

Choices and Consequences in Computing

INFO 1260 / CS 1340

Lecture 5 (Ranking, continued; Speech Principles)

January 31, 2024

<https://en.wikipedia.org> › wiki › Attention

Attention - Wikipedia

Attention is the behavioral and cognitive process of selectively concentrating on aspect of information, whether considered subjective or objective, ...
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Attention | Definition of Attention by Merriam-Webster

1 : the act or the power of fixing the mind on something : careful listening or watc
attention to what happens next. 2 : notice, interest, or awareness attract **attention**
thinking about something so as to be able to take action on it This matter require
attention.

<https://www.psychologytoday.com> › basics › attention

Attention | Psychology Today

The ability to pay **attention** to important things—and ignore the rest—has been a
skill throughout human history. **Attention** can help us focus our ...

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How Psychologists Define Attention - Verywell Mind

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Attention | Definition of Attention at Dictionary.com

noun · a concentration of the mind on a single object or thought, especially one p
selected from a complex, with a view to limiting or clarifying receptivity ...

<https://www.britannica.com> › science › attention

Attention | psychology | Britannica

Attention, in psychology, the concentration of awareness on some phenomenon

Rankings affect how attention is allocated

- They can minimize wasted effort and maximize the chance that an impatient user finds something that interests them.
- They tend to increase disparities in attention.
- We don't know enough to build correct rankings, so we build them over time as the system evolves (e.g. via leaderboards).
- This can lead to self-fulfilling rankings that might not reflect underlying quality or interest.
- All of this has implications for how we think about which pieces of content succeed in the competition for our attention.

Evaluating rankings experimentally

Computing as synecdoche: online rankings are just one form of filter that cultural products must pass through

- Consider e.g. the creation and distribution of a movie.
- Funding to make it; theaters or streaming to show it; critics to recommend it.

These filters operate like rankings, and exhibit the phenomena of rankings:

- They are designed to maximize consumption (even if mistakes get made).
- They create massive disparities in attention.
- They become self-fulfilling: path-dependence, cumulative advantage.

A thought experiment (Salganik-Dodds-Watts 2006):

- For a cultural artifact with enormous success, how inevitable was this success?
- If we could re-run history, would it happen again?



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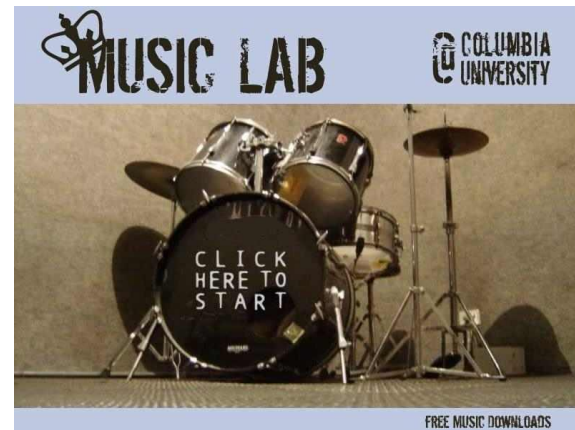
Evaluating rankings experimentally

- We can't run this thought experiment in the real world. But we can try a version of it on the Internet.
 - Do rankings increase disparities in attention?
 - Are rankings inherently unpredictable?
 - Can rankings become self-fulfilling?
- MusicLab experiment: Salganik-Dodds-Watts, 2006.
 - Roughly 14,000 visitors to a music site hosting 48 songs
- Three experimental conditions:
 - “Independent”: each user sees a randomly ordered list of songs.
 - Weak influence: randomly ordered list of songs with current download counts.
 - Ranked (strong influence): songs are ordered by the current download counts.

