

CSE 593

Assignment 3 Post-Mortem
Assignment 4 Review
Social Computing (part 1)

Farnaz Jahanbakhsh

Logistics

- Assignment 3 (Group) was due yesterday.
- Assignment 4 (Individual) due in a week; Assignment 4 (Group) due in two weeks.
- We will start reaching out to individual students who currently have B or lower in the course.
- No lecture on election day
- Reading assignment for guest lecture on Nov 12 posted

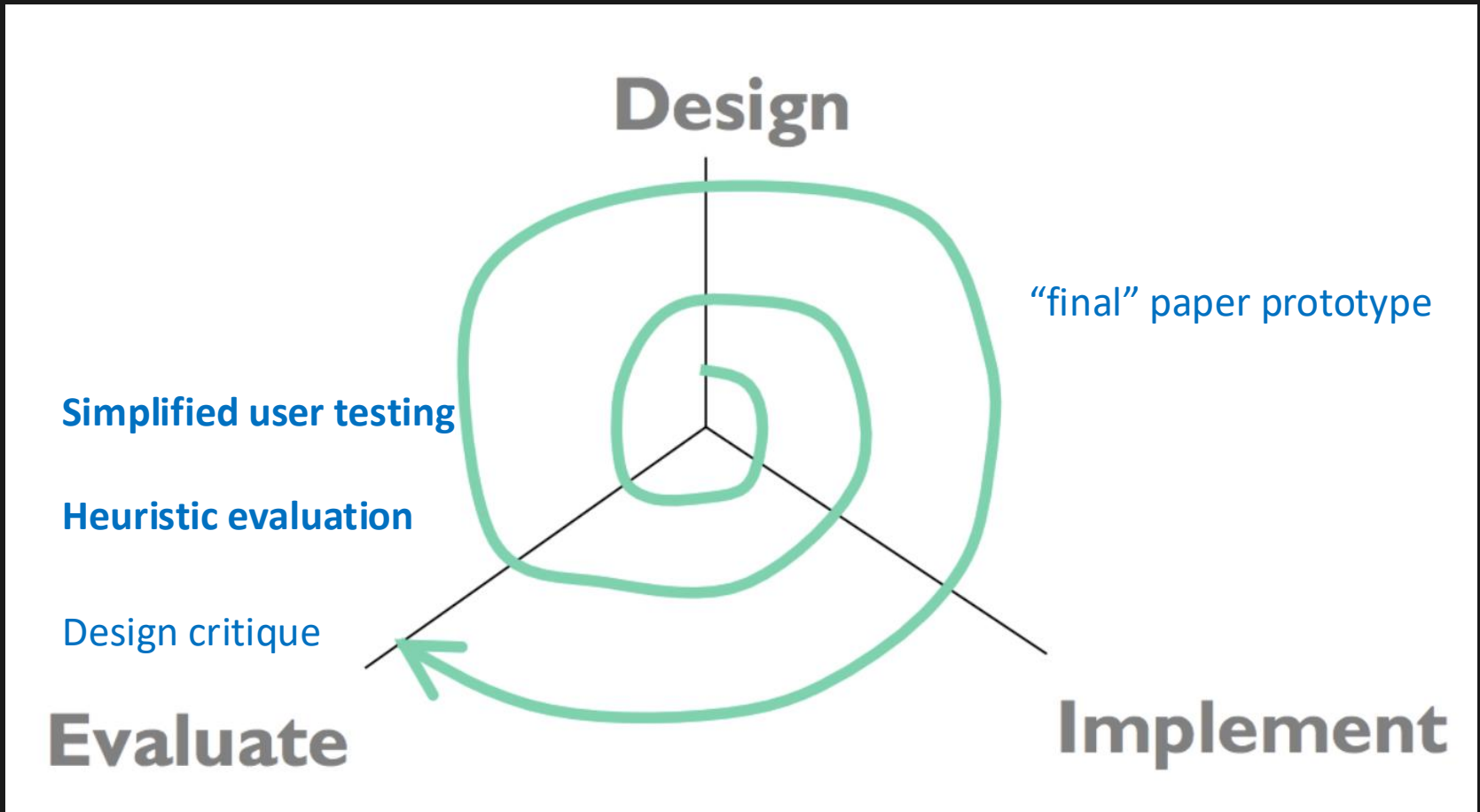
Assignment 3 post-mortem

- Interesting designs, good job!
- Some designs too similar to one of the initial designs
- The design space between too similar to the status-quo and “magical”:
 - *“If as it is said to be not unlikely in the near future, the principle of sight is applied to the telephone as well as that of sound, earth will be in truth a paradise, and distance will lose its enchantment by being abolished altogether.”*
Arthur Strand, 1898
- Different points in the design space have different rationales behind them
- You need to be able to test your prototype (with Wizard-of-Oz)

