Agenda

1. Administrative
2. Science, technology, & society
3. The Internet & inequality
4. Discussion:
   Online media & racial stereotyping

ADMINISTRATIVE

Deadline extention

- Synthesis essay 2 is now due on ***Friday, April 11***

Final exam freebie

- In our discussion of social network analysis, I neglected to talk about '*small world networks*'
- On the exam, a question asks you what type of network feature these are. The answer is **network structure**
- Note that response orders are randomized; ***on your exam, it may not be option 'c'***

"Small world" networks describe a type of _____. *(2 points)*

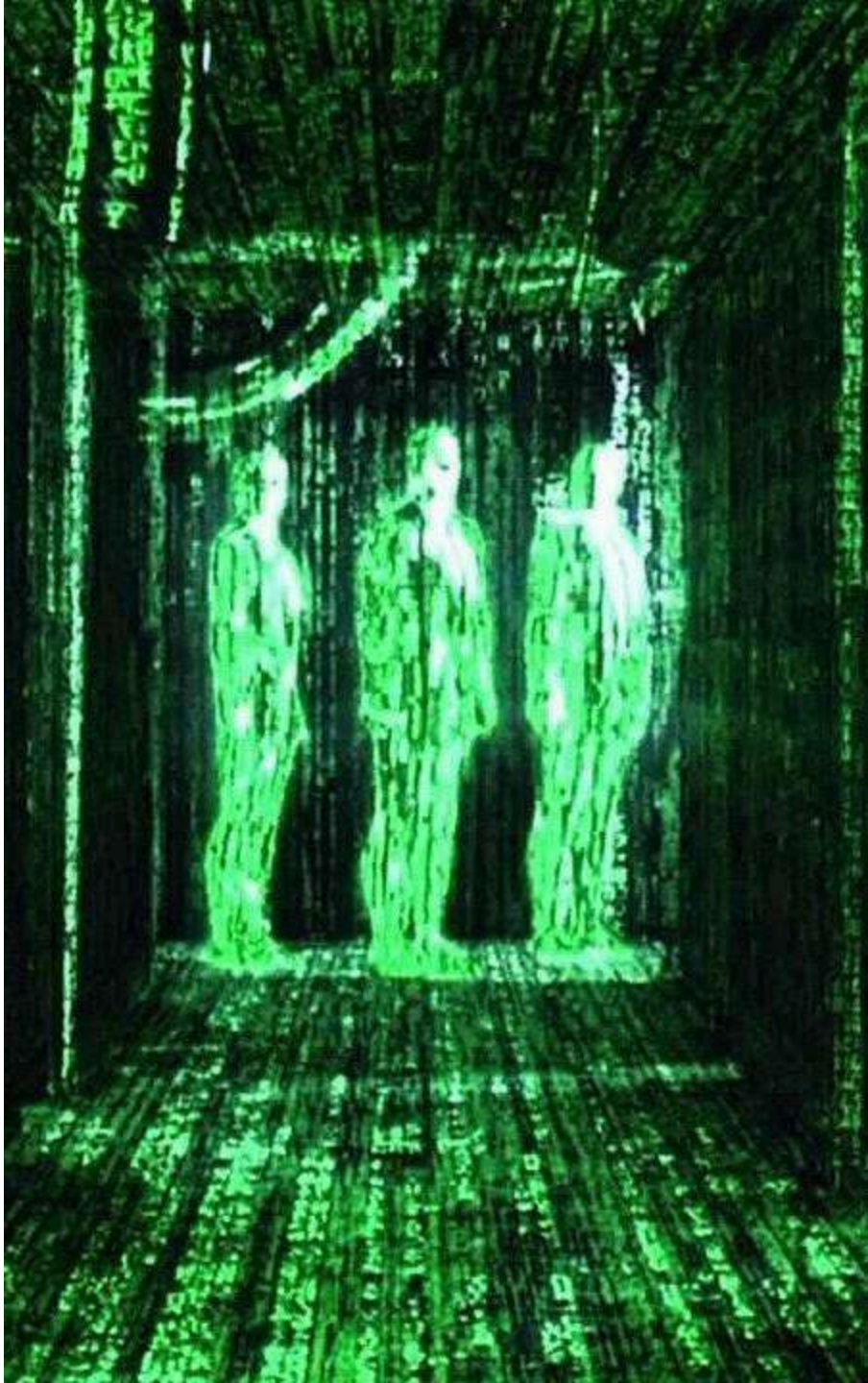
a. Network function

b. Network relation

c. Network structure

d. Network position

Science, technology, & society



What is “technology”?

