“Ghost Towns”
example submitted by Vardhan
1% extra credit for examples relevant to recent or upcoming lectures — submit on Ed under the “Lectures” category

Michael’s comment: do view counts make Twitter feel more bustling, or less?
Assignment 1: voting open

Votes due Friday 11:59pm, link on Ed
Top vote-earners get extra credit
Sections start this week

Ed announcement of section assignments

Check the room and not just time, since some sections are running simultaneously

Waitlist on Ed if you want to request a section change

Reading for first section due Wednesday 11:59pm
Attendance form is going around.

Grab a TA if you don’t get it, and please return it to The TA Corner™ at the end.
Send in OAE letters

Email to cs278@cs.stanford.edu
Project proposal + bricolage

Due Monday of Week 4: form a team, pick a project, prototype it!

We will be introducing bricolage prototyping on Thursday

Projects are with others in your discussion section

For finding teammates:

- Meet in section this week
- Thread in Ed
Last time: bustling spaces

Eyes on street: bustling spaces and ghost towns

Contribution pyramid: what does it mean if you say you want 100 active contributors?

Intrinsic and extrinsic motivations, how to design for them, and how extrinsic motivators crowd out intrinsic motivators

Channel factors and how small changes have big downstream effects on contributions

Social loafing
A Tale of Two Subreddits
Why?
Why?

← value the home
value the relationship →

[Jung et al. 2016]
What makes the interactions on Snapchat and Instagram so different?
Design influences the norms. Norms influence how people use the design. It's reciprocal: a socio-technical system.
Today: designing norms

How do norms form on social computing systems?
Why do norms have an effect on the system and the people in it?
How can design help support pro-social norms that the community wants to be true of itself?

Outline

   Presentation of self
   Norms: how we intuit them, and how they shape our behavior
   How to design norms
   Dangers
We are different people when we are in different spaces

[Goffman 1959]

We do not have a static set of behaviors that we perform in every environment.

Like actors, we change our behavior to guide the impressions that people form of us.

So, our behaviors change as we enter different social environments.
We are different people when we are in different spaces

[Goffman 1959]

Michael in CS 278  teacher
Michael with Ph.D. students  advisor
Michael with family  dad
Michael with friends  basically a muppet?
We are different people when we are in different spaces

[Goffman 1959] [Xiao et al. 2020]

Instagram: public performance

Finsta: private performance for close friends

“One of the most trenchant contributions to social psychology in this generation.” —American Journal of Sociology
We are different people when we are in different spaces

[Goffman 1959]

So if our behavior is malleable to the social surrounding, how is the design of the social computing system influencing that behavior?

Are you creating a dive bar or a wine bar?
Norms
What are norms?

The informal rules that govern behavior in groups and societies.

Example norms:
- Keep the door open to your dorm room when you’re around.
- Help, not mock, people who are struggling with assignments.
- Smile politely when [student performance group] swings by for a surprise performance while you’re grinding for a deadline.

How do you know if something’s a norm? Breaching experiment.
We intuit norms quickly.

Try it. Five seconds per social computing system.
We intuit norms quickly.
We intuit norms quickly.
We intuit norms quickly.

Funny

Why so serious

Hot

Fresh

Funny

Meme

Savage

Surreal

Dank

Funny - 40m

Holy shit is this relatable

@prinnytee

you ever met someone so academically talented yet so fkin dumb
We intuit norms quickly.
We notice signals quickly

[Metaxa et al. 2018; Cheryan et al. 2009]
Descriptive norms

We are influenced by what we see as common behavior in the environment. These are known as descriptive norms: norms that describe common behavior.

If a site is full of risqué selfies, you’re more likely to post risqué selfies there [Chang et al. 2016]
Is it the norms or the people?
[Rajadesingan, Resnick and Budak 2020]

Are community norms influenced more by who joins, or by what behaviors are on display?

Comparing people before and after they joined 56 political subreddits with different levels of toxicity: it’s the norms. People match toxicity levels with their first post in the community, differing from their prior behavior in other political subreddits.
Is it the norms or the people?
[Ricart-Huguet and Paluck 2020]

How much are our behavior and attitudes influenced by the norms of the people around us?

Natural experiment: randomization into university dorms that have starkly different cultures

Result: influence is weakest for individual outcomes (e.g., grades, personality), and strongest for interpersonal outcomes (e.g., trust, activism). Effects are strengthened if it’s part of the dorm’s daily life, and can last long past college.
News of the Day

I’m Voting for Hillary Because of My Daughter

Back in the 2008 primary season, I supported Hillary Clinton. That choice...

