

# STS.464 :: The Intellectual History of Technology

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Culture: High vs. Low, Traditional vs. Democratic

29 March 2005

## Background and Overview

**culture:** a rubric of our time, a mushy concept

**cultural history:** emerges in the late 1930s, the 1939 meeting of the National Historical Association pertains to the topic “the culture concept in history.” This is the anthropological (not Arnoldian) sense of the term “culture.”

As it pertains to our inquiry:

- tracing the history of what we not call “technology” and its surrounding ideas, values, and meanings
- cultural history as it is illuminated by the mechanic arts

Back to the main question: a word/concept which didn't gain currency until recently (large-scale usage emerges around WWII) → Why was it needed in the first place? What made the semantic void that it filled? Constantly creating conditions that require new thought.

**culture:** a counter-term (Arnold), things that resisted modernity, mechanism, the instrumentalization of life

TODAY: Getting a handle on the concept of culture.

## Discussion of Readings and Student Papers

metonymic → adjacent ideas?

Some aspects of technology:

1. teleology: moving towards some unarticulated force
2. totalization : the relatedness of technology to other aspects of life, consuming
3. fragmentation: professionalization, increasing specification and specialization → myopic
4. decorporealization: disembodiment

final stanza of *Dover Beach* → WWII

→ the tenor of the age that tells us what's really true

→ the sensory impact of powerful technologies

→ the sensory experience of technology

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*To a Locomotive in Winter* → Locomotive and westward expansion, locomotive as instrument/engine of democracy. never explicitly mentioned in the poem.

*Passage to India* → hymn to globalization and the mechanic arts

Art replaces religion in the modern context.

As technology becomes so totalizing, it's not just a lack of direct sensory interaction, but an increasing inability to read nature, a knowledge base that's lost. Isolation of consciousness, lack of ongoing experience and interaction.

Arnold: defining culture such that it is the opposite, the other to "technology"

"Technology" → absence in Arnold, promiscuous presence in Whitman → a British vs. American viewpoint

What is the fundamental difference between England and the U.S. that allowed Arnold to make this distinction between culture and everything else? → A landed aristocracy. Arnold assumes a class of people who don't have to work for a living. His whole argument hinges on this.

Williams: English, didn't come to U.S. before 1972, book about TV

Transformation of industry from a human virtue to a means...

<b>Intrinsic Values</b> (universal, absolute; compatible with criticism of technology; old definition of culture)	<b>Instrumental Values</b> (compatible with valorizing of technology)
truth	efficiency
virtue	power
spirit	speed
soul	wealth
courage	

Whitman wanted to make technology compatible with culture, democracy.

Mumford, *Technics and Civilization*, 1934

Consider the titling of journals: *Technology and Culture*, *History of Technology*... Why was "technology" chosen instead of, say, "engineering"?

What about *Culture and Anarchy*?

→ self + common good = culture

→ self only, selfishness = anarchy

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## Next Week: Systems & Networks

The concept of a unifying system has been latent in our discussion for the past few weeks.

Movement from the mechanic arts being characterized by discrete entities → the factory system, institutions, modes of behavior organized around and within machines.

By the time you get to the railroad (that emblem of industrialization and the new mechanistic society), it's not longer just an engine, it's an elaborate system. Required a transformation of the concept of time. No longer discrete things, but a complex of interlocking things.

Two borders were crossed:

1. between the thing (e.g. locomotive) and the system that owns the thing (e.g. railroad company): the mechanic arts and institutions around the mechanic arts
2. between the thing and society: the penetration of culture and society by these systems

Also: production systems (e.g. Fordist) and connective systems (e.g. railroad, telegraph, transportation and communication)

Adam Smith: system as an imaginative machine

Thomas Hughes, *Networks of Power*

→ how historians deal with technological systems

→ compares US and German electrical systems

Chandler: The typical American business before the railroad was a family business. A new system like the railroad called forth a new system of management → rise of corporations.

Henry Adams: The rapidly accelerating complexity and rate of change after industrialization.

Mindell, Castells

Heidegger: "The essence of technology is nothing technological."