Network

Agenda

- Follow-up to Open
- Learning Outcomes for Network
- Guest Speaker: Kavita Philip
- Break
- Panel
- Wrap-up and Overview
- Review

Learning Outcomes for Open

- Understand that open source is a catch-all term
  - People use it to mean what they need it to mean
  - Meaning comes from context
- Understand that open source principles can be applied to other problems
- Understand the limits of open source
- Apply the privilege, autonomy, and circulation lenses to open.

Learning Outcomes for Network Flows

- Understand that how ideas travel
  - Peer networks
  - Global networks
- Understand that ideas are inherently embedded in a context
  - Hybrids emerge when contexts change
- Apply the autonomy and circulation lenses to open.

Guest Speaker

- Kavita Philip
  - Dept. of History, University of California, Irvine

Tactic #5

- From Philip et al.
  - The universal model, the view from everywhere, and the voice of the center remain radically incomplete. But they cannot be completed by addition. Context and particulars are always already constitutive of a sociotechnical model, and therefore we begin with them, rather than adding them as "complex" supplements to a "simple" initial model.

Generality and Abstraction

- In CS, generality is considered a virtue
  - Programming languages are made to be general-purpose
  - Ease of use features are considered "syntactic sugar"
- Education in CS transmits general principles
  - Judgement is needed to apply the principles and general-purpose technology
- When there is too much duplication or similarity, an abstraction is created

What is computer science about?

- Algorithms
  - Like math
- Programming languages
  - Communication and tools
  - For whom and for what purpose? (Authority)
- Problem solving
  - Situated and local

Encountering Assumptions

- Raymond Lesson #14: Any tool should be useful in the expected way, but a truly great tool lends itself to uses you never expected.

- Every tool has built in assumptions about its use.
  - Recall functional approach to studying artifacts.
- What about the converse?
  - MIDI software and Senegalese music
  - Virtual reality systems and using distance to show respect and status
  - 3D animation software and Chinese animation
  - Database permissions and situated access to cultural knowledge

Questions

- When is generality a weakness?
- What does generality privilege?
- Is generality possible? Or only local optima?

Panel: CS Culture

Topic

- What did you find confusing, surprising, or odd about CS when you first became a student?
  - How did negotiate that cultural difference?
- What is computer science culture?
  - Who are the heroes?
  - Who are the villains?
  - What are the sagas?

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Up Next: Distributed

- Grinter and Herbsleb
  - Conway's Law
  - When work is distributed across an organization
- Coleman
  - Anthropologist studying Anonymous, the hacker group
  - Example of a distributed organization