

LOSING FACE



THE PRIVACY ARCHITECTURE OF FACEBOOK

Outline

- What is privacy?
- How does the environment affect privacy?
- What's wrong with privacy on Facebook?
- What might we do to fix it?

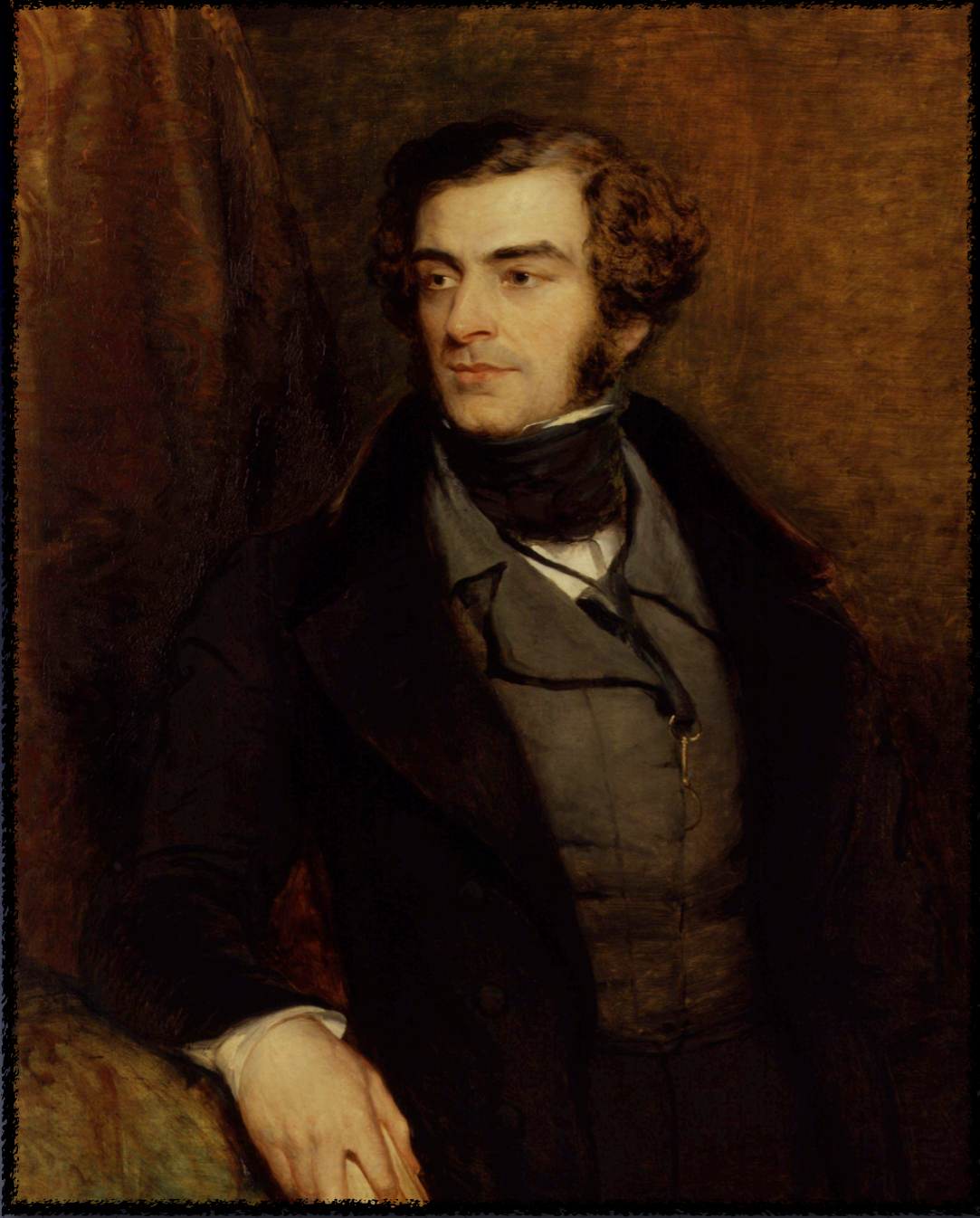
What is Privacy?

