Repair and ICTD: Sustainable Technology Practice and Development

Syed Ishtiaque Ahmed
PhD Candidate, Information Science, Cornell University
Introduction

- PhD Candidate in Information Science (expected 2017)
- B.Sc and M.Sc in Computer Science & Engineering from BUET
- Human-Computer Interaction and ICTD
- Research Focus: Human Freedom and Voice
- Area Expertise: Bangladesh and India
De-Centering HCI and Engineering Interest

- **Design**
  - What should we make?
- **Development**
  - How should we make?
- **Use**
  - How are people using it?
  - How can we get implication for a better design and development?

Maintenance and Repair seldom get any focus
Why is Repair Ignored in the West?

- Capitalism
- Consumerism
- Postcolonial Computing
Modernity and Making
Modernity and Death
Why Repair in the South?

- Economic Reasons
- Cultural Practice
- Post-human relationship
- Preservation
- Sustainability
- Voice
Repair as a Cultural Practice in the South
The Global Problem of E-waste: The material flow from the West to the South
The Post-Human Relationship
Preservation
Potential
Mobile Phone Repair in Bangladesh

- 4 month long critical ethnography
- 10 major electronic repair sites
- 1 month training
- 1 month working in a repair shop
- 30+ biographies
- 100+ interviews
- 70+ negotiations
Actors

- Mobile phone importers
- Retailer shops
- Users
- Expert Repairers
- Repair workshops
- Stand alone repair shops
- Parts importers
- Repair markets
- Bhangaris
- E-waste businessmen
Biography: Akmal
Biography: Ripon
Biography: Jaynal
Tools

- Hot Airgun
- Forceps
- Electric Iron
- Brush
- Octane
- Multimeter
- Wire
- Power Supply
- Screw Drivers
- Magnifying glass
- ICs ...
Knowledge: Explicit
Knowledge: Tacit
Knowledge: Social
Values: What constitute a good repair?

- Quick
- Effective
- No Mark
- Good behavior
- Updated knowledge
- Social bonds
Challenge: Invisibility
Challenge: Undervalued
Challenge: Work Environment
Challenge: Gender Bias
Challenge: Health
More: Privacy and Security
Thanks!

Syed Ishtiaque Ahmed

Email: sa738@cornell.edu