Assignment 3 post-mortem

- Pilot with a participant as soon as possible
- Will help you uncover missing functionalities and prototype limitations
- Your prototype does not need to have feedback to every user interaction in physical (i.e., paper) form
 - But you need to plan where verbal feedback comes in
 - And what the feedback is
- Get the limitations out of the way to uncover usability issues

Spiral model



Assignment 4 (Group) initial stage

- Discuss the user requirements you want to test using HE and SUT
- Develop the protocol for Simplified User Testing
 - How to wizard of Oz, including:
 - Which system feedback to communicate verbally
 - What the feedback is
 - How to introduce the system to users
 - ...
- Develop the protocol for Heuristic Evaluation
- Split up and do the individual part
- Regroup and analyze the data

Heuristic Evaluation in assignment 4

- Find a usability expert
 - On Piazza
- Train your expert on the application, user population, domain, scenarios
- Have the expert inspect the prototype
 - Point out usability problems, heuristics they violate, rate severity
- Not all issues will be rated by all experts

Assignment 4 (Group) second stage

- Analyze your results
- For SUT:
 - Share your notes, talk about the issues
- For HE:
 - Share your reports & severity ratings
 - Remember to take the average for the same issues
- Brainstorm possible solutions for at least the severe issues

Social Computing

Part 1

Social Computing

Study of the design of social computing systems



Computational systems that mediate social interactions



Every social system is designed to

- Support the goals of the stakeholders:
 - Individual end-user
 - Community
 - Subgroups
- Uphold the designer's social responsibility?
 - What kind of space do you want to create?

We can't enforce "good" behavior. We can't exclude the possibility of "bad" behavior.

But design shapes behaviors.

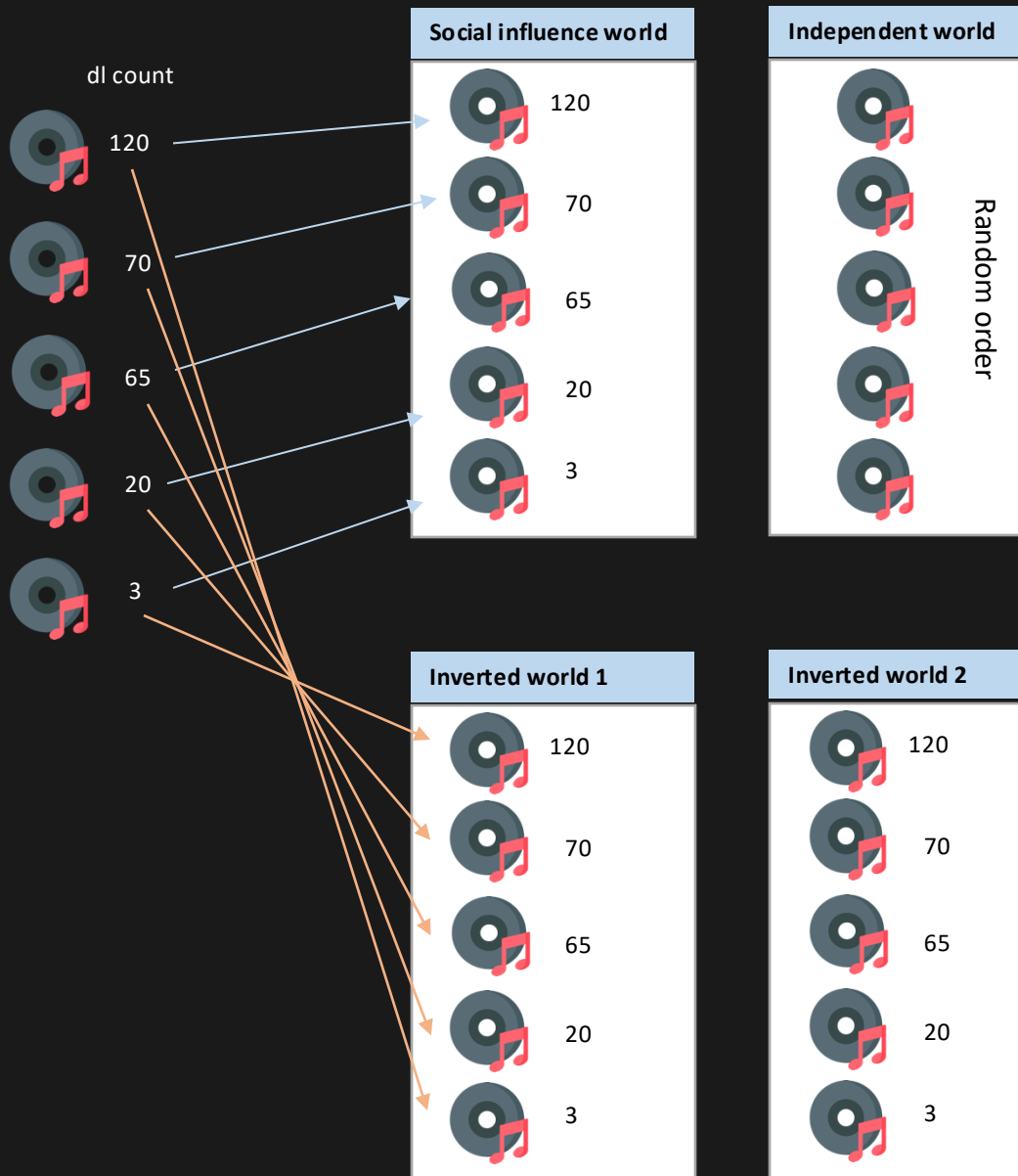
"We shape our buildings; thereafter they shape us"
(Winston Churchill, House of Commons)