Lots of Ideas

- CONTROL: Privacy is the ability to *control* information about me
- AUTONOMY: Privacy is the ability to behave *autonomously*, i.e. without any control over me

Secrecy Regime

Warren & Brandeis



The Right to Privacy

“Instantaneous photographs and newspaper enterprise have invaded the sacred precincts of private and domestic life; and numerous mechanical devices threaten to make good the prediction that “what is whispered in the closet shall be proclaimed from the housetops...The intensity and complexity of life, attendant upon advancing civilization, have rendered necessary some retreat from the world, and man, under the refining influence of culture, has become more sensitive to publicity, so that solitude and privacy have become more essential to the individual...but modern enterprise and invention have, through invasions upon his privacy, subjected him to mental pain and distress, far greater than could be inflicted by mere bodily injury.”

“The common law secures to each individual the right of determining, ordinarily, to what extent his thoughts, sentiments, and emotions shall be communicated to others.”

“In every such case the individual is entitled to decide whether that which is his shall be given to the public. No other has the right to publish his productions in any form, without his consent. The right is lost only when the author himself communicates his production to the public -- in other words, publishes it.”

“...a man is that which is exclusively his.”

Olmstead v US

- Cops wiretap bootleggers without a warrant
- Taft: “The letter is a paper, an effect, and in the custody of a government that forbids carriage, except under its protection. The United States takes no such care of telegraph or telephone messages as of mailed sealed letters. The amendment does not forbid what was done here. There was no searching. There was no seizure. The evidence was secured by the use of the sense of hearing and that only...By the invention of the telephone 50 years ago, and its application for the purpose of extending communications, one can talk with another at a far distant place.”
- Brandeis: “When the Fourth and Fifth Amendments were adopted...force and violence were then the only means known to man by which a government could directly effect self-incrimination. [But] discovery and invention have made it possible for the government, by means far more effective than stretching upon the rack, to obtain disclosure in court of what is whispered in the closet.”

US v Katz

- Feds wiretapped a public pay phone and discovered illegal gambling
- SCOTUS: “the Fourth Amendment protects people— and not simply “areas”—against unreasonable searches and seizures, it becomes clear that the reach of that Amendment cannot turn upon the presence or absence of a physical intrusion into any given enclosure. The Government’s activities in electronically listening to and recording the petitioner’s words violated the privacy upon which he justifiably relied while using the telephone booth and thus constituted a “search and seizure” within the meaning of the Fourth Amendment.”
- Harlan, concurring: “...there is a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as “reasonable.” Thus a man’s home is, for most purposes, a place where he expects privacy, but objects, activities, or statements that he exposes to the “plain view” of outsiders are not “protected” because no intention to keep them to himself has been exhibited. On the other hand, conversations in the open would not be protected against being overheard, for the expectation of privacy under the circumstances would be unreasonable.”

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FATALITY
BRANDEIS WINS

~~***FATALITY***~~
~~BRANDEIS WINS~~

Florida v Riley

- Situation: Riley grows mad weed in his pimp backyard greenhouse. He's got giant castle walls surrounding his mobile home so no cops can see his stash from the road. So instead the cops rent a helicopter and a guy who is trained to spot weed from the air and they do a flyby like Terminator: Salvation. There's a hole in the roof of the greenhouse and the guy yells THAR BE WEED IN THAT THAR YARD or something.
- Question: Is this a search that violates his privacy?

Florida v Riley

- Answer: NO it is not a search, therefore NO it does not violate his privacy
- Explanation: “[According to FAA regulations any] member of the public could legally have been flying over Riley’s property in a helicopter at the altitude of 400 feet and could have observed Riley’s greenhouse. The police officer did no more...As far as this record reveals, no intimate details connected with the use of the home or curtilage were observed, and there was no undue noise, no wind, no dust, or threat of injury. In these circumstances, there was no violation of the Fourth Amendment.”
- Dissent: “The police officer positioned 400 feet above Riley’s backyard was not, however, standing on a public road. The vantage point he enjoyed was not one any citizen could readily share. His ability to see over Riley’s fence depended on his use of a very expensive and sophisticated piece of machinery to which few ordinary citizens have access.”

Kyllo v US

- Situation: Kyllo grows mad weed but this time in the safety of his house which by this point looks like the set of *Jumanji 2 - Half Baked*. He's got a billion heat lamps in his house to make it like Jamaica inside. The feds point a newfangled thermal imaging gun at his house and figure out it's lit up like the world's highest Christmas tree and bust him.
- Question: Is this a search that violates his right to privacy?

