Repair and ICTD:

Sustainable Technology Practice and Development

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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

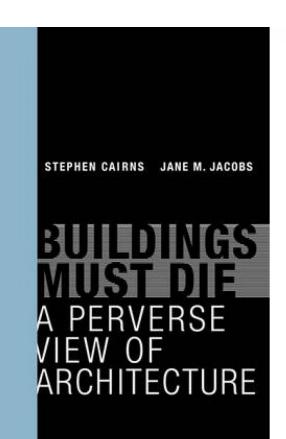


Modernity and Making



Modernity and Death

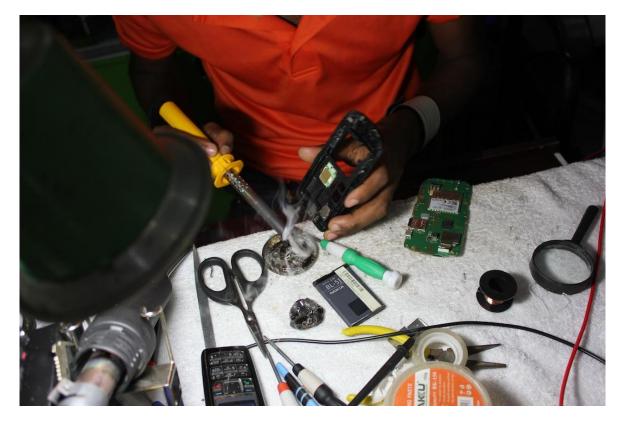




Why Repair in the South?

- 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

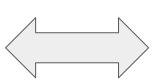


Voice - Practice



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

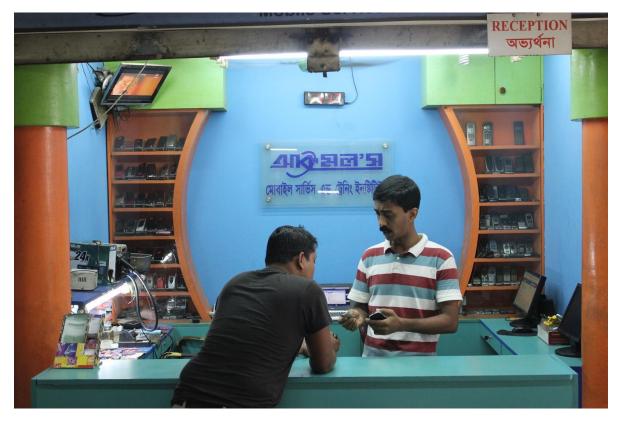


Actors

- 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

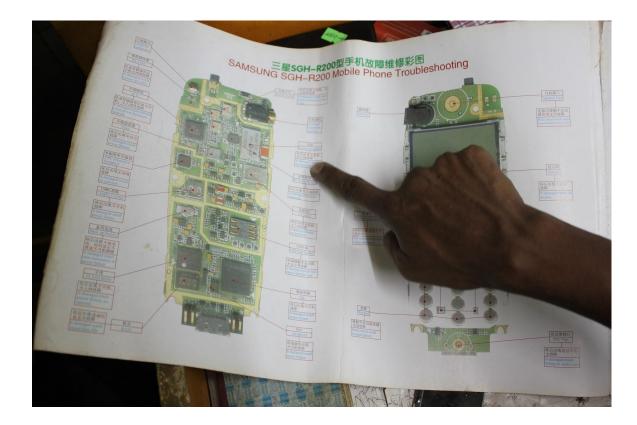


Tools

- 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

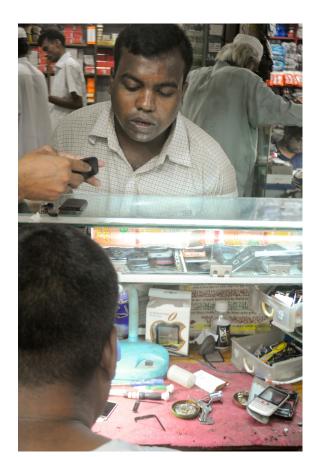


Challenge: Health





More: Privacy and Security



More: Voice



Thanks!

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