- Textbook: “The application of science to solve problems in daily life.”
- Frequently used more broadly

> Consider a tiny innovation commonly found in European hotels: attaching large cumbersome weights to room keys in order to remind customers that they should leave their key at the front desk every time they leave the hotel instead of taking it along on a tour of the city.

Latour, Bruno. “Technology Is Society Made Durable.” The Sociological Review 38, no. S1 (May 1, 1990): 103–31.

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Technology *mediates* the way we live and interact in society:

Weapons
Interpersonal dominance
Warfare, conquest, colonialism

Transportation
Trade
Migration

Medicine
Personal health
Reproduction
Demographic change

Automation
Increased alienation
Economic production

Communication …

Society & culture ⇆ **Science & technology**

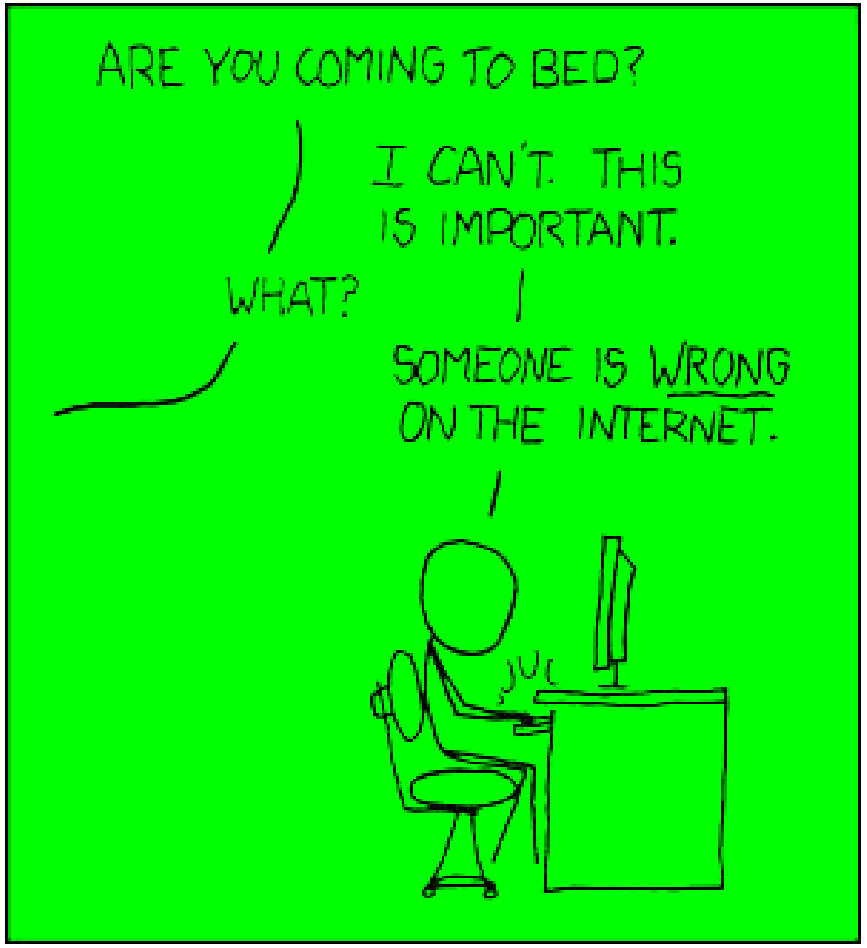
How does *technology* influence *society*?

- Is technological change ***exogenous***? something that happens *to* society?
  Demographic transition theory; Weber on bureaucracy; etc.
- How can new science and techologies change the way we interact with each other?
- How can new science and technologies alter power relations?

How does *society* influence *technology*?

- Production of scientific knowledge and technology is ***inherently social***
- Social institutions and norms *shape* scientific knowledge
  E.g., promote 'bad' science (phrenology, conversion therapy)<
- Scientific knowledge is *itself* social
  E.g. paradigms the structure of scientific revolutions (Kuhn)

The Internet & social divisions



Technologies of communication are hugely impactful on society

Communication as the *medium* of interaction

Written language

Durable, verifiable, recordable

Trade, laws, long-distance communication, literature, …

Printing

Reproducible, mass distribution

Democratization of text (Martin Luther)

Walter Benjamin: “The Work of Art in the Age of Mechanical Reproduction”

Technologies of communication are hugely impactful on society

Communication as the *medium* of interaction

Telecommunications

"Instant" broadcasts

Global availability of news

Mass media and culture (Hollywood)

The Internet

Email, World Wide Web

Person-to-person communication

Online identities

Globalized communication

- Popular idea that instant, effortless communication is widely available to everyone
  (We will problematize this in a moment)