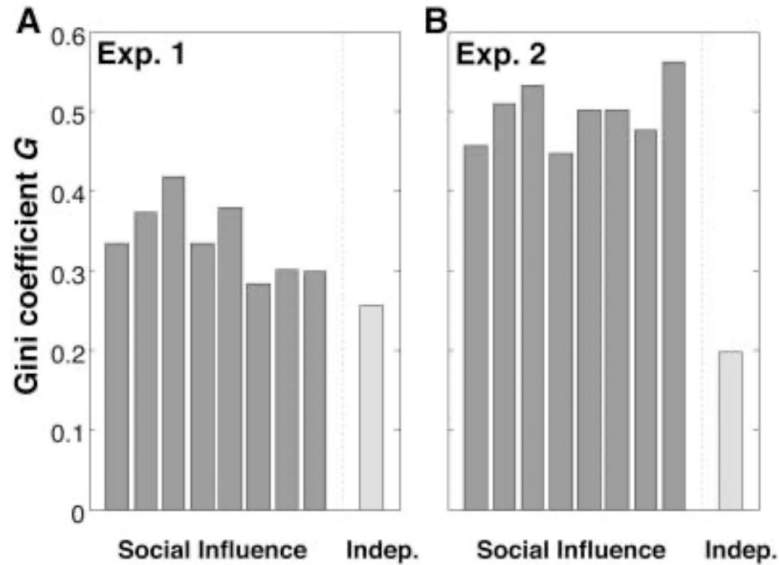


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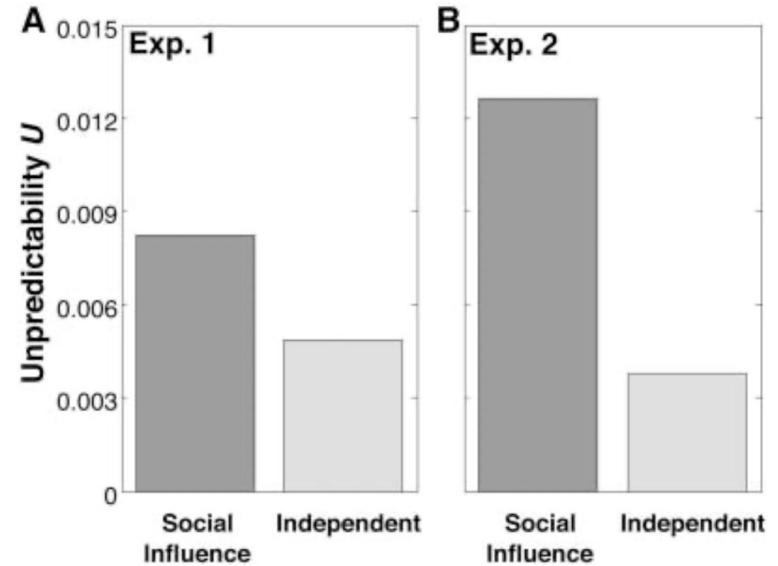
- Musiclab
 - “Independent”: each user sees a randomly ordered list of songs.
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- Did the conditions with ranking information create more disparity?
- To test inherent unpredictability, users in the ranked conditions were randomized into one of 8 “parallel universes” that evolved independently.
- A test not just of ranking on Web sites, but also a metaphor for the unpredictability of cultural success more generally.



Main Results from MusicLab Experiment

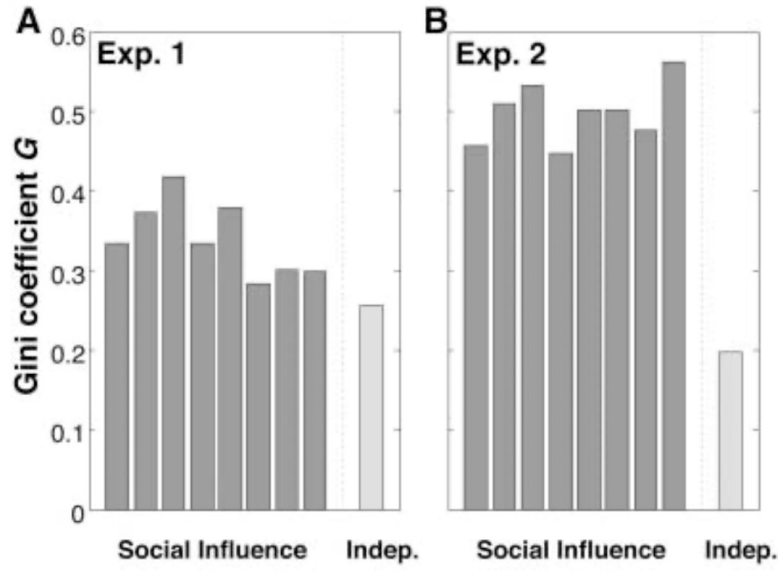


Outcome disparity goes up in ranked version.

