Lecture 3-2 Networked Communications

Addison-Wesley is an imprint of

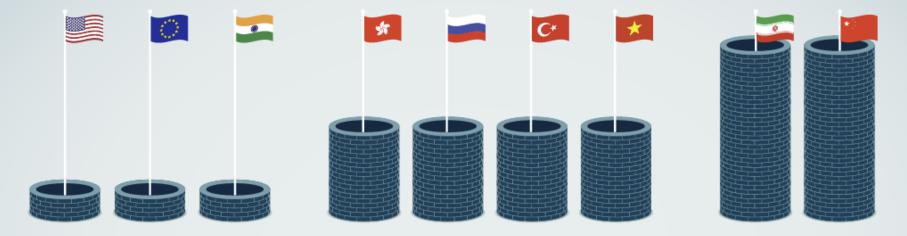


Government Control of the Internet

- North Korea: Internet mostly inaccessible; Myanmar: formerly inaccessible; Cuba: Notoriously slow & expensive.
- Saudi Arabia: centralized control
- 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: Limits access of minors to pornography
- Can you think of other examples?

Rising Cyber Sovereignty Threatens to Further Splinter the Internet

More governments are imposing restrictions on the flow of information across national borders.



MORE OPEN INTERNET

MORE CLOSED INTERNET

EUROPEAN UNION

In July 2020, the EU's highest court invalidated the bloc's US-data-sharing agreement, jeopardizing one of the internet's busiest border crossings.

INDIA

The world leader in internet shutdowns, the government banned over 100 Chinese apps and may compel companies to store citizens' personal data domestically.

UNITED STATES

The Trump administration's unprecedented move to ban TikTok and WeChat was a step toward cyber sovereignty.

HONG KONG

The Beijing-imposed National Security Law threatens to extend the Great Firewall into the region.

RUSSIA

The "Sovereign Internet" law could see the Russian web secede from the international internet. Foreign websites are already blocked en masse.

TURKEY

A new law coerces social media platforms to comply with censorship and surveillance, effectively extinguishing channels of free speech.

VIETNAM

Authorities slowed down connections to Facebook in an apparent push to force the company to cooperate with censorship demands.

CHINA

The Great Firewall is the world's most heavily fortified digital border and controls what information enters and exits the country.

IRAN

A national "intranet" of government-approved content is being built to prevent Iranians from accessing the global internet.



Recent Changes in Internet Freedom

C **Biggest 1-year decline Biggest 5-year decline** 2016 2019 2020 2020 -12 **MYANMAR** VENEZUELA 28 **KYRGYZSTAN** EGYPT PHILIPPINES INDIA 55 . **ECUADOR RWANDA KYRGYZSTAN** NIGERIA - 60

Largest One-Year and Five-Year Score Declines

Of the 65 countries covered by Freedom on the Net, these experienced the steepest one-year and five-year declines in internet freedom.

Freedom House

Internet Freedom Score - Biggest Gains



Sudan Based on slides © 2011 P Sudan saw a 5 point improvement in its internet freedom score.



Ukraine

Ukraine saw a 5 point improvement in its internet freedom score.



Zimbabwe

Zimbabwe saw a 4 point improvement in its internet freedom score.

This infographic is from the Freedom on the Net 2020 report, as seen on www.freedomhouse.org

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 (though see Saudi Arabia; China)
- 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 (as in Canada)

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 not at all impossible)
- 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."

When, if ever, do you think censorship is justified?

Freedom of Expression: History

- De Scandalis Magnatum (England, 1275)
 - You could be imprisoned for weakening loyalty to the King
 - Not so different from lèse-majesty laws today, esp. in Thailand, Morocco, Jordan (see <u>http://en.wikipedia.org/wiki/Lese-majesty</u>)
- 18th century: freedom of the press in England
 - Anyone could print what they liked
 - Punishment for libel: publication causing harm, even if truth
- American states adopted bills of rights including freedom of expression
 - Freedom of expression in 1st amendment to U.S. Constitution:
 "Congress shall make no law ... abridging the freedom of speech, or of the press"

Canadian Charter of Rights and Freedoms

1. The Canadian Charter of Rights and Freedoms guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and o



demonstrably justified in a free and democratic society.

- **2.** Everyone has the following fundamental freedoms:
- (a) freedom of conscience and religion;
- (b) freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication;
- (c) freedom of peaceful assembly; and
- (d) freedom of association.