Lowered barriers

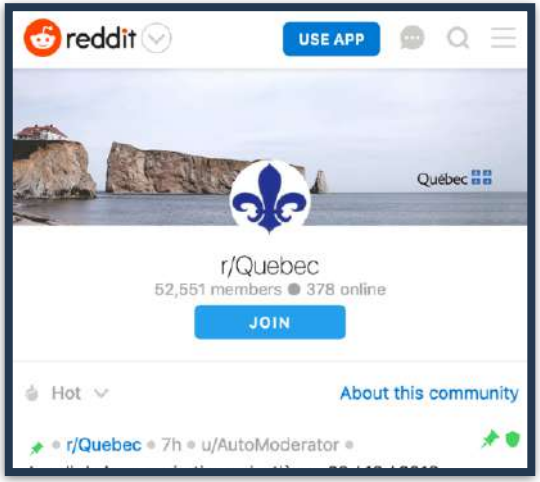
- Common idea behind theories of modernization
- Geographic, political, cultural, and economic barriers are easier to cross

"The World is Flat"

- Thomas Friedman (2005)
- Utopian ideal of hyper-modernized globe
- Realization of free-market ideal

Internet undoubtedly breaks down some social barriers

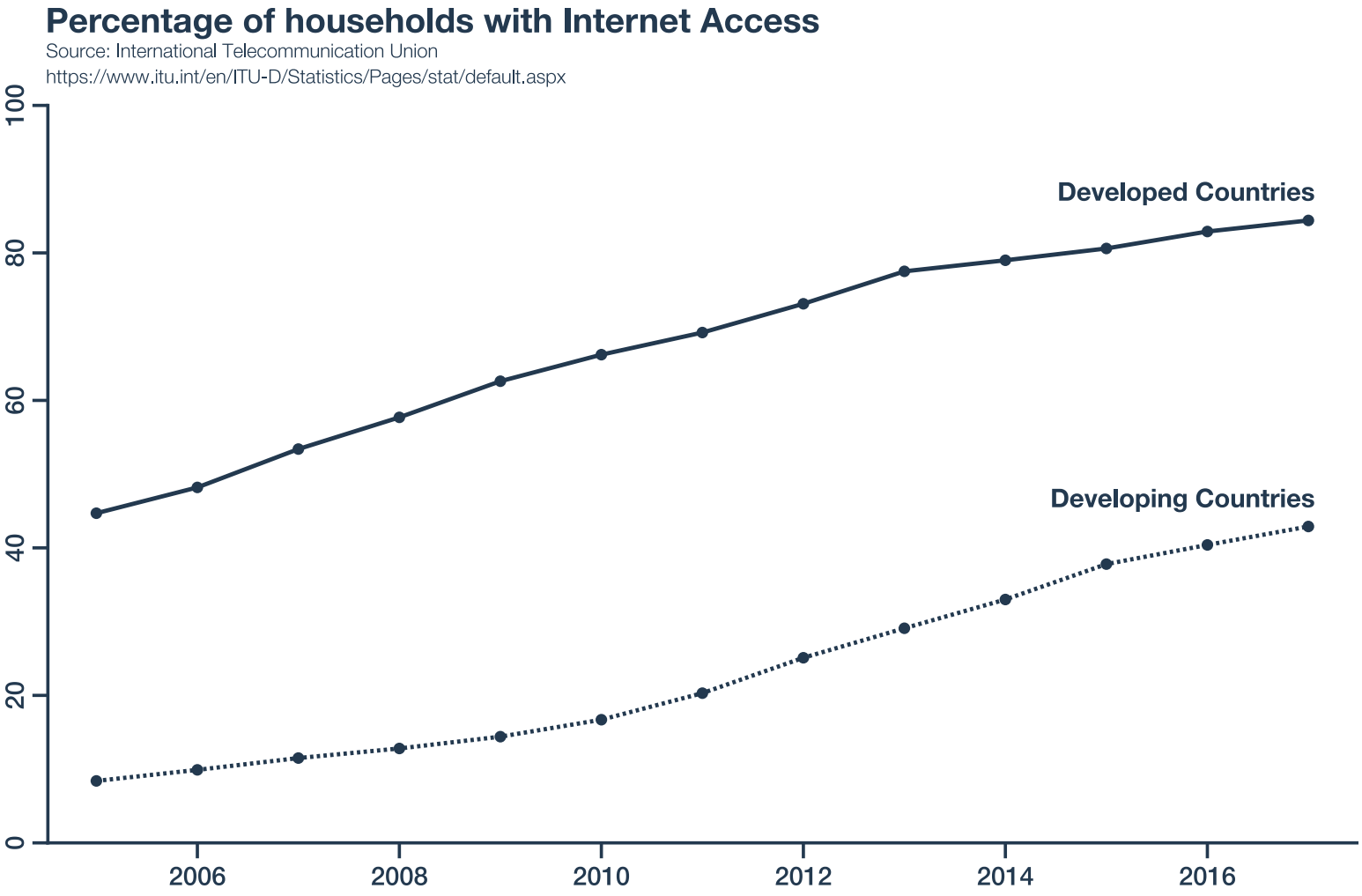
- Effort required to publish information to a global audience (or a specific person) is extremely low
- Special-interest information and support communities are widely accessible
  Marginalized communities can cast a wider social support net
- Populations with grievance can find each other
  Disparate individuals can become a “group”



