

---

# Online Behavior



---

# Online Behavior

- How do people behave online?
- How does it compare to their offline behavior?
- To what extent can online presence substitute for personal meetings?
- To what extent do online interactions displace “better” options



- We all know what that means
- Why does it exist?
- Do emoticons have deeper implications?

---

## Online Communications Aren't Perfect

- Nuances obvious when meeting in person are lost in online discourse
- There's no such thing as "tone of voice" in email
- Of course, the same can occur in books or newspapers, but most authors or copy editors are more skilled
- Emoticons are an extra channel that can help avoid ambiguity and confusion

---

## Now We Have Emojis

- Is   a threat?
- What if combined with ?
- Even if the sender and recipient believe they understand the meaning, will everyone else?

---

## Other Factors

- Anonymity or pseudonymity
- Physical distance
- Little or no chance of personal interaction—or retaliation
- All of these create mental separation

---

## An Imperfect Channel

- Given the limitations of the medium, we should *expect* different behavior
- The medium is different than the one we have habitually dealt with
- Inherent? “We’re just funny monkeys”.
- Educated? Will “digital natives” do better?

---

# Flaming

- People are very rude to others
- Rudeness exceeds the bounds that would be accepted face-to-face
- No apparent reason other than the medium

---

# Flaming

From the OED:

DRAFT ADDITIONS OCTOBER 2001

*intr. slang* (orig. and chiefly *Computing*). To rant, argue, or harangue, esp. via an electronic medium (such as e-mail or postings to a newsgroup); to send an inflammatory, abusive, or (esp. in early use) inconsequential e-mail or posting, usually as a hasty response or in a rapid, angry exchange. Also *trans.*: to send (a person) such a message. Cf. FLAME *n.* and *adj.*

Oldest citation: 1981 (offline!)

---

## Godwin's Law (1990)

“As an online discussion grows longer, the probability of a comparison involving Nazis or Hitler approaches one.”

---

# Trolls

- Posts things hoping for a reaction
- “Trolling” for a reply
- “Do not feed the trolls”

---

# Why?

- Immaturity?
- Boredom?
- Perceived immunity to retribution or punishment?

---

# Trolling

Also from the OED:

DRAFT ADDITIONS MARCH 2006

*intr. Computing slang.* To post a deliberately erroneous or antagonistic message on a newsgroup or similar forum with the intention of eliciting a hostile or corrective response. Also *trans.:* to elicit such a response from (a person); to post messages of this type to (a newsgroup, etc.).

Oldest citation given: 1992.

---

## Ancient Phenomena

- Trolling and flaming go way back on Usenet
- ☞ Some say the distancing effect is present on ham radio, too, but there there's a regulatory agency
- Early Usenet misbehavior held in check by social pressure
- What happens when the community becomes too big and too scattered for that to work?

---

## Harrassment and Bullying

- Targeted, malicious statements
- Generally done behind a screen of pseudonymity
- Sometimes random, sometimes aimed
- On at least one occasion, has resulted in suicide

---

## The Megan Meier Case

- Lori Drew did not like what a teenager was allegedly saying about her daughter
- Drew, her daughter, and a friend created a fake Myspace account. They pretended to befriend Megan to learn what she was really saying; later, they turned on her and taunted her
- Megan hanged herself
- Drew was convicted of a dubious charge; the judge threw out the conviction
- (I've oversimplified)

---

## Gender- and Minority-Targeted Harrassment?

- There is a lot of evidence that women and minority group members are disproportionately targeted, e.g., the AutoAdmit case
- (AutoAdmit is a web site for law students; some of the content was viciously sexist.)
- Has a crime been committed? A civil offense?
- What about anonymity? How is this balanced against the First Amendment?

---

## Examples

- “. . . routinely involves threats of rape and other forms of sexual violence”
- “[w]ho let this woman out of the kitchen?”
- “abuse can be ‘more vicious’ if targeted women are ‘lesbian[] and/or . . . not-white.’”
- “of the nearly 200 comments, only 3 failed to mention her gender in a disparaging or threatening manner.”