Top Comments Sorted by Best

User1337 · 2 hours ago
I’m a woman, and i don’t think you should vote for a woman just because she is a woman. vote for her because you believe she deserves it.
6 ✊ | ⬆ · Reply

User9054 · 3 hours ago
Personally, I’d vote for whoever I think is the best and...

Positive comments
Result: 35% troll comments

[Cheng et al. 2017]

News of the Day

I’m Voting for Hillary Because of My Daughter

Back in the 2008 primary season, I supported Hillary Clinton. That choice...

Top Comments Sorted by Best

User1337 · 2 hours ago
Oh yes. By all means, vote for a Wall Street sellout - - a lying, abuse-enabling, soon-to-be felon as our next President. And do it for your daughter. You’re quite the role model.
1 ✋ | ⬆ · Reply

User9054 · 3 hours ago
Hillary is a cunt. I am voting with my dick for Putin. (s

Negative comments
Result: 47% troll comments
(Relative increase of one third compared to the 35% baseline)
Taking these together...

Is it the norms or the people? (Rajadesingan, Resnick, and Budak 2020)

Are community norms influenced more by the people who choose to join them, or by what they see in the space?

Comparing people before and after they join political subreddits with different levels of toxicity, it's the norms. People match toxicity levels to those of their first post in the community, differing from their prior behavior in other political subreddits.

Is it the norms or the people? (Ricart-Huguet and Paluck 2020)

How much are our behavior and related outcomes influenced by the norms of the people around us?

Natural experiment randomizing dorms with starkly different norms. Result: influence is weakest for individual behaviors (e.g., grades, personality), and strongest for interpersonal outcomes (e.g., trust, activism). Effects are strengthened if it's part of the dorm's daily life.

A substantial amount of the good and the bad that we see online can be attributed to the norms that are established in that space.
Why?

Recall: social proof, from our Going Viral lecture

When uncertain about appropriate behavior, we look to others’ behavior as a kind of proof of what is appropriate
Injunctive norms

We are also influenced by what we believe to be expected, even if we don’t see it. These are known as injunctive norms: norms that describe what you should or should not do.

Subreddit rules: /r/roastme

5. The Unfunny Abuse Rule

There is a clear and definitive line between humor and abuse. If your comment cannot be reasonably expected to make an audience laugh, and is instead meant to intimidate or threaten another user, your posted comment will be removed.

OSS Contributor Covenant: used by Linux, git, Node.js, React…

Our Standards

Examples of behavior that contributes to creating a positive environment include:

- Using welcoming and inclusive language
- Being respectful of differing viewpoints and experiences
- Gracefully accepting constructive criticism
- Focusing on what is best for the community
- Showing empathy towards other community members
When do norms influence?

Norms don’t influence us at all times: it’s principally when they’re made salient [Cialdini 1991]

Participants receive an unwanted paper ad on their car windshield. They see someone either walk by or litter. Measure: % who littered

- Person walks by: 30%
- Person litters: 60%

When the littered norm was made salient by the litterer, people reinforced it.
Making norms salient

Randomized experiment on Reddit’s r/science, stickying a rules post at the top of a random subset of the threads

Newcomers 8% more compliant (ok.) but 80% more likely to post (wow!) [Matias 2019]
Making norms salient

Both of these are the community visibly enforcing injunctive norms. It (should) have the effect of making those norms salient, and thus encouraging more behavior in line with the norms.

But, it could also have the effective of making clear a descriptive norm of people creating bad posts, which would increase them!
How design influences norm formation
Step one: think critically about the norms that the members of your community will want. Have conversations about them. Don’t just let the norms emerge. Be purposeful and thoughtful. Norms that emerge without design are often poisonous.
Curate a community early

How did Stack Overflow create a set of norms around answers to technical questions?

Closed beta

The founders launched in a small private beta with 500 enthusiastic community members for three months before opening to everyone.

What happened?

By the time the site launched publicly, it was full of positive examples of technical questions answered helpfully and succinctly, which set the expectation.
Curate a community early

How did Stack Overflow create a set of norms around answers to technical questions?

New user training wheels

Legitimate peripheral participation [Lave and Wenger 1991]: new members begin with low-risk tasks while they absorb norms. On Stack Overflow, new users cannot up/downvote, edit questions and answers — only ask and answer.

What happened?

Users learn what kinds of questions and answers are valued before they can vote.
But this is hard to scale...

The decline of Stack Overflow

Originally published by John Slegers on July 4th 2015

How trolls have taken over your favorite programming Q&A site

Why? More to come when we discuss growth and anti-social behavior.

Stack Overflow Isn’t Very Welcoming. It’s Time for That to Change.