So Who Won?

- Taft: We had privacy, but now there is a new technology. The new technology does not allow for privacy as we understood it - therefore, we have no privacy, because the old laws do not allow for it.
- Brandeis: We had privacy, but now there is new technology. New technology threatens old privacy, but we liked that privacy, so we have to change the law to protect privacy against technology.
- Riley, Kyllo, CCTVs, etc - all of them are Taftian! The secrecy regime - that “privacy only protects that which is secret” - has won out!

Architecture of Privacy

Lessig on AoP

- Certain technologies / properties support secrecy and certain don't.
- Laws are written in a technological context - a trespass law protecting privacy from the 1800s "assumes" technological capabilities that may or may not be true in the 1900s or 2000s!
- "There are special laws about the theft of automobiles, planes, and boats. There are no special laws about the theft of skyscrapers. Cars, planes, and boats need protection. Skyscrapers pretty much take care of themselves."
- Laws operate within an architectural context, within an architectural space, and it is only within that context that a law can be understood and holds constant meaning - when the context changes, so does the effect of the law!

Contextual Integrity

Contextual Integrity

- Developed by NYU Prof. Helen Nissenbaum to explain why people watched by CCTVs in *public* spaces still felt their *privacy* violated
- Draws on Erving Goffman's sociology - that we present ourselves, and "play roles" with each other, differently, based on social context
- Informational norms: norms of appropriateness, norms of distribution

Contextual Integrity

- “Most people have a robust sense of the information about them that is relevant, appropriate, or proper to particular circumstances, situations, or relationships. When information is judged appropriate for a particular situation it usually is readily shared; when appropriate information is recorded and applied appropriately to a particular circumstance it draws no objection. People do not object to providing to doctors, for example, the details of their physical condition, discussing their children’s problems with their children’s teachers, divulging financial information to loan officers at banks, sharing with close friends the details of their romantic relationships. For the myriad transactions, situations and relationships in which people engage, there are norms....governing how much information and what type of information is fitting for them.”





Contextual Integrity

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Contextual Integrity



Contextual Integrity



Architecture & CI

- How do the design / properties / technologies of the real world support contextual integrity?

Contextual Integrity

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Contextual Integrity




CI & Facebook

CI on Facebook

- What are their norms? I.E. with whom are they attempting to share data, and how do they expect the data to disseminate?
- People use Facebook to talk to people they know; people play the same roles on Facebook that they play in real life
- First: friends preexist Friends. Put another way, though not all friends are Friends, almost all Friends are friends. The overwhelming majority of Facebook relationships are digital representations of their corporeal counterparts, and as such are animated by the social roles, expectations, and norms from the “real world.”
- Second: profiles are performative. They are crafted to present a certain person to a specific audience. Profiles are “gloriously direct tool[s]...for impression management.” And, because friends preexist Friends, all of those impressions must be managed in concordance with certain social norms and roles.

No Grandma!!

facebook Home Profile Friends Inbox Chris 'Petey' Peterson Settings Logout





Michelle

Wall Info Photos Boxes


Write something... [Share](#)


[Filters](#)


 **Michelle** my grandmother just friend requested me. no. facebook, you have gone too far!
April 12 at 8:16am · [Comment](#) · [Like](#)


 **Michelle** drinks.bonfire.old/good friends
April 11 at 9:37pm · [Comment](#) · [Like](#)

RECENT ACTIVITY

 Michelle is attending PAPER APRIL 16TH!!!! · [Comment](#) · [Like](#)

 Michelle is attending Spring Silent Rave | Boston 2009. · [Comment](#) · [Like](#)

 **Christina** Good to see you last night. I feel like crap his morning. Too many drinks!!
April 11 at 9:54am · [Comment](#) · [Like](#)

 **Michelle** omg peter frampton! too bad its at stupid gillette and not somewhere cooler like the hatch
April 11 at 8:16am · [Comment](#) · [Like](#)


[View Photos of Michelle \(372\)](#)
[View Videos of Michelle \(2\)](#)
[Send Michelle a Message](#)
[Poke Michelle](#)