(From Danielle Citron’s “Law’s Expressive Value in Combating Cyber Gender Harassment”, 108 Michigan Law Review 373 (2009), [http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1687&context=fac\\_pubs](http://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=1687&context=fac_pubs))

---

## Gamergate

- Gender-based harassment of female video game developers and journalists
- Example: developer Brianna Wu criticized people who are apparently afraid of women developers
- She received rape and death threats that listed her home address
- “What takes the biggest toll is when young girls write me and tell me they’re too scared to go into this field.”
- Gamergaters say that it’s about “ethics in game journalism”

---

## Curt Schilling and his Daughter

- Schilling—formerly a top-notch pitcher—tweeted that his daughter had received an athletic scholarship to a college
- Many people tweeted back crude, vulgar, and threatening responses (see <https://38pitches.wordpress.com/2015/03/01/the-world-we-live-in-man-has-it-changed/> for details and examples)
- Schilling has been a computer user since 1981—and he identified many of the offenders...
- Several have been fired or suspended from school; the FBI and some local police departments are investigating
- But why is law enforcement taking him seriously, and not so many other women who have been similarly harassed?

---

# Revenge Porn

- People (usually men) post nude pictures of their (usually female) exes
- Sometimes, these are accompanied by addresses, phone numbers, and purportedly genuine lewd offers
- Other women are victimized by hackers who steal pictures from personal computers and the like
- There are web sites that solicit such pictures, and charge the victims for removal
- Against the law in California and 25 other states—and there have been recent convictions, though not under those statutes

---

## Sexting—and Teen Sexting

- Why do people do it?
- Is it all voluntary?
- Are girls pressured? What about men who send unsolicited pictures of their genitals?
- What is the role of the *online* nature of sexts?

---

## The Long Island Case

- A boy took a video of another boy and girl having sex (but it isn't clear what was and was not consensual)
- It was widely distributed to students at a neighboring school
- The two boys were arrested
- Other students were suspended, for redistributing or possessing the video

---

## The Online Role?

- Trivially easy distribution and redistribution
- Should possession have been punished?
- Was it because the girl was underage?
- Was it because it was unclear if she consented?
- Was it because the pictures were on phones instead of paper?
- Would possession and distribution of paper pictures of a consenting adult model have been punished the same way?

---

## Griefers and “Anonymous”

- Griefers: cyber vandals and cyber sadists
- One loosely-organized group is known as “Anonymous”
- One action: uploading a flashing image to an Epilepsy Foundation forum, causing epileptic seizures
- (The FBI investigated that one. Anonymous blames the Scientologists; they blame Anonymous.)

---

## Gender Impersonation

- On the Internet, no one knows you're a dog—and no one knows your real age or gender
- In various online forums, people deliberately adopt a different persona
- “She-males”

---

## Accuracy and Facebook

- One study asserts that people are generally truthful on Facebook et al.
- Why?
- Because of the link to a real-world community?

---

## It's Harder to Lie on Facebook

- Your real-world friends know the truth
- The social graph implicitly authenticates much of the content
- Query: are there mostly-disconnected subgraphs of fake accounts?

---

## What Do We Do?

- Should the Internet ban anonymity?
- (Can that actually work?)
- What of the right to anonymous political speech?
- How does one get accountability for rape threats while protecting privacy against marketers—and cyberstalkers?

---

## Displacement

- Does Internet use displace other activities?
- Is there such a thing as “Internet addiction”?
- Does it displace other forms of interpersonal interaction?
- If so, is that good, bad, or neutral?
- About ham radio, in the 1950s:

*“wives wrote of resenting ham radio for weakening emotional and physical marital bonds.”*

(<https://muse.jhu.edu/article/49697>)

---

## One Opinion

“Do we honestly think that communicating via Twitter, e-mail or texting is the same as hanging around the water cooler with colleagues or sitting and having dinner with a friend?”

“I fear that in this age of technology, just being with another human in the moment and in real time is endangered. How can we think that machines can match the joy of personally hearing the sound of a friend’s voice or the gaze of a lover? I fear that we are losing the real meaning of human connection and intimacy, and I worry about the consequences.”

