

About philosophy of technology



Luca Consoli and Mignon Hagemeijer, 25-11-2024

Outline

- **Part 1 (Luca Consoli)**
 - **Philosophy of technology**
 - Instrumentalism
 - Determinism
 - Mediation theory
- **Part 2 (Mignon Hagemeyer)**
 - More on mediation theory + case study

3 approaches

Different approaches reflect different relationships between human-technology-world

- Instrumentalism: we control technology
- Determinism: technology controls us
- Mediation: it's about the interaction between us and technology

<https://plato.stanford.edu/entries/technology/>

Instrumentalism: we control technology

- Technology = (collection of) instruments that people use to achieve their goals
- Usually material objects, by extension also: skills, organisations,...
- Basic idea: “Technical cyclus”
 - Factual situation compared to desired situation
 - Discrepancy? Action → technology!

Instrumentalism

2 flavours:

- (existence of) instrument has both positive and negative consequences

→ technology is **ambivalent**

- Good and evil are not in technology *as such*

→ technology is **neutral**

Instrumentalism (Neutral flavour)

- Typical arguments:
 - Technology is like a knife...
 - Guns do not kill people...people kill people
 - Existence is not the same as use: difference use / abuse

Possible objections?

Instrumentalism



(Martin Meganck)

Determinism: technology controls us

- Technological change comes from outside society as part of an autonomous scientific development
- Technologies have their own **inertia**, totally separate from the influences of people.
- At the extreme, technology *causes* social change

Technological determinism

- ☐ Technological change comes from outside society as part of an autonomous scientific development
- ☐ Technologies have their own **inertia**, totally separate from the influences of people.
- ☐ At the extreme, technology *causes* social change



Examples of Determinism

Lynn White

The invention of the stirrup
led to Feudalism.

See: White, L. Medieval Technology and Social Change. Oxford: Clarendon Press, 1962.

“The history of the use of the horse in battle is divided into three periods: first, that of the charioteer; second, that of the mounted warrior who clings to his steed by pressure of the knees; and third, that of the rider equipped with stirrups.”



More Examples of Determinism

The automobile created suburbia.

See: McShane, C. *Down the Asphalt Path: The Automobile and the American City*. New York, NY: Columbia University Press. 1995.



TECHNOLOGICAL DETERMINISM

Technological determinism is the idea that technology shapes social change. It determines our future.

EXPLANATION

Technological determinism believes that advancements in technology are the moments that bring on each new phase in human history.

For instance, the invention of the wheel revolutionized human mobility, allowing humans to travel greater distances and carry greater loads with them. Thus, a technological advancement changed the course of human history for all time.

EXAMPLES

1. The invention of language,
2. The discovery of various metals (bronze, iron, copper, etc),
3. The introduction of double-entry bookkeeping, and
4. The invention of the steam engine.
5. The internet
6. Emergence of general AI

Consequences of Technological Determinism

- At the Macro level, technology causes social and historical changes.
- At the Micro level, technology affects social and social-psychological processes as individuals use technology and tools.



Technological determinism



Mediation: it's about the interaction between us and technology

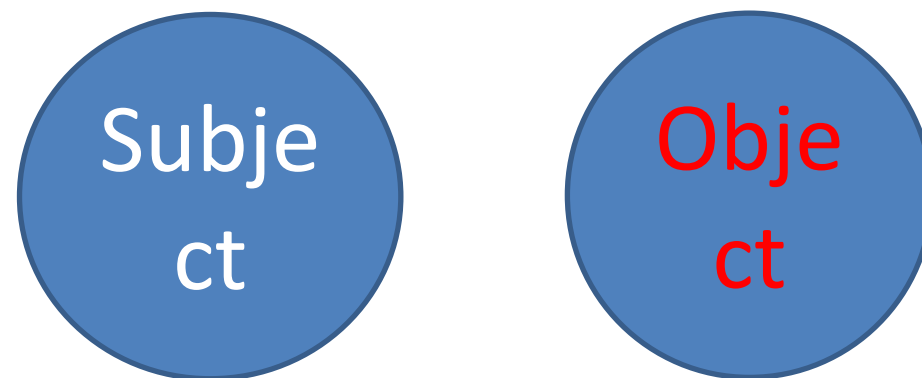
The theory of technological mediation offers a framework to analyze the roles technologies play in human existence and in society. Its central idea is that **technologies, when they are used, help to shape the relations between human beings and the world.** Rather approaching technologies as material objects opposed to human subjects, or as mere extensions of human beings, it sees them as mediators of human-world relations. Mediation theory is rooted in the 'post-phenomenological' approach in philosophy of technology, which was founded by Don Ihde.

<https://ppverbeek.wordpress.com/mediation-theory/>

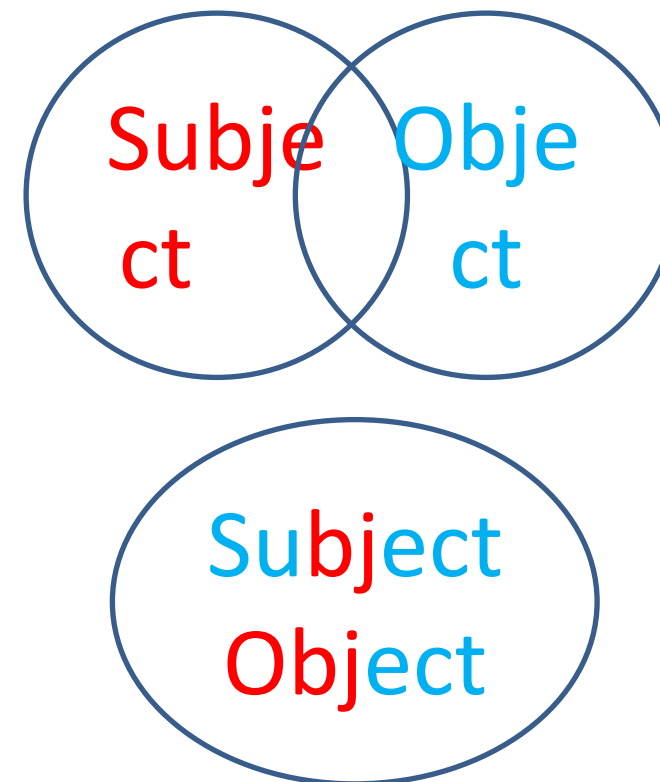
If the thesis of mediation theory is plausible...

...the relationship subject / object changes dramatically!

External relationship



Technological mediation



Consequences for ethics!