

Historical Epistemology and Historical Ontology: Methods and Concepts in STS and HSTM

The history of science, medicine and technology can be told in many ways: The story of the lone genius sitting in a laboratory or a study, laboring towards that famous Eureka!-moment, the story of the book of nature that we are just looking to decode, the story of institutionalization and organization of science after the Enlightenment and the efforts of abolishing superstitions, and, sometimes, as the „adventures of concepts“ or the „metaphors we live by“.

In this course, we will try to navigate through these different types of (hi-)story telling in order to learn the critical skills that any historian or philosopher of science should know in order to understand the many ways in that progress is being facilitated and the even larger number of ways that constrain it.

Historical Epistemology is the suggestion that it is the human mind that ascribes historicity to its environment and the processes s/he is embedded in.

Historical Ontology describes the idea that it is processes and things that have historicity and effect the historic dimensions in one another, invoking it in our thoughts about the world. Therefore, it is the world and its historic processes and facts that produce us as subjects of history.

The radical lesson we can take from this course is not simply that there are several sides to each and every major chapter in the history of science. The hypothesis we need to face is that if we fully appreciate that each notable scientific event or epoch exists only in practice and through the decisions made by all the actors involved, progress may only be the history of a long series of creative misunderstandings. Whether this provocative hypothesis has any bearing will be the question we will have to answer at the end of the semester.

Topics.

1. What is science and was there a Scientific Revolution?
2. Who makes science? Scientists, experimentalists, clinicians, intellectuals, and dilettantes.
3. Science as a Vocation or a Job?
4. Constraining Science: Arrangements
5. Enabling Science: Assemblages
6. Assembling a scientific object
7. What is progress?

Requirements:

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| a. Participation | 20% |
| b. Weekly “Concrete Case” Paper (3 Pages each) | 40% |
| c. Research Paper on a lab-ethnography(ca.20 Pages) | 40% |

Literature Recommendations:

Foucault, Michel. The Order of Things
Foucault, Michel. Archeology of Knowledge
Davidson, Arnold. History of Sexuality
Hacking, Ian. Representing and Intervening
Hacking, Ian. The Social Construction of What?
Kant, Immanuel. What is Enlightenment?
Knorr-Cetina, Karin. Fabrication of Knowledge
Kuhn, Thomas. The Structure of Scientific Revolutions
Latour, Bruno. Reassembling the Social
Merton, Robert. The Sociology of Science
Rheinberger, Hans Joerg. Epistemic Things

Shapin, Steven. Scientific Revolution