Recombinative culture

- *Cognitive Surplus* (Clay Shirky, 2010)
- Grass-roots creative communities
  itch.io, bandcamp.com, github.com, archiveofourown.org

INTERNET AS DIVIDER



INTERNET AS DIVIDER

```
<!DOCTYPE html>
<html>
  <head>
    <title>Cultural Privilege of Northwest Europeans</title>
  </head>
  <body>
    <section>
      <h1>Cultural Privilege of Northwest Europeans</h1>
      <p><em>Northwest Europeans</em> are often seen as having cultura
      <p>This privilege can be seen in various aspects of society, suc
      <p>Furthermore, the media often portrays Western values and life
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Infrastructure inequality

- Physical infrastructure of the Internet focussed on wealthy parts of wealthy countries
  Access and bandwidth correlated with wealth and power
- Hardware expensive for individuals and institutions

Cultural inequality

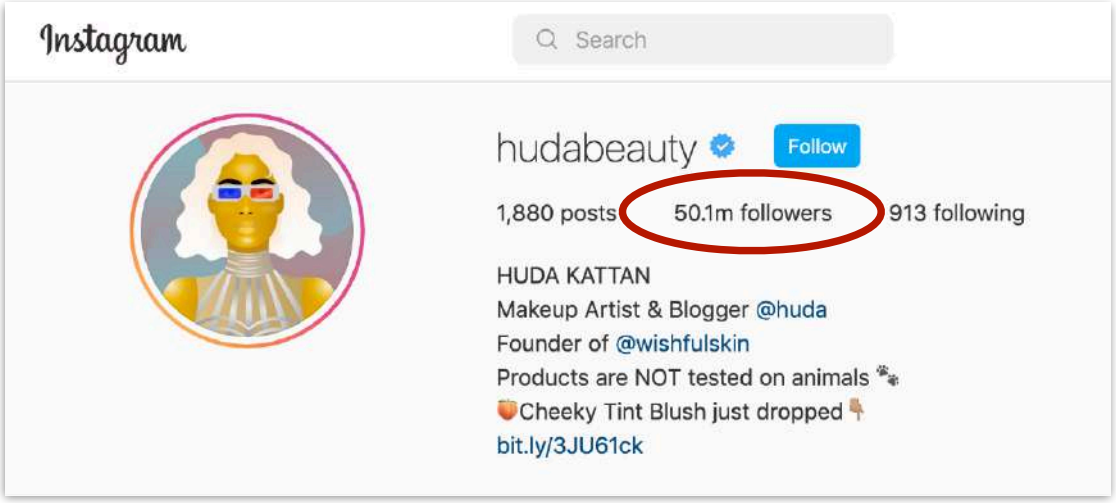
- Internet is designed by and for Western Europeans and North Americans
  Euro-centric URLs, programming languages, documentation, …

Knowledge inequality

- Technical knowledge
  Email, web navigation, word processing, etc.
- Social knowledge
  Etiquette, discernment of legitimate sources, etc.

Forces of structural inequality

- Evan a “flat world” will develop structural inequalities
- Matthew effect
  (path dependency, preferential attachment)
  “Rich get richer, poor get poorer”
- Concentration of power
  Twitter accounts with many followers will attract even more
  Amazon books with lots of reviews will sell more
  Academic articles with lots of citations will be cited more
- ***Small differences compound over time***



Automation of communications media

- Filtered content, targeted ads, search, …

Technology embeds existing biases

- Racial, ethnic, gender, and class prejudices are built into technology

