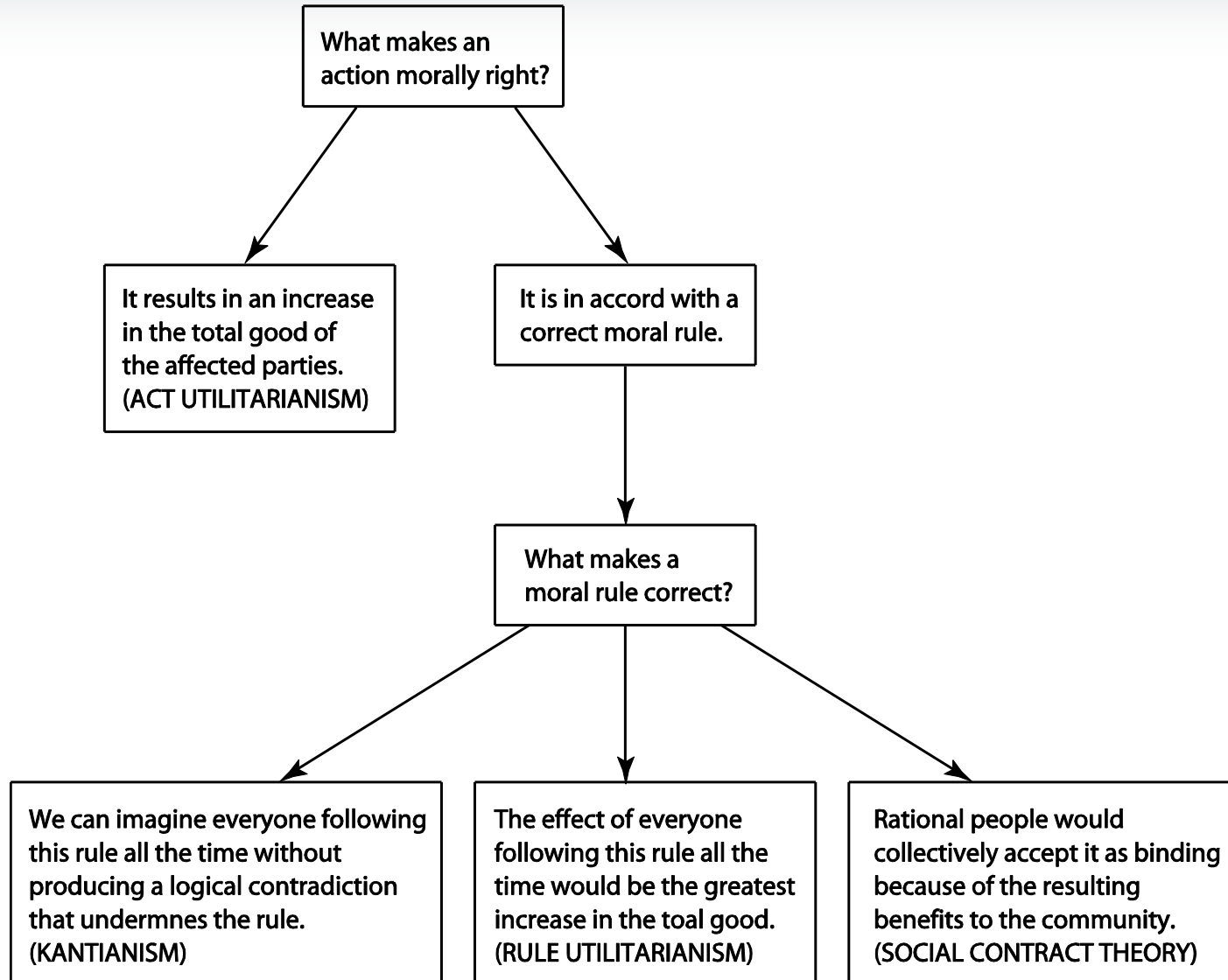
Case Against Social Contract Theory

- No one signed a contract
- Some actions have multiple characterizations. In such cases, we don't learn how to make trade-offs between these conflicting rights.
 - Same problem we saw with Kantianism, though now phrased in terms of rights instead of duties.
- May unjustly treat people who cannot uphold contract
 - In principle, we should distinguish between people who *can't* follow the contract, and those who *choose not to*.
 - In practice, this can be hard to do.

