"Mentorship as a Social-Cause Paradigm": Responding to Kentaro Toyama's *Geek Heresy*
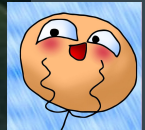
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Mayowa Aina || Jacob Kovacs
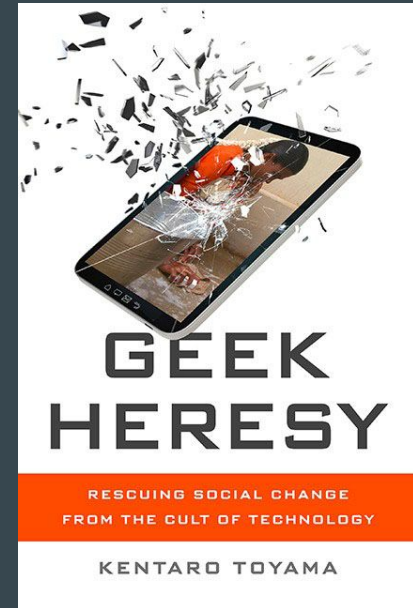Odegaard Writing & Research Center

Who is Dr. Kentaro Toyama?

"I am a recovering technoholic. I was once addicted to a technological way of solving problems."

- Physics major
- Comp sci PhD
- Microsoft Research
- Microsoft Research India
- iSchool @ UC-Berkeley
- iSchool @ UMich

Geek Heresy:

- The "packaged intervention" & other paradigms
- The "tech commandments"
- Perspectives on tech+society
- Successful amplification
- "Intrinsic growth"
- The role of mentorship

GEEK HERESY

RESCUING SOCIAL CHANGE
FROM THE CULT OF TECHNOLOGY

KENTARO TOYAMA

The "packaged intervention" & its potential for failure

- Farming or child wellness advice dispensed via mobile phones
- Microcredit
- Vaccines
- Elections
- Laws, e.g. outlawing caste
- Technology in schools, workplaces, and communities at-large
- Electronic medical records
- The "Facebook revolution"

Other development/aid paradigms that Toyama rejects

- **RCTs**: Abdul Latif Jameel Poverty Action Lab (J-PAL) at MIT

- **Social enterprise:** C. K. Pralahad's *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits*

- **Happiness as a goal:** Bhutan's 1972 adoption of Gross National Happiness

The "tech commandments"

1. Measurement over meaning
2. Innovation over tried-and-true
3. Ultimate goals over root causes
4. Destinationism over path dependency
5. External over internal
6. Quantity over quality
7. Intelligence over wisdom
8. Value neutrality over value engagement
9. Individualism over collectivism
10. Freedom over responsibility

Perspectives on tech+society

- **Technological determinists:** "Technology determines social outcomes … technologies embody moral and political values"
  - **Technological utopians**: "Technology is inherently a positive force … technology shapes civilization … more of it is a good thing"
  - **Technological skeptics**: "Technology is overhyped and often destructive"

- **Contextualists**: "not good, not bad, not neutral"; effects cannot be generalized

- **Social determinists:** "People decide the form of the technologies, the purposes of their use, and the outcomes … it is people who act and make decisions—technologies do not."
  - **Toyama's law of amplification**: "technology's primary effect is to amplify human forces … technologies don't have fixed additive effects. They magnify existing social forces, which themselves can be good, bad, or neutral."

Successful amplification

What matters:
- "the dedication of the **researcher**, not to research outcomes but to concrete social impact";
- "commitment and capacity of the **partner organization**"; and
- "desire and ability [of the **intended beneficiaries**] to take advantage of the technology provided."

For example …
- [Digital Green](#) in India, Ethiopia, Ghana
- [Ashesi University](#) in Ghana
- [I-TECH](#) at UW
- [Shanti Bhavan](#) in India

Laying a foundation ("intrinsic growth")

- **Heart**: Intention, caring in "expanding circles", hope, vision
- **Mind:** Discernment, judgement, knowledge, cultural capital, prudence, practical wisdom, sagacity
- **Will:** Discipline, self-control, deferment

The role of mentorship

What mentorship is:
- Status differences are acknowledged, but the goal is independence, partnership, peer status;
- Mentor supplies technical knowledge, expertise and/or resources;
- The mentee's aspirations take precedence (but might need to be uncovered).
  - Maslow's amended hierarchy

What mentorship is not:
- Legal or physical coercion, manipulation through incentivization, charity, trade, coaching, managing, top-down authority, benevolent paternalism, pretended equality.

What about us?

- How do you conceptualize the relationship between technology and society?
- What do you think about Toyama's definition of mentorship? How would you define mentorship?
- Do you see points of connection or distinction between tutoring and mentoring?
- Do you think mentorship has a role to play in social change? What about tutoring? What about education more generally?
- Do you suspect any of the "tech commandments" influence (y)our approach to tutoring?
- Are there situations in which any of the tech commandments are worth defending?
- How have you grown "intrinsically" in your life so far, and to what do you attribute this growth?