Social influence

- Humans exhibit a strong herding behavior
- Subconsciously
 - A cognitive shortcut, so the individual doesn't have to activate System 2 (per Daniel Kahneman) all the time
- Consciously
 - To avoid social friction or exclusion from the group

Social influence affects *what content* becomes popular



Social influence increased inequality

In the inverted worlds, the actually best songs did well, the actually worst songs did poorly. The rest were unpredictable.


Salganik, Matthew J., Peter Sheridan Dodds, and Duncan J. Watts. "Experimental study of inequality and unpredictability in an artificial cultural market." *science* 311, no. 5762 (2006): 854-856.

Social influence affects *what content* becomes popular

- Controlled field study ran on a social news aggregator
- For five months, each fresh comment was randomly assigned to one of 3 conditions: up-treated, down-treated, control
- Up-treated comments ended up with 25% higher average ratings than control
- No statistically significant long-term effect on down-treated comments

Social influence affects *who* becomes popular

Task Time: 7 minutes 32 seconds



Kate
★★★★☆ (3.6)

swimming

water

Kate is tagging the image





Image Attribution

Select the 3 best tags as soon as both workers finish.



Jeremiah
★★★★☆ (4.5)

ocean

shore

birds


rocky

seagulls

Jeremiah is done tagging the image

Submit

Task Time: 6 minutes 20 seconds



Kate
★★★★☆ (3.6)

chairs

suspenders

gambling

greetings

uniform

Kate is done tagging the image





Image Attribution

chairs

police

restaurant



Jeremiah
★★★★☆ (4.5)


bottle

bicycle

Jeremiah is done tagging the image

Submit

Help us assess worker performance. Your input is confidential.




Allison
★★★★☆ (4.4)

Rate the performance of Allison ★★★★★

How willing are you to work with this worker in the future?

☐ 1 very unwilling ☐ 2 ☐ 3 ☐ 4 ☒ 5 very willing



Liam
★★★★☆ (3.5)

Rate the performance of Liam ★★★★★

How willing are you to work with this worker in the future?

☐ 1 very unwilling ☐ 2 ☒ 3 ☐ 4 ☐ 5 very willing

Submit Evaluation

Jahanbakhsh, Farnaz, Justin Cranshaw, Scott Counts, Walter S. Lasecki, and Kori Inkpen. "An experimental study of bias in platform worker ratings: the role of performance quality and gender." In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1-13. 2020.


Social influence affects *who* becomes popular

Performance Ratings

high  4.5

low  3

low  3.5

high  4.6

N=16

True ratings world 1

 4.5

 3

 3.5

 4.6

Reversed ratings world 1

low  4.5

high  3

high  3.5

low  4.6

X 4

When 2 similar performing workers were paired together, social influence impacted the ratings they received

Social influence increased inequality

X 4

Jahanbakhsh, Farnaz, Justin Cranshaw, Scott Counts, Walter S. Lasecki, and Kori Inkpen. "An experimental study of bias in platform worker ratings: the role of performance quality and gender." In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1-13. 2020.

