Technology Induced Distance and Technology Enabled Mobility: A Framework for Participatory Technology Innovation

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Neutrality of Technology

• Technology can empower
• Technology changes the way we live
• Technology provides more options
• Technological advancements?

• Technology also limits other options
Technology takes us far

• Technology often bring us closer to things/people that are far away
• ... inevitably, it also takes us farther from our immediate surroundings
• With each new connection there is a price to pay, perhaps a nearby connection is lost

• Are we considering what is lost when embracing new technology?
Technology takes us fast

• Innovation in technology often occurs with fast cycles of development and quick obsolescence
• For the most part, main goal is maximizing profit
• Maximizing quality of life is usually not directly considered

• Is it possible to design for wellbeing in the current state of the global economy?
Barriers to Technology Adoption: slow process

• Poverty
• Low literacy rates
• Poor infrastructure
• Limited financial resources

• How to turn these barriers into opportunities to:
  • Reflect upon social impact of technology
  • Establish participatory technology development processes
Development

- Development is ill defined and sets a lose-lose struggle
- Focus on development of things and not development of human potential
- Development agenda has failed to change the direction of resource rich Africa to harness its Native Power for local empowerment

- Is it possible to replace development with human flourishing?
  - Wellbeing, Quality of life, Redefined progress
Responsible Wellbeing

“The biggest challenge for development as good change in the long term, is to find more ways in which those with more wealth and power will not just accept having less, but will welcome it as a means to well-being, to a better quality of life.”

Responsible Wellbeing and Threshold Hypothesis: Wellbeing vs Consumption

Point (a): minimum necessary


Point (b): threshold hypothesis

Sustainable Livelihoods

“... reducing poverty by empowering the poor to build on their opportunities.”

Clare Short, Foreword in Diana Carney, *Sustainable Livelihood Approaches: Progress and Possibilities for Change*
Technology Enabled Mobility

• Cars
  • Urban planning
  • Collective transportation systems
  • Individual/Collective convenience

• Social Media
  • Virtual mobility
  • Potential to enable real gatherings: Spark Revolutions?
  • Virtual Communities

• Education
  • Distance learning and MOOCs
  • Democratization of education
  • Homogenization?
Education

• “value-neutrality and a value-free education are impossible”
• “learning process as one in which students seek knowledge on the one hand, and thirst for insichgt and enlightenment on the other in an integrated manner”
• “In many cases boarding schools were established for children as young as four or five years... to remove them from the influence of their families, parents, elders, and the indigenous community as a whole.”

Technology Induced Environmental Distance (TIED)

• Example of a remote community without running water
• Need to walk few kilometers to get water from local river, everyday.
• Locals are greatly aware of any changes in the river from daily observations
• With the introduction of piped water there is no need to visit the river everyday
• Native Knowledge of ecosystems and environmental aspects is lost
Technology Induced Distance

- Cars have not only increased the mobility of individuals but also reshaped the topology of cities and enabled the dispersion of families with important social implications.

- Social media enabled the communication of people that live very far while altogether has shifted time spent with the family or in local shops to more hours on front of the monitor isolated from close human contact.

- Boarding Schools have effectively separate the education process from the parents, elders, local community and indigenous wisdom in general
  - MOOCs, Distance Learning, One Laptop per Child
Tras Otro Progreso, Héctor J. Huyke-Souffront

• Acoplamientos debilitadores
  • “Conjuntos de tecnologías particularmente útiles en conjunto que se acoplan entre sí invitándonos a abandonar las cercanías que enriquecen la vida...
  • no son malos de por sí. Sin embargo... no permiten que los usuarios y los constructors vean con claridad las cercanías que están abandonando al entregarse a un errado sentido del progreso.”

• Acoplamientos fortalecedores
  • “Conjuntos de tecnologías particularmente útiles en conjunto que se acoplan entre sí invitándonos a aprovechar las cercanías.
  • ... tampoco son buenos de por sí. Sin embargo son superiores a los debilitadores en el sentido que nos permiten ver con claridad aquello en lo que hay que esforzarse para progresar.”
Tras Otro Progreso, Héctor J. Huyke-Souffront

- Tecnologías arraigantes
  - “tecnologías que colaboran con el esfuerzo, el trabajo y la creatividad en el desarrollo de alguna o varias capacidades;
  - tecnologías quemotivan la creacion de lazos entre seres humanos en la presencia de cercanías;
  - tecnologías que arriesgan a las personas en alguna localidad;
  - ...tecnologías que, en la consecucion de estos fines, no nos cierran el paso al ejercicio de la autonomía moral.”
New Information Technologies and the dynamics of Gender in Northern Sudan

Janice Boddy - Adoption of mobile phones

• Pressure to travel for sick/dead relatives, or help during crisis
• Cellphone killed conversation

• Mobile phone changes expectations: compare to home lines
• How does mobile phone mediated distancing impact gender relations?
Technology and Social Change

• While many changes that technology brings are not necessarily negative, more care to foresee fundamental social changes and concerted efforts to guide technology innovation are a pre-requisite for technology to become truly liberating.

• “The principle of nearness postulates the need of physical nearness, because that’s where vitality, prosperity and diversity, in one word -, the happiness that we look for in progress.”

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