Critical perspectives

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CS 376
Today

- Short lecture 3:30-4
- Discussion 4-4:40
- Back here for wrap-up 4:45-5:15
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
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.
Third wave HCI [Harrison et al., ’07; Bødker ’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?
Postcolonial Computing
[Irani et al., 2010]

- 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?
Yesterday’s tomorrows

- 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?
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
## Discussion rooms

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