Social influence affects what people post

If a site is full of risqué selfies, newcomers are more likely to post risqué selfies there too.

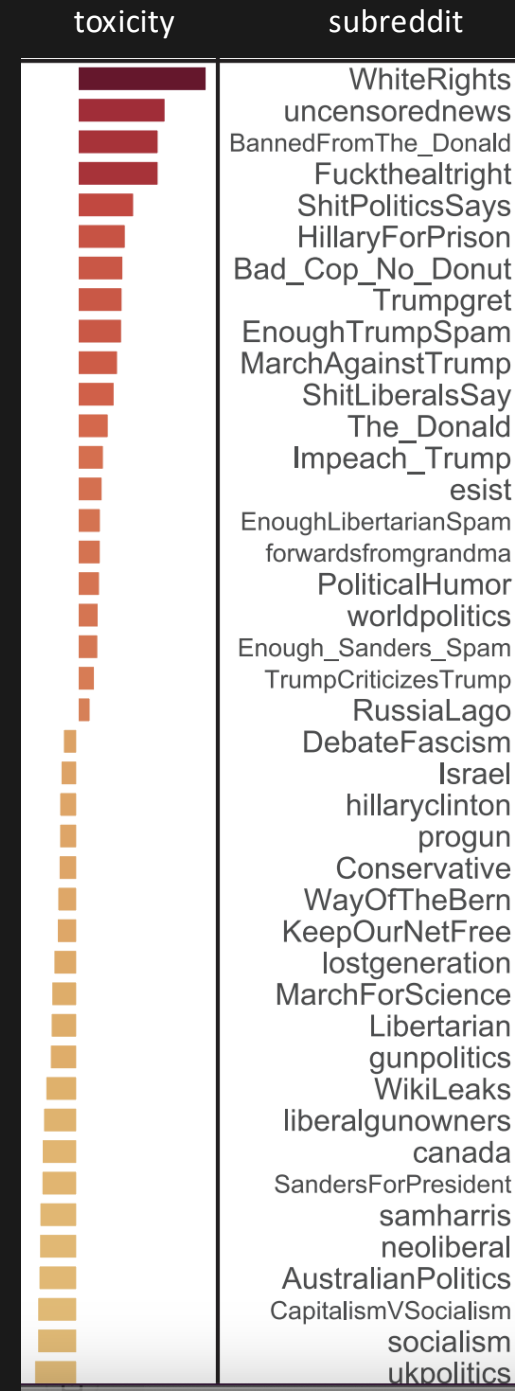
But is it the norms or the people?

Is it the norms or the people?

Each subreddit maintains a particular level of toxicity over time

Newcomers align their toxicity levels with the new community from their very first post

This adaptation is community-specific



Different types of norms

- Descriptive norms: what people actually do
- Injunctive norms: what people ought (not) to do

Descriptive norms direct behavior.

What about injunctive norms?

Django Code of Conduct

Like the technical community as a whole, the Django team and community is made up of a mixture of professionals and volunteers from all over the world, working on every aspect of the mission - including mentorship, teaching, and connecting people.

Diversity is one of our huge strengths, but it can also lead to communication issues and unhappiness. To that end, we have a few ground rules that we ask people to adhere to. This code applies equally to founders, mentors and those seeking help and guidance.

This isn't an exhaustive list of things that you can't do. Rather, take it in the spirit in which it's intended - a guide to make it easier to enrich all of us and the technical communities in which we participate.

This code of conduct applies to all spaces managed by the Django project or Django Software Foundation. This includes IRC, the mailing lists, the issue tracker, DSF events, and any other forums created by the project team which the community uses for communication. In addition, violations of this code outside these spaces may affect a person's ability to participate within them.

If you believe someone is violating the code of conduct, we ask that you report it by emailing conduct@djangoproject.com. For more details please see our [Reporting Guidelines](#)

• Be friendly and patient.

• **Be welcoming.** We strive to be a community that welcomes and supports people of all backgrounds and identities. This includes, but is not limited to members of any race, ethnicity, culture, national origin, colour, immigration status, social and economic class, educational level, sex, sexual orientation, gender identity and expression, age, size, family status, political belief, religion, and mental and physical ability.

• **Be considerate.** Your work will be used by other people, and you in turn will depend on the work of others. Any decision you take will affect users and colleagues, and you should take those consequences into account when making decisions. Remember that we're a world-wide community, so you might not be communicating in someone else's primary language.

