Development, Social transformation and S&T: Indian Debates
Gandhi, Nehru, Ambedkar

Gandhi
- ❖ Anti-technology?
- ❖ Machines and Humans: Critique of automation and Mass production
- ❖ Productivity: needs vs desires
- ❖ Technology and Environment, Sustainability
- ❖ Technology scale and decentralization
- ❖ Problem Solving and Problem Prevention

Ambedkar

- Freedom from degrading and monotonous work
- Possibility of a life of culture: technology, toil, leisure
- Machinery and modern civilization
- Evils of technology: "wrong social organization"
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Gandhi and Ambedkar

- All human beings as scientists
- Technology and Democracy

Nehru

- S&T for development, industrialization

- Mass production, heavy industries

- Huge investments in research institutions and infrastructure

- Scientific temper

- Bureaucratic science? Science by experts only?

- Role of socio-political and economic change in R&D

- Technological determinism: can S & T alone address problems

Technology as Thought: Gopalkrishna Gandhi

Technology and its applications in a foundational sense

- Material or Thought?

- An idea: formulation to fabrication

- Tactile and Tensile technology: shape and context

- Technology as solution ideas

- Technological solution: levels of sophistication; also ethos

  - Technologies have ethos and designs

- Idea to Technology: pass through stations – Do-ability, Desirability, Liability, Practicability, Possibility, Feasibility, Suitability, Sustainability, Viability, and Actuality

- Actuality: happiness and misery to self and others, in the short and long term

- Asking questions about destination: Have we reached? Should we reach? Which destination? Why?

- Why do technologies not solve problems? Why do they create more problems? Why do we not design technologies for some problems?

- Technology in ideational not instrumental terms: alternatives, options, choices; adapt to contexts
  - Go back to the ethos, roots and foundations of technology
- Technologist: cook or repository of engineering cuisines? Mali or gardener botanist? Technologist as a counselor