“Did You Build That?”
The Social, Cultural and Political Contexts of Your Engineering Work

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The Social, Cultural and Political Contexts of Your Engineering Work

I want you to leave today with:

1) an expanded idea of the potential influence your designs may have; and

2) a more humble sense of how much control you have over your designs.
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Top-Down Model / Technological Determinism (mostly abandoned today)

Scientists produce basic knowledge

Engineers produce technology

Consumers consume technology, society is transformed
Social Construction of Technology (SCOT) Model

- Engineers are a part of society, constrained / inspired by social, cultural, and political contexts;
- Engineers aren't the only relevant actors in tech. innovation;
- Flows are not one-way or top-down;
- Technology is not separable from society, culture, politics;
- Social effects of technology dependent on social context.
What are technologies “for”?

Goal: broadening our understanding of the social and cultural context of technology

Example: “What is an alarm clock for?” (from Nelly Oudshoorn and Trevor Pinch, *How Users Matter*, p. 1)
Who drives technological development?

Goal: recognizing the role of diverse social actors in producing technology

Example:

Development of telephony (Michele Martin, *Hello, Central?* 1991)

Rural women transformed telephones from a technology serving business to one serving social networking.
How can technologies produce cultural and social change?

Goal: recognizing the forms cultural and social change can take

Example:

Texting → social acceptability of distracted walkers

But note that the changes can be unstable and unpredictable!
Changes can change...

U.S. 1993:
“On the Internet, no one knows you're a dog.” (Internet produces a more anonymous society)

China ~2008:
“On the Internet, not only does everyone know you're a dog, they also know your breed.” (Internet undermines privacy.)
What is the political significance of those changes, and how do technologies become sites of political struggle?

Goal: To understand cultural change as a process of struggle involving political stakes.

Example: Barbie Liberation Organization
Your Student Design Projects

How do your social, cultural, and political contexts shape the projects you choose and the way you pursue them?

How will social, cultural, and political contexts shape your project once you release it?

Now that you are conscious of these contexts, how will you attempt to position your design project to reinforce or challenge existing social relations, cultural forms, or political power structures? (Note that this relates to the “ethics” question you will have to answer for your project.)