• **Be respectful.** Not all of us will agree all the time, but disagreement is no excuse for poor behavior and poor manners. We might all experience some frustration now and then, but we cannot allow that

SITE WIDE RULES

1. No Hate Speech

See our hate speech rule [here](#)

2. Do not suggest or support harm.

See our harm rule [here](#).

3. No brigading

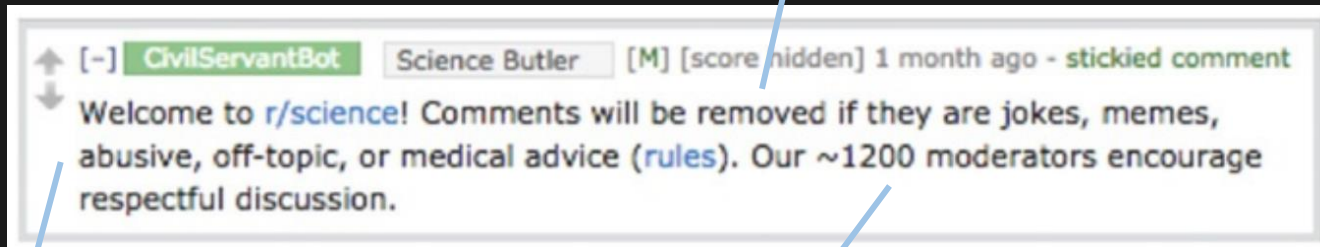
Manipulating comments and posts via group voting is against reddit TOS

RULES

- | | | |
|---|-----------------------------------------------------------|---|
| 1 | General: No novelty accounts or bots | ▼ |
| 2 | General: Rule-breaking username | ▼ |
| 3 | General: No spam or solicitation | ▼ |
| 4 | Comments: No incivility or personal attacks towards users | ▼ |
| 5 | Comments: No flaming, baiting, or trolling | ▼ |
| 6 | Comments: No witch hunts or personal information | ▼ |

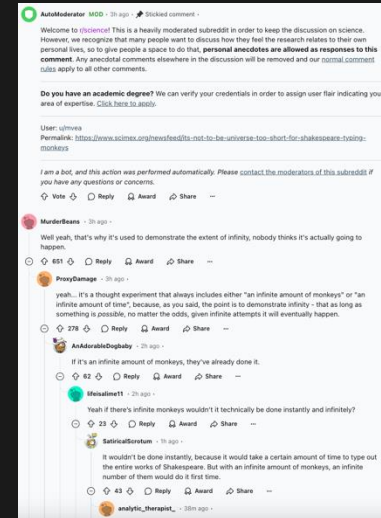
Injunctive norms direct behavior when made salient

Describes the enforcement consequences



Names unacceptable behaviors

Reports many people agree with the norm and that they have the capacity for monitoring and enforcement



“When Professor Stephen Hawking answered questions [on the subreddit] in 2015, commenters mocked his medical condition and personal life with abusive and obscene insults. In July 2016, when discussing new research about obesity among women, moderators removed 1,497 of 2,186 comments. Many of those comments derided women, mocked the researchers, and criticized people with obesity through jokes, memes, personal anecdotes, and unsubstantiated medical advice...”

Injunctive norms direct behavior when made salient

“Many harassing and abusive comments in the r/science community come from people who are participating for the first time”

In threads with stickied comment about the norms, newcomers were 8% more compliant and 70% more likely to post

Making norm enforcement salient

+ Comment removed by moderator 11 hours ago (9 children)

+ Comment removed by moderator 10 hours ago (0 children)

+ zombiesunflower -14 points · 2 hours ago (8 children)

+ TT676 -7 points · 2 hours ago (0 children)

Lots of design decisions around governance:

- What the norms are
- Who sets the norms
- What aspects to make salient
- How salient
- Who enforces the norms
- ...

Do we have any control over descriptive norms?



- The founders launched in a small private beta with 500 enthusiastic community members for three months before opening to everyone
- By the time the site launched publicly, it was full of positive examples of technical questions answered helpfully and succinctly, which set the expectation

Do we have any control over descriptive norms?



Newcomers cannot upvote/downvote, edit questions and answers. Only ask and answer

Shaping descriptive norms

- What features and affordances to make available
- User tiers and what features to make available to who
- Defaults
- What content, source, or user to promote
- Models of self presentation



Questions, comments, and/or concerns?

Farnaz Jahanbakhsh

farnaz@umich.edu

<https://people.csail.mit.edu/farnazj/>