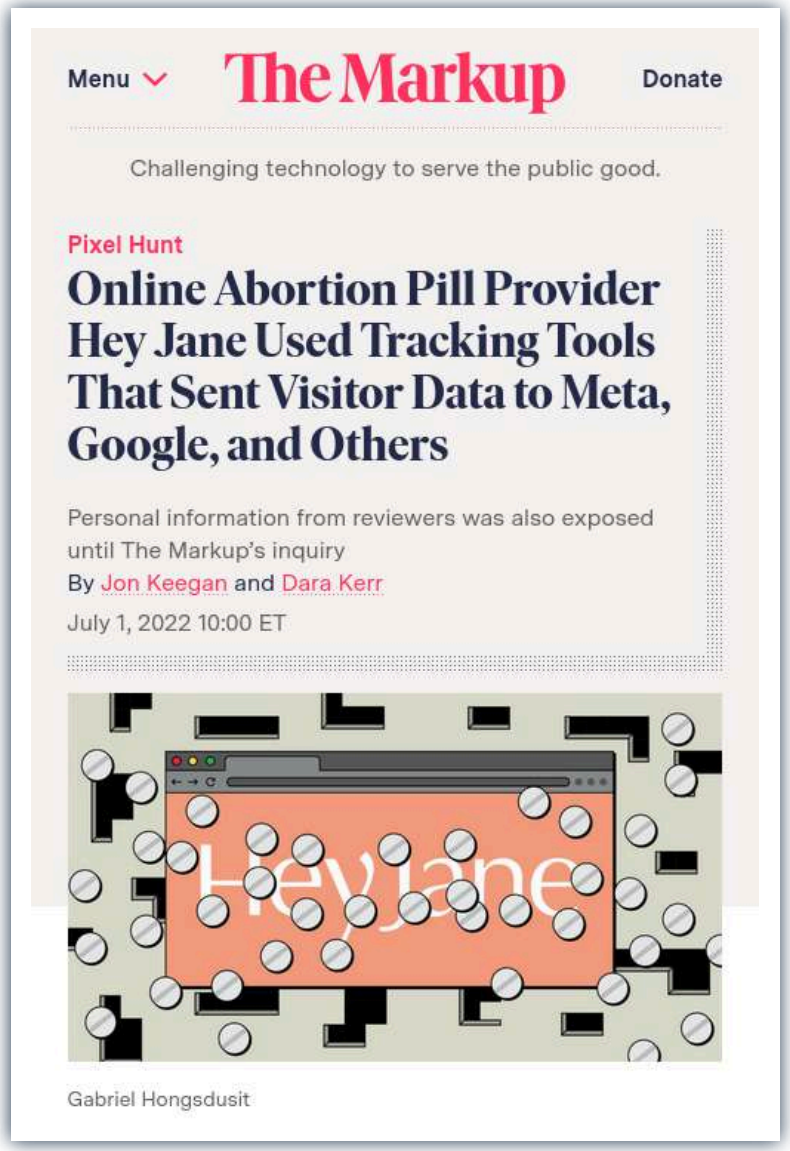
Roth, Lorna. “Looking at Shirley, the Ultimate Norm: Colour Balance, Image Technologies, and Cognitive Equity.” *Canadian Journal of Communication* 34, no. 1 (March 28, 2009).

New media and the reproduction of inequality

- Artificial intelligence / machine learning cannot be neutral
- Biases of scientists
  Introduced through categories and implicit assumptions
- Biases of society
  Introduced through data availability and model training

AI-generated images reflect cultural biases

Bianchi, Federico, Pratyusha Kalluri, Esin Durmus, Faisal Ladhak, Myra Cheng, Debora Nozza, Tatsunori Hashimoto, Dan Jurafsky, James Zou, and Aylin Caliskan. 2022. “Easily Accessible Text-to-Image Generation Amplifies Demographic Stereotypes at Large Scale.” arXiv. https://doi.org/10.48550/arXiv.2211.03759.



Technology as tool of opression

- **Ubiquity of digital communication opens new channels for systems of oppression**
- **Surveillance**
  Location, content, association, etc
  Foucault's panopticon
- **Extraction**
  Labor (physical and creative)
- **Harassment, cyber-bullying, doxxing**
  Availability of information and access to social networks
- **Framing / narative**
  Social media and online resources give outsize influence over framing to those with access

The role of online *versus* 'legacy' media in racial stereotyping

1. **In groups of 2–4:**
   - What **differences** did Phelps and Hamilton (2021) find between 'online only' and 'legacy' news sources?
   - Discuss what **features** of online media could account for this difference?
   - Consider the influence of **social media** on racialized representations. How does this to the news media that was the focus of the reading?

2. **As a class:**
   - As a class, we'll discuss some of the points and insights from the groups