

# STS.464 :: The Intellectual History of Technology

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The Marxist Critique of Capitalism

15 March 2005

## Today in Class

What does Marxism contribute to our understanding of the circumstances that led to the need for the concept of “technology?”

We need to be in the habit of *thinking historically*. Our inquiry only makes sense if you think about it over time — an historical question.

One effect of the course is to sensitize you to the ambiguity inherent in the term.

If a professor can use the term “technology” over twenty times in one lecture, this should ring an alarm signal! Problems of coherens of our thinking about the world.

At the beginning of the 19th century, the vocabulary that existed was sufficient for conversations about the mechanic arts. However, at some point, a new conception emerged. The circumstances of the development of society in 19th- and 20th-century America called for another term, another concept. “Machine” is not a good way to describe Dickens’s Coketown. Machines are a part of it, but not it. “Mechanism” goes from artifact to concept.

Marx and Engels give us some valuable intellectual tools, remind us that this is a very recent development. A word so commonly used doesn’t seem to need explanation.

**A note about your papers:** Be critical, make note of what places could stand improvement or clarification. Class is a good time for workshopping, for sharpening the writing and thinking.

This course is not about semantics, but semantics enters into it...

## Readings

This week’s readings span a range of years, and outline the evolution of Marxist thought in this period. Keep in mind that Marx was writing in Germany, and the evolution of the term “technology” in German is different than in English (see Schatzberg’s paper).

Marx uses “technology” in the more modern sense, *i.e.* as the mechanic arts themselves, rather than the literature pertaining to them. The *Oxford English Dictionary* has “technology” as a set of words, a jargon around a discipline.

Richard Poirier / Raritan

→ novel as a technology of literature

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Marx talks about the movement towards industrial capitalism → moving away from the individual and towards systems.

Something happens when you set up workers in a factory with machines. Transfer of knowledge and skills from men to machines. Workers are no longer separate from tools/machines.

Why is Marx so interested in machines? How does the machinery contribute to his political thoughts?

- The machine fits into the Marxist system because it's the *mode of production* (see S&D, p. 68). This language has become incredibly important.
- Machines were forces of production, the production of people's livelihood.
- Machines became more than just things → need for "technology"?
- Marx wasn't interested in the machines themselves necessarily, but in the social system surrounding them → need for term?
- Problem with *relations* of production, not just the *means* of production.
- Marx and Engels have no qualms about machines themselves.

The paradox of Marxism: Capitalism is the best and worst thing to have happened to society.

Marx's image of drudgery was being a peasant/serf. Machines should be used in the workers' interests, not those of the bourgeoisie. The machine itself is neutral, doesn't have class loyalties.

Coercion of getting people to work in factories

→ authority, hierarchy

→ machines could be liberators — it was the factory owners causing drudgery

In 1848, half of the capitals of Europe were threatened by workers' uprisings. The U.S. Navy came to the rescue of many.

How long does the feeling last, that the revolution would be completed? 2 generations?

Can you really just change the ownership? Ascribing agency to the machines, in the person of the capitalist → capitalists have built their interests into the machine.

E. P. Thompson, *The Making of the English Working Class*

Rural/agricultural life:

- living outside the modern means of production
- isolated, behind
- peasantry → reactionary conservative force
- rural areas have to be brought into the modern means of production
- globalization

Fear of capitalist industrialization? Russia as opposed to England...

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See also *To the Finland Station* and *Ten Days that Took the World*.

Fusion of town and country that Marx talks about.

## Discussion of student papers

Marxism developed from the writings of utopian socialists, who had idealized visions of the future. Marx was influenced by them, but saw them as imputing agency to ideas. Marx was a materialist.

We create the material conditions to our survival, relations to our environment.

**Technology:** a system from which you cannot extract yourself, a sense of totality. Preceding formulations had technology as discrete instruments → a necessary if not sufficient attribute that it be a physical entity? “Technology” does not point to any concrete object — instead it approaches totality: abstract, pliant, dematerialized, deliteralizing. At the same time that it becomes pliant, it loses meaning. **Capitalism** is Marx’s word for this totality — it’s much more concrete.

Using the word “technology” instead of “capitalism” depoliticizes it. The language for taming capitalism is an issue.

See also Perrow, *Normal Accidents* → risk, accident

Production for use rather than profit.

Marx had the word “technology” at his disposal, but he chose to use “capitalism,” as that was his focus.

**hermeneutic circle:** language changing while its subject is evolving.