(Letter to the Editor, *N.Y. Times*, 1 March 2010, <http://www.nytimes.com/2010/03/02/opinion/102internet.html>)

---

## The Internet versus Phone Calls or Letters

- Is communicating over the Internet better or worse than older means of communication?
- Why is it worse than a letter? Is it worse than a letter?
- But—we've already spoken about imperfections in Internet communication
- Is it a way to keep one's distance?
- Is it a deliberate way to maintain distance?

---

## Staying in Touch

- Because Internet communication is so rapid and so cheap, it can be much better
- Letters or phone calls may not be an option
- What about video chats?

---

## Breaking Up Over the Net

- Traditionally, done in person
- But “Dear John” letters are part of the culture
- Is email or a text message worse?
- What about just changing your Facebook status?

---

## Getting Away

- When you break up with someone, do you unfriend them?
- Do your other friends unfriend them?
- Is it healthy to keep track of them?
- What is the line between that and cyberstalking?

---

## But...

- It may be a way to stay in touch with your children
- Disentangling from an ex is hard even without Facebook
- Maybe sometimes distancing is good

---

## The Challenge

- There are good and bad aspects to people's online behavior
- Anonymity is important, but seems to contribute to misbehavior
- How do we—technically or socially—gain the benefits without paying the price?

---

## Online Private Information: Given, Taken, Hidden

- How does do people behave online with respect to privacy?
- They give away some information
- Other information is taken
- But people often hide things

---

## Giving Away Information

- You tell social network platforms your age, gender, etc.
- People disclose very private information:

*I feel like I want to live and experience the world—but with the recent rape and physical injury from it all the extra drama rama on top of it starting to decline*

(from a depression chatroom—no login required)

- Why are people so open?

---

## Online Openness: Why?

- The ability to find supportive people among a much larger population?
- You don't see the people to whom you're talking?
- You think your online name protects you from physical consequences?
- You think that no one who knows you will see it?
- You think there's enough physical distance to protect you?
- It's an extremely important question!

---

# Taking Private Information

Non-subscribed visitors to WSJ.com now each receive a propensity score based on more than 60 signals, such as whether the reader is visiting for the first time, the operating system they're using, the device they're reading on, what they chose to click on, and their location (plus a whole host of other demographic info it infers from that location). Using machine learning to inform a more flexible paywall takes away guesswork

- There are a lot of clues sent to sites when you log in
- IP address (and hence location), browser, computer type, and more
- Often, sites see which other site linked to them

<http://www.niemanlab.org/2018/02/>

[after-years-of-testing-the-wall-street-journal-has-built-a-paywall-that-bends-to-the-i](http://www.niemanlab.org/2018/02/)

# Signing Up with Facebook

## Sign Up

It's free and always will be.

First name

Last name

Mobile number or email

New password

**Birthday**

Feb  25  1993  [Why do I need to provide my birthday?](#)

Female  Male

By clicking Create Account, you agree to our [Terms](#) and that you have read our [Data Policy](#), including our [Cookie Use](#). You may receive SMS Notifications from Facebook and can opt out at any time.

**Birthday**

**Providing your birthday** helps make sure you get the right Facebook experience for your age. If you want to change who sees this, go to the About section of your profile. For more details, please visit our [Data Policy](#).

[Why do I need to provide my birthday?](#)

to our [Terms](#) and that you have read our [Cookie Use](#). You may receive SMS Notifications from Facebook and can opt out at any time.

Okay

---

## (Advertisers *Really* Want to Track You)

the Paleolithic diet is a myth. Food choice is as much about what is

Accept and Close ✕

Your browser settings do not allow cross-site tracking for advertising. Click on this page to allow AdRoll to use cross-site tracking to tailor ads to you. Learn more or opt out of this AdRoll tracking by clicking [here](#). This message only appears once.