Information

Networks:

Relationship Status:

Birthday:

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April 11 at 8:16am · [Comment](#) · [Like](#)

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Rachel on Grandma

- “Facebook started off as basically an online directory of COLLEGE STUDENTS. I couldn’t wait until I had my college email so that I could set up an account of my own, since no other emails would give you access to the site. Now, that was great. One could [meet] classmates online or stay in touch with high school mates [but it] has become a place, no longer for college students, but for anyone. [About] five days ago, the worst possible facebook scenario occurred, so bizarre that it hadn’t even crossed my mind as possible. MY GRANDMOTHER!? How did she get onto facebook?...As my mouse hovered between the accept and decline button, images flashed through my mind of sweet Grandma [seeing] me drinking from an ice luge, tossing ping pong balls into solo cups full of beer, and countless pictures of drunken laughter, eyes half closed. Disgraceful, I know, but these are good memories to me. To her, the picture of my perfectly angelic self, studying hard away at school, would be shattered forever.”

Contextual Integrity

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Contextual Integrity



Contextual Integrity



Contextual Integrity



Why The Breakdown?

“Technological Fictions”

- Allusion to legal fictions - ideas that the law contrives that are unreal but which are treated as being real (the ‘reasonable man’, ‘corporate person’, etc)
- Technological fictions are counterfactual elements of Facebook’s design: *those aspects of it that do not accord with reality*, but which are constituted and created by the code of Facebook
- Flat Friendships, Invisible Audiences, Strange Sharing Defaults

Flat Friendships

- In the physical world, we have very different relationships (and disclose very different things to) different people
- On Facebook, “all Friends” are equal - Rachel discloses to her drinking buddies what she does to grandma
- Impossible to have contextual integrity - which requires heeding expectations about social roles - without differentiation of disclosure







Invisible Audiences

- In the “real” world, there is a physical separation to social situation (a bar *is not* a church, because walls not only keep people out, they also define communities of who is “in”); on Facebook, all people are in the same place at the same time
- In the physical world, one can perceive the audience for whom one performs and adjust accordingly; on Facebook, this is impossible
- The story of Stokely Carmichael and Meyrowitz

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Strange Sharing Defaults

- In the physical world, publishing is difficult; in the electronic world, publishing is the default
- In the physical world, we don't blast all of our information out to everyone we know simply by saying something; on Facebook, hello News Feed
- In the physical world, moving to a town does not broadcast our information elsewhere; on Facebook, joining the 'Boston' network makes your profile available to everyone!










Strange Sharing Defaults


Privacy ▶ Profile


Basic Contact Information

Control who can see your profile and related information. Visit the [Applications](#) page in order to change settings for applications.

See how a friend sees your profile:

Profile	 My Networks and Friends	[?]
Basic Info	 My Networks and Friends	[?]
Personal Info	 My Networks and Friends	[?]
Status and Links	 My Networks and Friends	[?]
Photos Tagged of You	 My Networks and Friends	[?]
Videos Tagged of You	 My Networks and Friends	[?]
Friends	 My Networks and Friends	[?]
Wall Posts	<input checked="" type="checkbox"/> Friends may post to my Wall	[?]
	 My Networks and Friends	
Education Info	 My Networks and Friends	[?]

Education Info  My Networks and Friends [?]

 My Networks and Friends

What to do?

Markets won't work

- Behavioral biases (bounded rationality; optimism bias; discounting bias; power of the default) cause users to regularly misapprehend risks and underinsure themselves, sending bad privacy signals
- Facebook is anticompetitive - people can't 'get up and leave' without leaving their friends behind. It's subject to increasing, not decreasing returns, so no market forces will naturally return it to equilibrium

