

Community and the Tools of Knowledge

History
Descriptions
Prescriptions
Examples

Thinking about Science and Knowledge in the 20th Century

Tendencies:

- relation to technologies
 - large-scale (atom bomb, moon, cern, etc)
 - career not a calling
 - what else?
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- vs. 18th/19th Century
 - ie. the "Gentleman Scientist" (Goethe, Lavoisier)
 - About General Ideas/Theories
 - Small Scale Experiments
 - Function of Privilege/Leisure

20th Century Thinkers - Descriptive and Prescriptive

Descriptive

Bachelard: epistemological obstacles and ruptures

Fleck: Denkkollektiv ("thought collective")

Foucault: episteme - historical a priori

Kuhn: Paradigms informed by education
institutions

Prescriptive

Rheinberger: Historical Epistemology /
Practicalism

Hacking: Entity Realism

Popper: Falsifiability

Harding: Strong Objectivity

Chargaff: Small Science

Mertonian Norms: Communalism, Universalism,
Disinterestedness, Organized Skepticism

Isabelle Stengers: Ecology of Practices

Feyerabend: Bring Democracy into Science

Latour: Bring the Sciences into Democracy

Examples

- hackspaces/makerspaces
- diybio / open science community labs like the Open Science Network <http://www.opensciencenet.org/>
- food testing (igem competitor restaurant test, cae gmo grocery tests)
- medical (pulse oximeter, pregnancy test)
- environment (fukushima fallout, community ocean testing (surfriders & vcr aquarium))