---

# Facebook

- People give Facebook a lot: real name, demographic information, social graph, pictures, things they say, far more
- Facebook takes a lot: they can do the same sort of analytics as the Wall Street Journal, and they have a lot more information
- Facebook is a huge advertising site, and can use tracking cookies to follow you around the Web

---

# Look What Snapchat Learns from Devices

- **Device Information.** We collect information from and about the devices you use. For example, we collect:
  - information about your hardware and software, such as the hardware model, operating system version, device memory, advertising identifiers, unique application identifiers, apps installed, unique device identifiers, browser type, language, battery level, and time zone;
  - information from device sensors, such as accelerometers, gyroscopes, compasses, microphones, and whether you have headphones connected; and
  - information about your wireless and mobile network connections, such as mobile phone number, service provider, and signal strength.

---

## Other Information Snapchat Takes

- Usage information including social graph
- Photography metadata
- Your contacts (if you agree)
- Location information, via GPS, WiFi, cell towers, gyroscopes, accelerometers, compasses
- Cookies
- IP addresses
- Third party marketing affiliates
- (All from

<https://www.snap.com/en-US/privacy/privacy-policy/>)

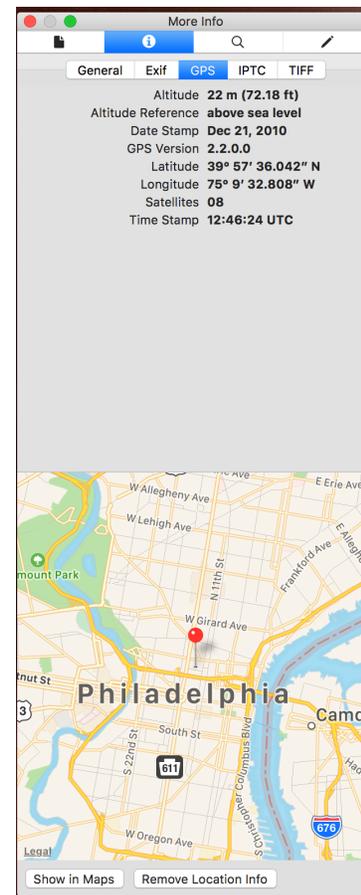
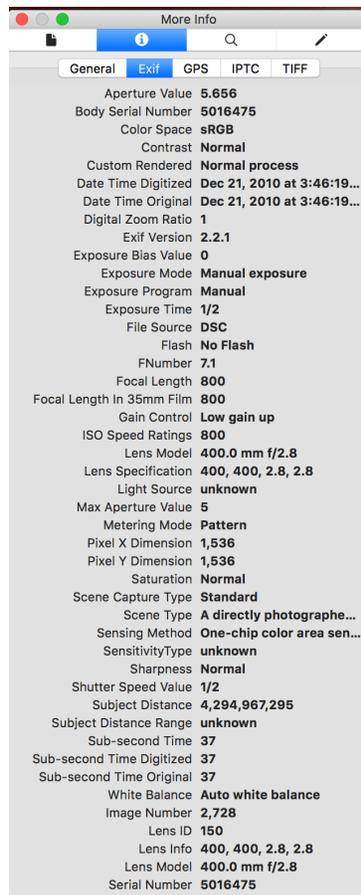
---