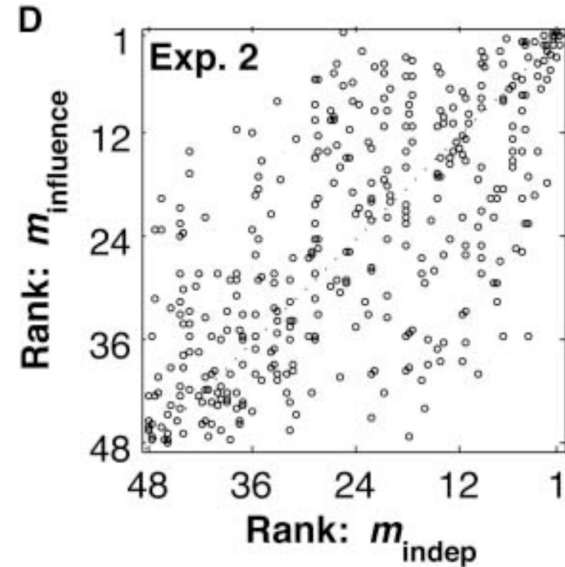


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Taking a step back...

- Ranking and personalization of online content raise questions about what information gets attention.
- But this raises a more fundamental question: how valuable is it for different kinds of speech to be heard?
 - And why??
 - And who gets to decide??

Free speech principles

- What is the value of free speech?
- Why does the First Amendment (seem to) matter so much?
- What does the First Amendment actually protect?
- What does the First Amendment have to do with technology platforms?

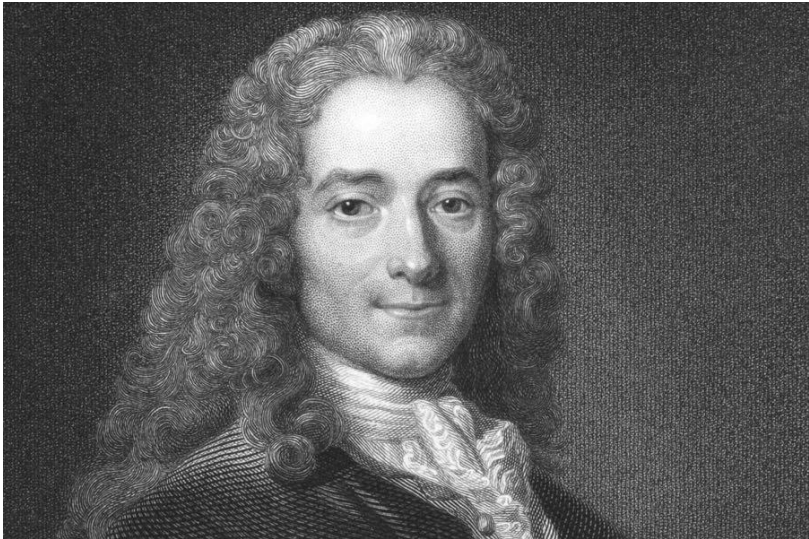
The First Amendment

“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.”

A common formulation

“I disapprove of what you say, but I will defend to the death your right to say it.”

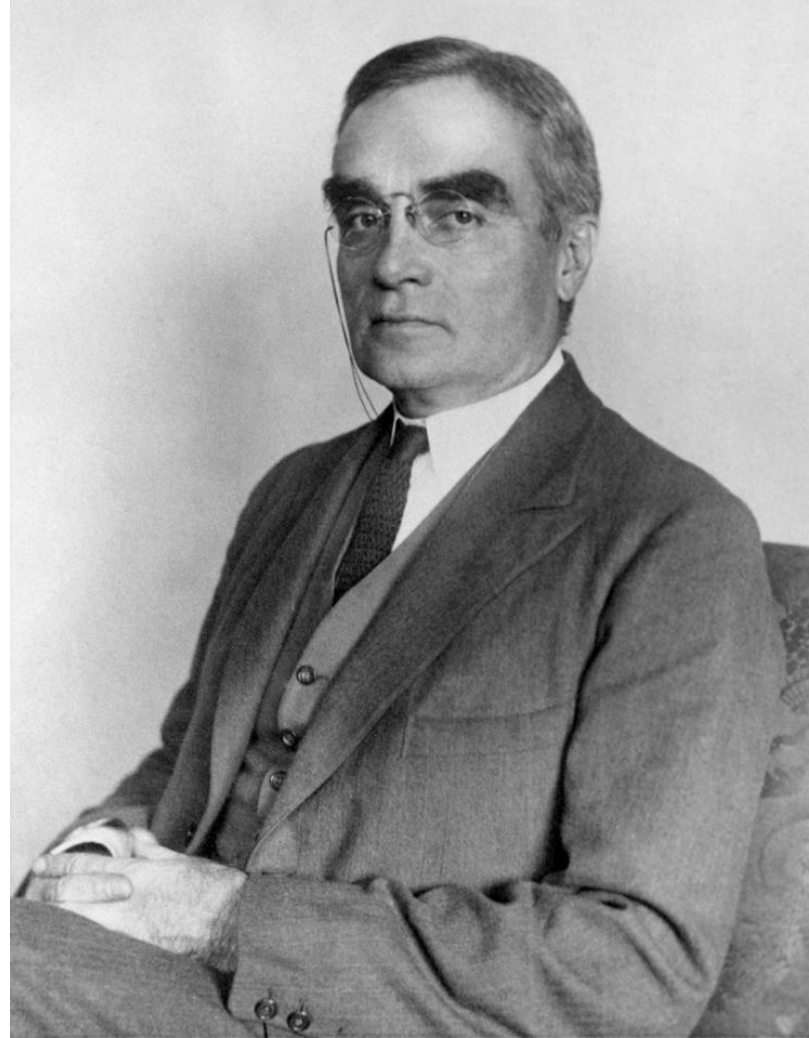
(commonly attributed to Voltaire; actually said by Evelyn Beatrice Hall)



