

LECTURE 1

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Research Methods (google)

- Go for pdf files
- Google books (maybe)
- University data bases
- University Library catalogue
- University library

Why ask why ?

- Letter from Albert Einstein to Robert Thornton, (7 December 1944)
- He agreed about the significance and educational value of methodology as well as history and philosophy of science. Prof believes that this is also applicable to the history of technology.
- To gain a knowledge of the historic and philosophical background.
- And the objective of this, is to give people, the kind of independence from the prejudices of his generation.

What is History

- Its not exactly What we read about the past or learn in lecture.
- These are the researches of Herodotus of Halicarnassus, which he published in hope of thereby preserving from decay the remembrance of what men did, and of preventing the great and wonderful actions of the Greeks and the Barbarians from losing their due meed of glory, an withal to put on record what were their ground of feuds.
- Meed means measure
- They covered subject matter,
 - a subject matter (what happened: "what men have done")
 - a process (finding out what happened: "researches")
 - a narrative (telling what was found: "to put on record")
- Historian, research the past.

What is Technology

- "The philosophy of technology must deal with a phenomenon which will likely decide the survival of the human race." — Wolfgang Schirmacher, 1983.

From arts and craft to technology

- The concept of technology is recent, even though the earliest human societies mastered techniques superior to those of any other animal species, but giving these other names
- The word "technology" goes back to Antiquity, but it only took on its modern meaning in the 18th century, just as technological innovations were laying the groundwork for the Industrial Revolution
- The technological innovations of the Industrial Revolution prompted new interest in the history of technology
- 1543: Vesalius Copernicus Start of the Scientific Revolution.
- 1759: Acceptance of heliocentrism Linnaeus completes his Systema Naturae Beginnings of the Industrial revolution.
- 1859: (1856: Perkin discovers aniline) Darwin publishes On the Origin of Species Lenoir proposes an internal combustion motor Drake strikes oil in Pennsylvania.
- 1901: Radio (Marconi)
- 1903: Flight (Wright brothers)
- 1905: Relativity, quantum physics (Einstein)
- 1928: First observation of penicillin's antibiotic action (Fleming)
- 1945: First use of nuclear technology as bombs in the U. S. and Japan
- 1957: The launch of Sputnik by the Soviet Union marks the start of the Space Age

The history of technology

- Historians were interested in discovery or past development even before they used the word technology.
- In Antiquity, Pliny the Elder wrote up the first listing of inventions and inventors as Book VII of his Natural History.

- Later scholars did not seem to realize that newer inventions could be added to the lists until Giovanni Tortelli (1449) and Polydore Vergil (1499).
- The history of technology as a mere list of inventions prevailed until the 19th century, as encyclopaedias and works by early engineers were dedicated to identifying who had come up with what when.
- **Technics and Civilization was first published in 1934.**
- **At that time, though scholars often characterized the present period as the 'Machine Age'**
- **they still looked for its beginnings in the eighteenth century.**

Paying heed to technology

- In 1895, a locomotive burst through a wall of the Montparnasse train station in Paris, France.
- In 1907, the Quebec City bridge over the St. Lawrence collapsed, killing 75 men.
- Piling and collapsed bridge structure, 1 September 1907 (Courtesy of Dominion Bridge Company Ltd./Library and Archives Canada/PA).
- In 2005, hurricane Katrina overwhelmed the dikes and levees of New Orleans in Louisiana, flooding much of the city.
- In 2010, a deep water oil well in the Gulf of Mexico blew and was responsible for a gigantic spill.
- Ships pull oil into a fire boom in a controlled burn, with a second controlled burn visible in the distance, 17 June 2010.

The anthropological Argument: homo technologicus

Many animals manipulate their environment (beavers, birds, ants, termites, etc.); a few species are able to use natural objects (stones, sticks, etc.) as tools.