## A Nice Picture of the Moon



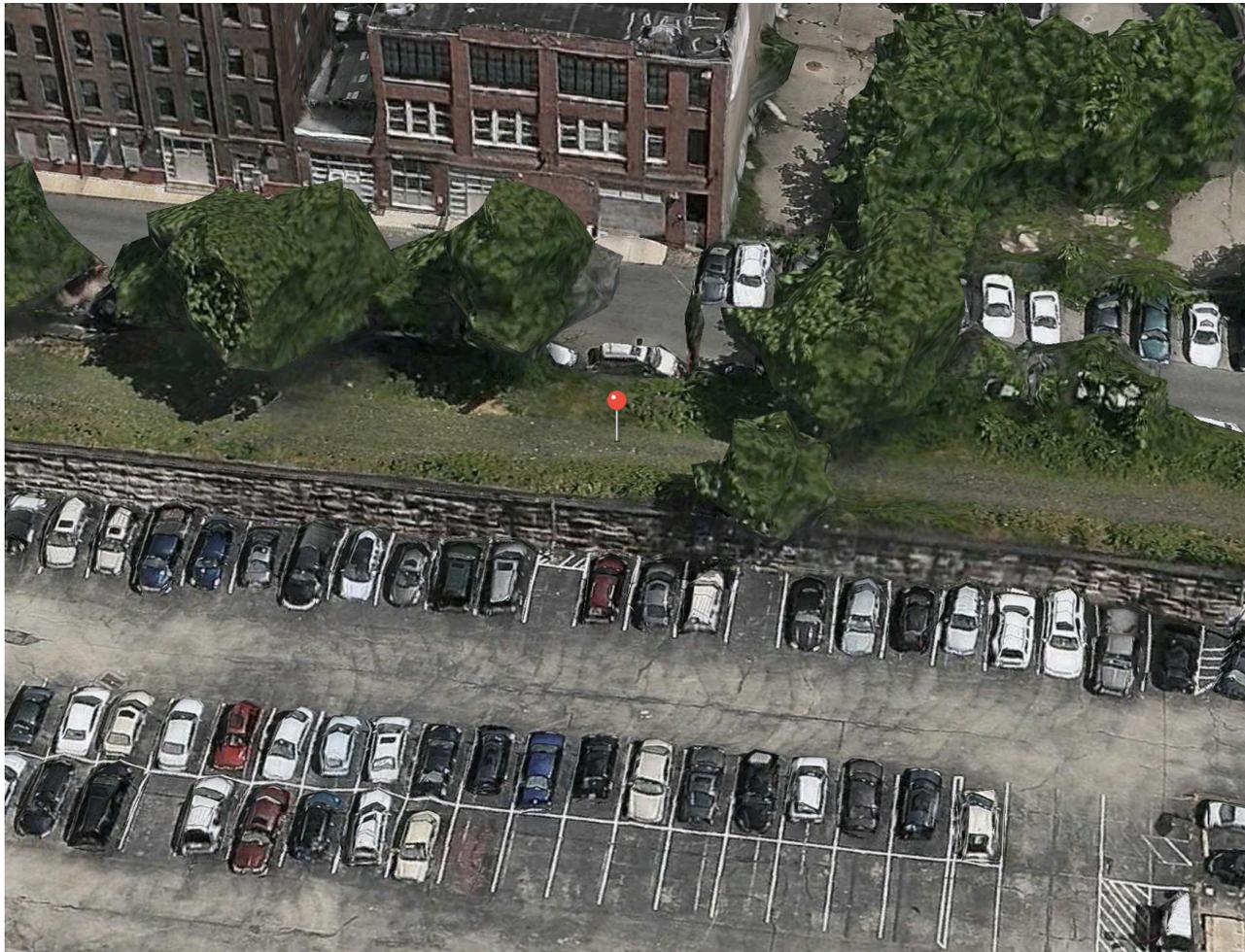
Picture © Matt Blaze

# With Lots of Metadata



---

## Not Taken at his House...



---

## Alexa, Siri, et al.

- *All* sophisticated voice recognition is done in the Cloud
- Your phones, devices, etc., do “wake up” processing: “Hey, Siri”, “OK, Google”, “Alexa”, etc.
- In other words, the microphone is always on
- After the wakeup signal, the device sends all sounds to a server somewhere, which translates it into text
- Can the live mic be used in other ways?
- (Why do so many privacy people have such devices?)

---

## (Aside)

What would happen if I suddenly yelled, “Hey, Siri!” in this classroom?

---

## The Company v. the United States (349 F.3d 1132)

“One feature of the System allows the Company to open a cellular connection to a vehicle and listen to oral communications within the car. This feature is part of a stolen vehicle recovery mode . . . The same technology that permits the interception of the conversations of thieves absconding with the car also permits eavesdropping on conversations within the vehicle.

“The Federal Bureau of Investigation (FBI), realizing that the System can be used as a roving “bug” . . . sought and obtained a series of court orders requiring the Company to assist in intercepting conversations taking place in a car equipped with the System.”

---

## Hiding

- But people can and do hide
- Use different logins and fake data
- Create throw-away email addresses
- Lie
- Delete cookies
- Clear photo metadata (and make sure location is off)