What's the value of free speech?

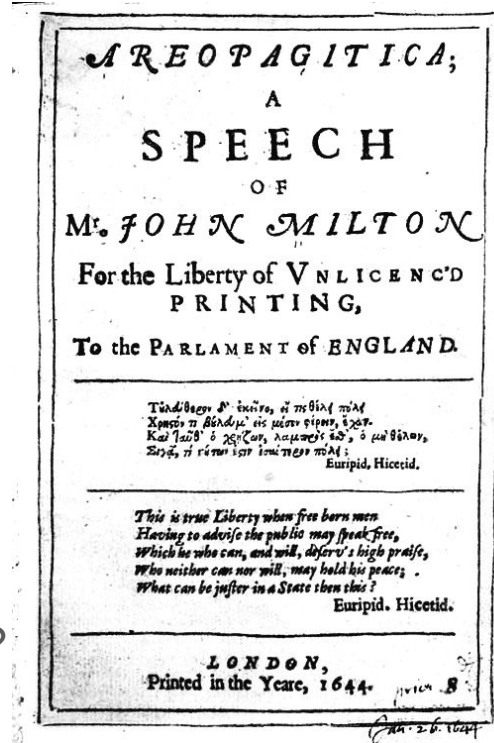
Truth theory

- Learned Hand: First Amendment
“presupposes that right conclusions are more likely to be gathered out of a multitude of tongues, than through any kind of authoritative selection” (US v. Associated Press, 1943)
- Justice Holmes: “the best test of truth is the power of the thought to get itself accepted in the competition of the market” (Abrams v. US, 1919)



Is truth destined to succeed in the marketplace of ideas?

- “Let her and Falsehood grapple; who ever knew Truth put to the worse, in a free and open encounter?” (Milton, *Areopagitica*)
- Counterspeech doctrine: the remedy for bad speech is more speech (Brandeis, *Whitney v. California*, 1927)
- But, according to Holmes: truth is just “the majority vote of that nation that can lick all others”
- Is the market a “free and open encounter”?
- Feminist critique by Williams (2009): truth and knowledge are socially constructed ideas shaped by power
- Does popularity of an idea = inherent quality or value of that idea?
- A lot of speech doesn’t really have a truth value



Democracy theory

- Maybe the goal of free speech is not to reach truth, but to preserve democracy (Meikeljohn)
- By giving people tools they need for democratic participation (criticizing government, voicing dissent, etc.) while maintaining social stability:

“The principle of open discussion is a method of achieving a more adaptable and at the same time more stable community, of maintaining the precarious balance between healthy cleavage and necessary consensus.”

—Thomas Emerson

- “Talking it out” as a kind of safety valve: prevents revolution, allows for gradual change

Democracy theory and political speech

- Under democracy theory, we are most concerned with protecting political speech
- But a lot of speech is not explicitly political – what do we do with that?
- Some political speech is not high-quality (“vehement and caustic” attacks, misinfo)
- Primacy of political speech also leads to things like Citizens United v. Federal Election Commission (2010): First Amendment means the government can’t restrict corporations’ political spending
 - Not everyone thinks this is great for democracy



Social interaction and self-fulfillment theories

- Talking to others freely is how we develop healthy relationships, communities, and selves

“By communicating an individual forms relationships and associations with others—family, friends, co-workers, church congregation, countrymen. ... Expression is the way we interact with others and so participate in social goods such as friendship and self-government. And through expression individuals develop their human capacities.” (Richard Moon)

- But a lot of speech isn't clearly helping us become our best selves or build our best communities
- What's so special about speech? A lot of things that might help me be my best self are not legal

In reality, it's a mushy mix of these

All theories have limitations

Imperfect mapping between values and rules

Why does the First Amendment (seem to) matter so much?