Law won't work

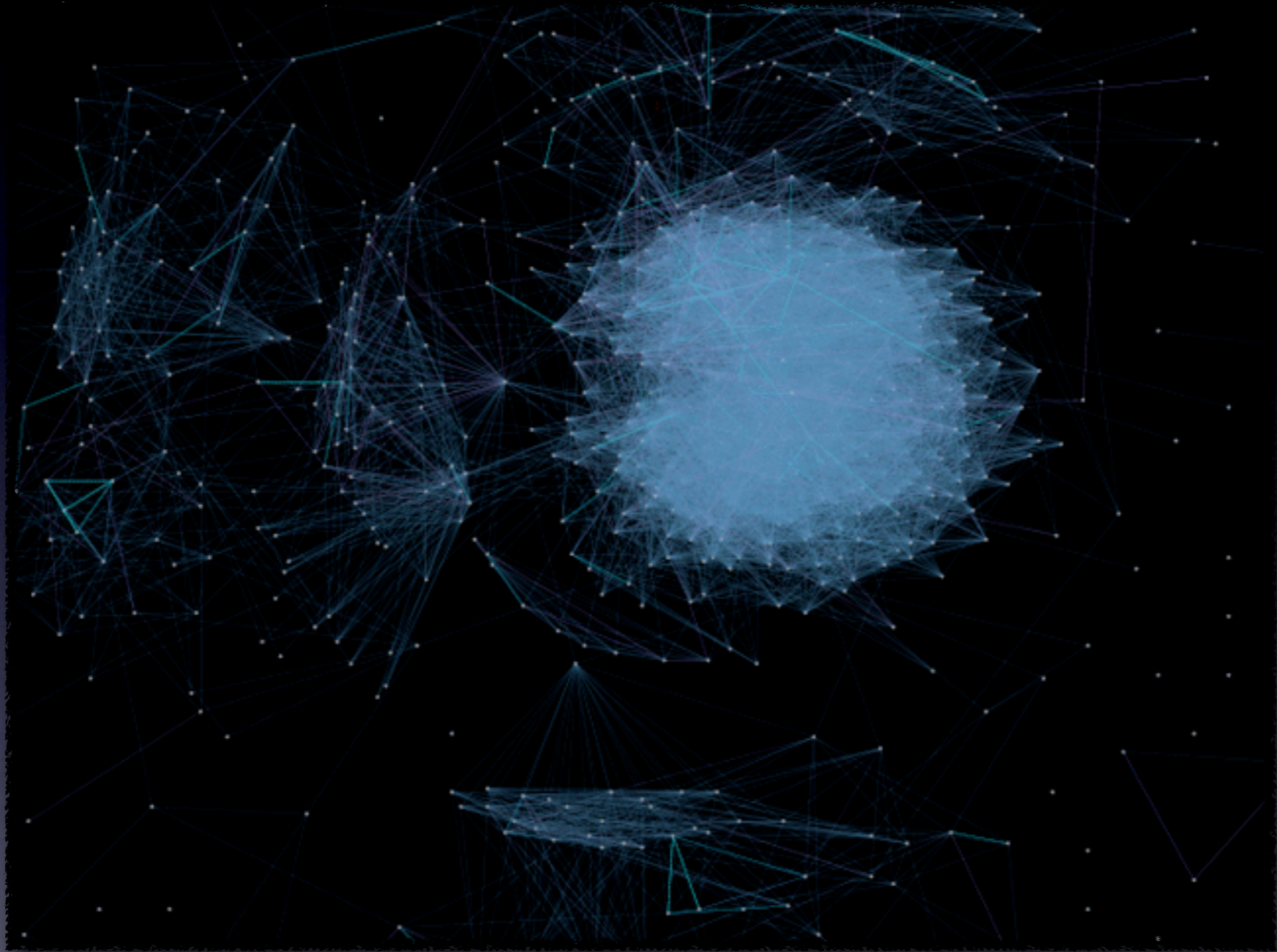
- Some solutions (public disclosure torts, privacy controls == reasonable expectation) could work, BUT
- Law functions on the 'secrecy regime' - no one on Facebook wants secrecy, they want contextual integrity, and American law doesn't do that (and imagine jurisdictional issues!)
- Law still presumes the architecture of the physical world, and hasn't yet been translated into the Facebook environment
- Most importantly, law can't protect users from themselves (can't protect Rachel from showing the ice luge to Grandma, or correct for behavioral biases)