Freedom of Expression is always in the news



Freedom of Expression is not an Absolute Right

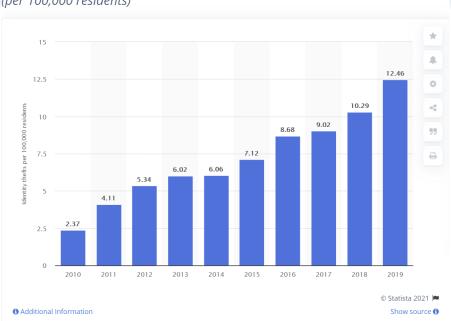
- Right to freedom of expression must be balanced against the public good
- Various restrictions on freedom of expression exist
 - e.g., Section 1 of the Canadian Charter is used to justify laws against hate speech, even though these limit expression

In pairs:

Which restrictions on freedom of expression do you think are justified?

Identity Theft

- Identity theft: when a person uses another person's electronic identity
- Phishing: use of email to attempt to deceive people into revealing personal information



Rate of identity thefts in Canada from 2010 to 2019 (per 100,000 residents)

source: https://www.statista.com/statistics/544904/identity-theft-rate-canada/

Child Sex Abuse Imagery

- Recent explosion in online child sex abuse imagery https://www.nytimes.com/interactive/2019/09/28/us/child-sex-abuse.html
 - 1998: 3,000 reports of child sex abuse imagery
 - 2009: over 100,000 reports
 - 2014: over 1,000,000 reports
 - 2018: over 18,400,000 reports
 - 1/3 of total ever reported; represents over 45,000,000 images
- It's important that we approach this issue with sensitivity
 also important that we not ignore it; it's important
- What factors contribute to this epidemic?
- Why have legal responses failed?
- What can be done?

Cyberbullying

- Cyberbullying: Use of the Internet or phone system to inflict psychological harm
- In a 2009 survey, 10% admitted to cyberbullying, and 19% said they had been cyberbullied (2016 same)



Vancouver area teen commits suicide after telling story of being cyberbullied (with video)

#RIPAmanda is trending as people post news and condolences for the teen, Amanda Todd

BY GILLIAN SHAW, VANCOUVER SUN OCTOBER 11, 2012 1:05 PM

A Vancouver area teen who told a heart-breaking story in a YouTube vide of cyberbullying that led to an all-out schoolyard attack has committed suicide.

In stories and posts flooding Vancouver's social media networks, #RIPAmanda is trending as people post news and condolences for the teen, Amanda Todd. Amanda died in Coquitlam last night.

The young teen went to school in Maple Ridge but had changed schools and was living in Coquitlam. She joined YouTube on September 6 and posted her video September 7. Her last YouTube activity was when she added a Hunter Hayes music video to her favourites on YouTube.

Sexting

- Definition: sexually suggestive text messages or emails with nude or nearly nude photographs
- In a 2009 survey, 9% of U.S. teenagers admitted to sending a sext, 17% admitted to receiving a sext
- 2018 study: 14% sending; 25% receiving
- Case of Jesse Logan
 - killed herself after ex-boyfriend shared pictures
- Case of Phillip Alpert
 - just turned 18; sent pictures of his 16 year-old girlfriend.
 - sentenced and registered as a sex offender for child pornography
- Case of Ting-Yi Oei
 - principal kept a copy of a picture as evidence
 - angry parent sued him
 - lost job over child pornography charges

How should society respond to sexting?

Chat-Room Predators

- Chat room: supports real-time discussions among many people connected to network
- Instant messaging and chat rooms replacing telephone for many people
- Some pedophiles meeting children through chat rooms
- Police countering with "sting" operations

Are chatroom "stings" ethical?

Kantianism, Utilitarianism (act/rule), Social Contract, Virtue Ethics

Internet Addiction/Excessive Use

- Some liken compulsive computer use to pathological gambling
- Traditional definition of addiction:
 - Compulsive use of harmful substance or drug
 - Knowledge of its long-term harm
- Some people spend 40-80 hours/week on the Internet, with individual sessions lasting up to 20 hours



Is Internet Addiction Real?

- Kimberly Young created test for Internet addiction
 - Sample question: "Have you repeatedly made unsuccessful efforts to control, cut back, or stop Internet use?"
 - Patients who answer "yes" to at least 5 of 8 questions may be addicted
- Arguments against it being an addiction
 - Computer use is generally considered a positive activity
 - Do not need more to function; we don't develop a 'tolerance'
 - Excessive use does not lead to criminal activity
 - More accurate to call excessive use a compulsion

Vote

Do you believe that internet addiction is real? A: Yes B: No

Does society bear an ethical responsibility for excessive internet use/internet addiction?

- A: Yes
- **B:** Somewhat
- C: No

Should we hold tech companies accountable?