Summary: Objectivism vs. Relativism

- Objectivism: Morality has some kind of existence outside a given human mind
- Relativism: Morality is subjective
 - This is clearly not going to get us anywhere persuading anyone else with a moral argument.
- Kantianism, utilitarianism, and social contract theory are examples of objectivism
 - So are divine command theory and ethical egoism, but we rejected these as poor bases for ethical argumentation.

Comparing Workable Ethical Theories

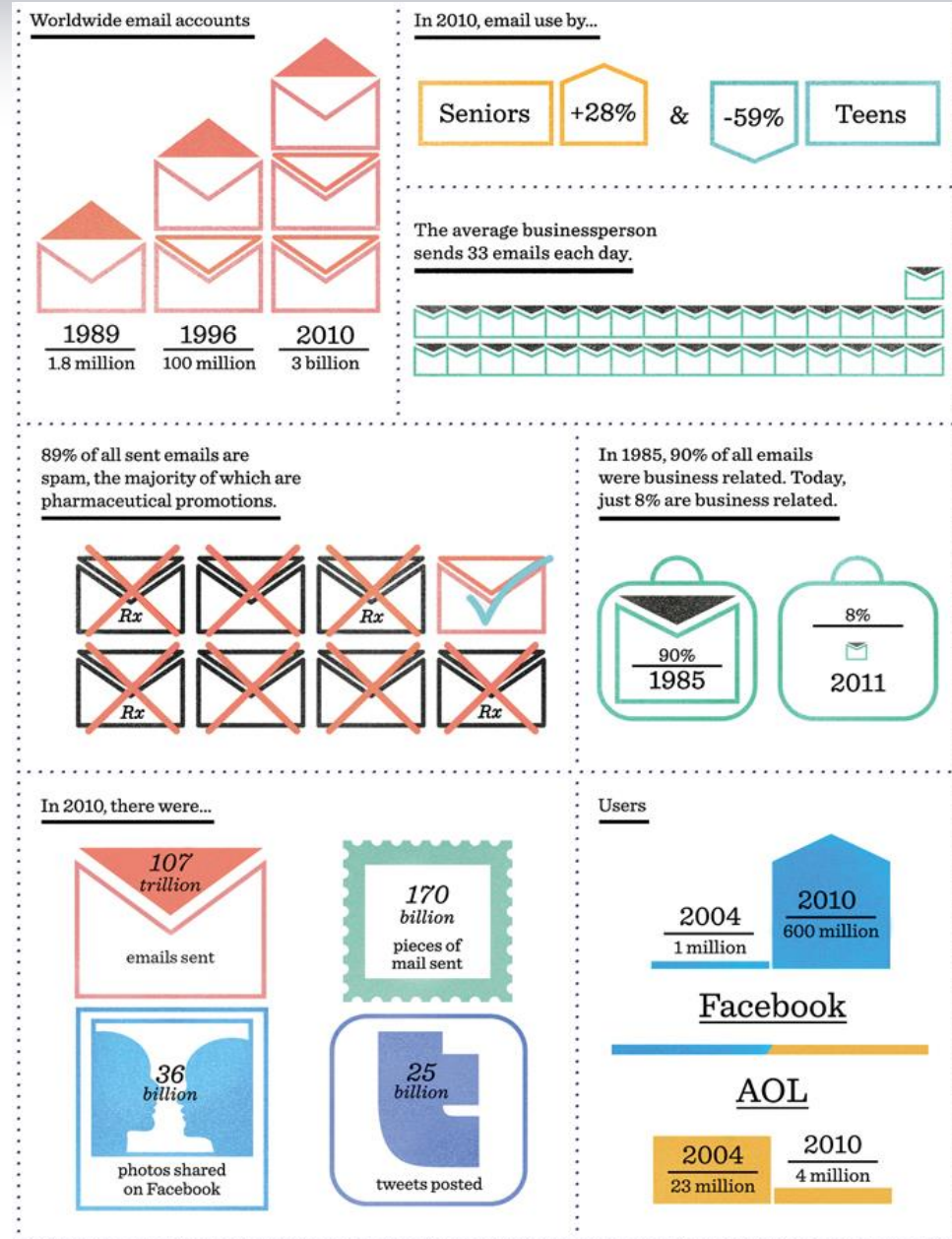


So much for ethical theories. Let's transition to:

NETWORKED COMMUNICATIONS

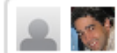
The Spam Epidemic

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



...but things have gotten better

The Dying Business Of Email Spam



4 comments, 3 called-out

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Spam email is on the wane. And no one on God's green Earth is going to miss it.

The share of spam in email traffic decreased steadily throughout 2012 to hit a five year low, an unprecedented decrease. The main reason behind the decrease in spam volume is the overall heightened level of anti-spam protection, says the Moscow based junk mail and cyber crime fighting Kaspersky Lab.



A report by Kaspersk Lab in Moscow says the number of spam attacks on email accounts around the world has fallen to five year lows thanks to new methods to block it by software security firms.

See: [Kaspersky Lab Security Bulletin On Spam Evolution 2012](#)

Ethical Evaluations of Spamming

The book argues from each perspective that spamming is wrong. Let's see if we can make the arguments ourselves:

- Kantian evaluation
- Act utilitarian evaluation
- Rule utilitarian evaluation
- Social contract theory evaluation

Which of these do you find most/least convincing?

Need for Socio-Technical Solutions

- New technologies sometimes cause new social situations to emerge
 - Calculators → feminization of bookkeeping
 - Telephones → blurred work/home boundaries
- Spam is an example of this phenomenon
 - Email messages practically free
 - Profits increase with number of messages sent
 - Strong motivation to send more messages
- For communications to be perceived as fair, they need to be two-way (allowing consequences for misuse)
 - Internet design allows unfair, one-way communications

Government Control of the Internet

- Myanmar, Cuba, North Korea: Internet virtually inaccessible
- Saudi Arabia: centralized control center
- People's Republic of China: “one of most sophisticated filtering systems in the world” as well as censorship
- Germany: Forbids access to neo-Nazi sites
- United States: limit access of minors to pornography
- *Can you think of other examples?*

Forms of Direct Censorship

- Government monopolization of a communication medium
 - E.g., the government owns all television stations, or all printing presses, and so controls the message
 - Doesn't work so well with the Internet
- Prepublication review
 - Certain kinds of information must be reviewed before they can be published
 - E.g., nuclear/military secrets
- Licensing and registration
 - You can't operate a TV station without a license
 - Necessary because of limited bandwidth
 - Opens the door to regulation of content

Self-censorship

- Most common form of censorship
- Group decides for itself not to publish
- Reasons
 - Avoid subsequent prosecution
 - Maintain good relations with government officials (sources of information)
- A “soft” form of self-censorship: ratings systems
 - Movies, TVs, CDs, video games
 - Nothing similar has happened on the Web
 - At least, not consistently.

Challenges Posed by the Internet

- Many-to-many communications
 - Hard for the government to shut down (but, Arab Spring)
- Dynamic connections
 - Computers coming and going all the time; hard to know who's who
- Huge numbers of Web sites
 - Hard to control access to online information
- Extends beyond national borders, laws
 - Governments may have limited authority to shut down sites
- Hard to distinguish between minors and adults
 - Important for initiatives that seek to restrict children's access

Ethical Perspectives on Censorship

- Kant opposed censorship
 - Product of the Enlightenment: reaction to institutional control
 - “Have courage to use your own reason”
- Mill opposed censorship
 1. No one is infallible: we may silence the truth.
 2. Even if not, an opinion may contain a kernel of truth.
 3. Even if not, the truth must be rationally tested and validated.
 4. Ideas are most persuasive if they’re tested rigorously.

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.”

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