We care and believe in Stack Overflow. But sometimes, owning something means caring enough to admit that it has a problem. Let’s start with the painful truth: Too many people experience Stack Overflow as a hostile or elitist place, especially newer coders, women, people of color, and others in marginalized groups. Our employees and community...

What a very bad day at work taught me about building Stack Overflow’s community

Hi, my name is Sara Cripps, first time Stack blogger, long time StackOverflower (I’ve always wanted to say that). I’m the new Director of Public Q&A at Stack Overflow. I’ve been at Stack for a year now, and I’d like to share with you one of my worst days at work, and what it...

/* SOFTWARE */

if dev == woman then
dont_be(a**hole): Stack Overflow tries again to be more friendly to non-male non-pasty coders

Another try...catch attempt to end tedious mansplaining
Defaults influence norms

The default on Instagram is a public account.
What if you want to make your Instagram account private?
Defaults influence norms

Very few users change defaults: only 5% of Microsoft Word users in one study had ever changed any settings [Spool 2011]; only 19% changed the default public calendar setting [Palen 1999]

Why? Recall: Channel factors. (Amongst other reasons.)

Think about the defaults you encounter in social computing systems

Who do you share with by default on Facebook?
What’s the default sort order of posts?
What’s the default skin color of emoji? 👍
Identity influences norms

Should we use real names? Pseudonyms? Be anonymous? This is a classic, old question in the field. What do you think? [1 min]

Anonymous environments create greater disinhibition, which results in more trolling, negative affect, antisocial behavior, and conformity to norms [Kiesler et al. 2012; Huang and Li 2016]

On the other hand, anonymity can foster stronger communal identity [Ren, Kraut, and Kiesler 2012] and more creativity [Jessup, Connolly, and Galegher 1990]

Overall, anonymity increases conformance to group norms [Huang and Li 2016, Seering et al. 2018]
Identity influences norms

Summary: anonymity and pseudonymity are playing with 🔥. But, real name requirements can put victims of abuse and others at risk.
Culture influences norms

Norms are created as part of culture, which can also include answers to: Who is high status? What is valued to obtain status?

Local culture impacts norms. For example, we are most influenced by social media content violating our local cultural values [Hsu et al. 2021]

Culture will also impact how social computing systems are coopted. Example: Myanmar military uses FB to persecute Rohingya Muslims
Dangers
Once a norm is set, if the platform violates it, things get bad.

On a platform of user-created content, who is responsible for that content?

When YouTube starts demonetizing videos (and doing so inaccurately), it breaks from a norm of free performance. [Alkhatib and Bernstein 2019]

Result? Creators revolt.
Facebook was only accessible to college students at first, so college-bound teens left MySpace for Facebook. danah boyd [2011] identified this as a form of “white flight”.
Norms, taste, and status

So what’s going on with this behavior?

Sociologist Pierre Bourdieu [1979]: your aesthetic choices—the music you like, the clothes you wear, the food you enjoy—delineate your status in society.

So what happens when people gravitate toward particular social computing systems with particular norms or designs?

We need to design norms. But those norms become exclusionary. What are we to do?
Unintended consequences

Facebook’s design to connect people instead resulted in separation. This reversal is not unique to Facebook — we’ll continue to cover it:

Twitter crowdsourced disinformation identification in 2021, but initially it was heavily used by political groups to flag their opponents’ tweets.

SFUSD deployed an algorithm to more fairly assign students to schools, but it increased segregation: not all groups have access to information on how to navigate the algorithm [Robertson, Nguyen, and Salehi 2021].

Facebook opened up its API to great fanfare…but Cambridge Analytica.

Twitter empowers end user news via the Arab Spring…but fake news.
Utilizing injunctive norms

Possible injunctive norm: we want to support inclusion. We will act in favor of those who do, and against those who don’t.

Would this work?

Remember this study?

Making the injunctive norm salient had the opposite—and desired—effect!
What makes the interactions on Snapchat and Instagram so different?

Designs encouraged different norms between the two platforms.
Summary

We take cues about how to behave from what’s around us

1. From signals in the designed environment
2. From peers in the lived environment

…and we quickly learn these descriptive and injunctive norms.

So, if we think about how to fashion…

1. The designed environment (defaults, identity)
2. The lived environment (visible behaviors)

Then we can help highlight the things the community wants to be true about itself, to help them make it true.
References


Hsu, Tiffany W., et al. "Social media users produce more affect that supports cultural values, but are more influenced by affect that violates cultural values." Journal of Personality and Social Psychology 121.5 (2021): 969.
References


References


Social Computing
CS 278 | Stanford University | Michael Bernstein

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