First Amendment “magnetism”

- Schauer: no one normative theory really describes what is actually protected by the First Amendment: “all of the work is being done not by the theories, but by as-of-yet unarticulated factors.” So what might be going on here?
- The First Amendment has become a nearly mystical political and cultural **symbol** with immense rhetorical power
- Nobody wants to be seen as a First Amendment hater; there is no similar magic for other constitutional provisions. Why? Possibilities:
 - History of association with social movements
 - It's literally #1
 - It's a “negative” protection (the government *can't* do something): “fears tend to be retransmitted more than hopes”

First Amendment “magnetism” (cont.)

- Perhaps the biggest reason: “relying on the First Amendment is, not surprisingly, a good way of attracting the attention and sympathy of the press”
 - First Amendment has strong resonance for media, since it’s about them too
 - (Schauer wrote this in 2004; would we say this holds today?)
- A good route to elevate the apparent gravity of a situation is to frame it as a First Amendment issue (Bong Hits 4 Jesus → “the inspiration, enthusiasm, and courage of our youth”)



What does the First Amendment actually protect?

(a quick and non-exhaustive tour)

Does the First Amendment mean that the government can under no circumstances restrict what you say?

- No!
- Even when speech is protected, governments can sometimes enact content-neutral restrictions on the “time, place, and manner” of speech – like requiring permits for protesting, soliciting
- Some kinds of speech are protected to a lesser degree
 - Commercial speech
 - Student speech in K-12 schools: schools can censor speech that creates “substantial disruption” to educational mission (Tinker v. Des Moines, 1979)
- Some kinds of speech are unprotected

Not protected: incitement

- *Brandenburg v. Ohio* (1969): Speech is protected unless it is likely to provoke *imminent violent action*
- Courts will look at factors like: size of the audience, likelihood of harm, imminence and specificity of harm – includes who the speaker is, how people are likely to interpret the speech, the context and relationship between speaker and audience



- False statements that harm somebody's reputation
- Different standards apply based on whether the person being defamed is a public or private figure, and whether the issue is of public or private concern

- New York Times v. Sullivan (1964): NYT ran ad with a few minor errors about Alabama police's actions against MLK; SCOTUS says that's not enough for defamation

- [illegible]

Most hate speech is protected

- A large category of speech is “lawful, but awful”
- Language that is offensive, encourages hate, or asserts inferiority of a group is protected by the First Amendment unless it constitutes incitement to violence, “true threats,” or “fighting words”
 - A city cannot ban the wearing of Nazi uniforms in a parade (Collin v. Smith, 1978)
 - A state can ban cross-burning only with evidence that the cross-burning was done “with the intent to intimidate” (Virginia v. Black, 2003)
 - A state cannot bar a hate group from protesting at funerals in extremely offensive ways (Snyder v. Phelps, 2011) – but can pass time, place, and manner restrictions against it

Does the First Amendment mean that private companies can't restrain your speech?

● No!!!

- This is called the *state action doctrine*
- The First Amendment only prevents the government from restraining your speech
 - Not just Congress, but other branches/levels of government too (incorporation doctrine)
- (We will come back to this shortly)

Does freedom of speech mean you can say anything you want at any time without consequence?

- Of course not!
- Recall that the whole premise of the “marketplace of ideas” is that not every idea deserves to succeed. Consequences are, in a sense, the market working.
- Things that are not a violation of your First Amendment rights:
 - You being fired (except if your employer is the government and you are speaking in private capacity)
 - You being kicked off a social network
 - You being asked to leave a restaurant
 - You losing a record contract, endorsement deal, book contract, or advertiser
 - People not liking you

Along comes the internet

Big changes in how speech works online:

- A lot more speech happening
- Reduced gatekeeping to production and dissemination of speech
- Different ways of finding listeners
- More persistence of speech (that thing you posted in 2015 is probably still visible somewhere)
- Attention scarcity, not information scarcity
- New questions about how platforms rank, promote, and display information, and who benefits

Is the internet good or bad for speech?

- Both, probably
- AJ Liebling: “Freedom of the press is guaranteed only to those who own one.”
- The promise of the internet was democratization of information production; we might question whether that has occurred

Next time: who/what controls speech online?