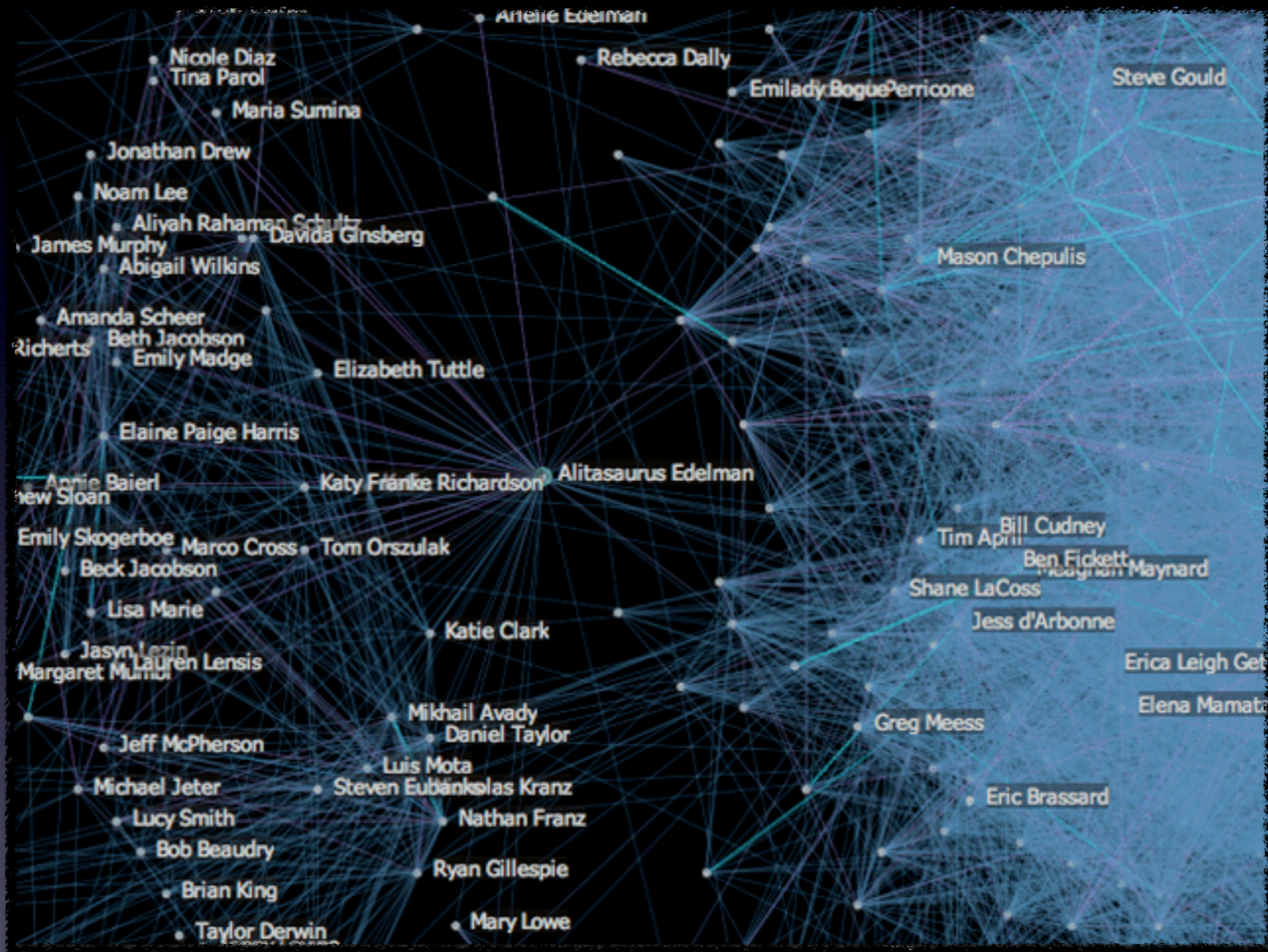
Code could work

- Code is self-executing so no jurisdictional issues
- Code can help make disclosure more salient and be built to overcome behavioral biases
- Code can help crush the technological fictions and allow people to navigate their own contexts as they do in the real world

Some solutions

- *For Flat Friendships:* Make Friends Lists easier to assemble and use; allow people to rebuild social contexts among grouping mechanisms; recreate a digital separation to social situation
- *For Invisible Audiences:* Build better feedback mechanisms, let people know who they're disclosing to and performing for
- *For Strange Sharing Defaults:* Set default sharing preferences to match norms of distribution (i.e., joining a network should not make it available to everyone, and posting a photo should not be globally published by default)





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