Critiques

CS 347
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Announcements

Project fair 2 due today, but no event

No final presentations: all points routed into the final paper

Final project paper due next Friday at 5pm

Final team assessments due with the final project paper
Why we must be reflective

We cannot blindly design ourselves into a bright future. What if that bright future is not what we think it is?

HCI was, in many ways, born out of a critical perspective on artificial intelligence [Winograd and Flores 86]
Critical theory and HCI
What is ‘critical’ here?

Not ‘critical’ as in being mean, or ‘critical’ as in a crit

**Critical theory** aims to be reflective about our assumptions and what they might imply

A strong critical HCI paper reorients us toward important problems, and pushes us to cast aside previous assumptions
Recall: third wave HCI [Bøcker ’06]

First wave: man-machine fit, human factors

Second wave: understanding cognition, groups working together in the context of applications

Third wave: non-work, non-purposeful, non-rational

But are our techniques up to the task of the third wave?

e.g., usability studies? design thinking?
Is our drive to design ‘liberation technology’ or ‘ICT for development’ (ICT4D) just reinforcing old colonial legacies?

“We’re going to go help the fairly poor Indian resident who are getting water from the river by giving them our new water purifier system!”

Alternative points of view: might these people be teaching us design lessons instead?
Ubiquitous computing is driven not by a technological goal, but by a shared vision of the future.

However, this vision is a future in 1991.

What should the future of ubicomp be, from today’s perspective?

Bell and Dourish’s proposal: messiness
Feminist HCI

[Bardzell 2010]

Feminist theory often aims to emphasize the roles of currently marginalized groups in society

Step back: who is the “ideal user” of your design? Is that person who you really want it to be?
Intersectionality and HCI

[Schlesinger, Edwards, and Grinter, CHI 2017]

For the most part, HCI has considered representation in terms of one dominant axis: e.g., gender, nationality, expertise.

**Intersectionality** emphasizes that experiencing multiple attributes simultaneously produces a substantively different experience than each attribute individually.

How might we better engage with intersectionality in design and HCI? Especially given that design and computing often reduce complexities rather than
Design justice

[Chock 2020]

Design can be a tool not just to solve problems, but to resist structural inequalities.

Connects activism with notions of participatory design.
Critical design
Design to challenge us
[Dunne and Raby, 2001; Bardzell and Bardzell, 2013]

Use design fiction to cause us to re-evaluate our assumptions of what design can and should be doing

Sputniko’s Menstruation Machine

Electrodes for pain, fake blood…

Its question: how might design challenge our gender norms and identities?
Fit4Life [Purpura et al., CHI 2011]

Critique of today’s persuasive and behavior-change technology

Computer vision to estimate calories, LED beacon to tell others how you’re doing, “metabolic lancet” to analyze blood, hourly Facebook posts if you’re not tracking your behavior
Datacatchers [Gaver et al., CHI 2016]

IoT device that scrapes facts about the area you’re in

“People around here earn £25,300 per year. A 4-5 bed house will cost £26,000 per year to rent.”

“People from New Cross are in the bottom 50% of health in England.”

“The Government say that 6% of people in this community are unemployed. That is 339 people.”
Let’s get divorced

Constructive design research (“research through design”) and critical design research are increasingly at odds:

- Constructive research: demonstrating preferred futures in the lab or field
- Critical design research: polemicizing the current zeitgeist in a showroom

Suggestion: let’s stop trying to connect these communities — they have extremely different values

[Forlizzi et al. 2017]
In conclusion...

It’s been a pleasure.
HCI Research

Envisioning and understanding the future of interaction between people, society, and technology
This class

Teaches foundational theories and modern frontiers
This is not like other HCI classes.

Your goal is not just to fashion an alignment between people and technology. Your goal is to articulate and generate entirely new ideas about that relationship.
Course themes

Interaction

Social Computing

Design
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Feedback?
Bravo!