

TELOS AND ARISTOTLE'S TECHNOLOGICAL DETERMINISM

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The theory of technological determinism

- If tools would be **autonomous** – there would be no need of slaves

(“if every tool could perform its own work when ordered, or by seeing what to do in advance...if shuttles wove and quills played harps of themselves, master-craftsman would have no need of assistants, nor master – of slaves” *Politics*, I, 4, 1253b20)

- **argument**, but also an **implicit critique** of the theory of natural slaves

Argument of Theory of natural slaves

Between 2 opposed opinions:

- a) Mastership – **necessary** as a management function similar to that of state officials (→ slaves – necessary)
- b) Slavery – **convention based on force**, contrary to nature

Aristotle adopts half of a) (idea of necessity)

because of the low levels of tools (technological determinism)

(**Aristotle's methodological** emphasis: the problem of slavery is not solved with **moral** concepts, but with concepts corresponding to a deeper layer of reality: **production of life**)

Production of life

- ‘Man’s **telos** – happiness as a result of virtues and contemplation (devotion for public affairs)
 - Even the highest intellectual preoccupations – cannot occur without the material support / without all goods people need for a decent life
 - Production of these goods requires **tools** (including people: “an assistant in the arts belongs to the class of tools”)
- (Production of life – depends not only on organisation and social relations, but also on **tools**)
- Productive means / **tools** – concept of the **ontology** of man

Assistants and slaves – necessary for society / at least for a part of it

Arguments for the natural slavery – supporting the argument of the level of tools

1. **‘Metaphysical paradigm of the hierarchy of things**
 2. **Difference in the capacity of knowledge of groups** (knowledge of **individual** things from **experience** – knowledge of **the general, of causes**) as explaining
 3. **The social division of labour masters/slaves: more economical**
 4. **The highest level of man** – the manifestation of the function of **understanding and of devoting to public affairs**
 5. **The whole – more important than the parts**
- **Slavery – technical and not social relation of slaves with tools**
 - **All types of tools** (simple tools acting directly, complex tools acting indirectly) – **needed human effort**

Logic of theory of tech. determinism

- Relation between
 - the **efficient** cause (the acting labour force)
 - its **instrument** acting on the **material** cause

Modernity of this logic (if the level of tools/
productive means – low, one need
slaves/compensating labour force; if the level –
high, one no need slaves)

Epistemology of theory of tech. determinism

- Related to, but separated from the theory of slavery
 - Theory of slavery – **description** (realm of necessity, closed)
 - Theory of tech determinism – **anticipation** (realm of possibility, open)
- **Society as relations** → **state of slavery – human construction**

Telos – grounding all the other causes

– forbids unilateral understanding of the functioning

of things and their reduction according to one cause/aspect

- **Tools and slaves – have their *teloi***

- **Aristotle' technological determinism ≠ reductionism**

!!! It does not forget the chain of causes related to it

Aristotle's non-conformist epistemology: the focus on one aspect – and the bracketing of the other ones – ≠ to ignore these aspects, but just to consider the **complex structure** of causes and aspects, including the **telos** of man)

- **Aristotle** aimed at explaining **social stability**; Marx – **the social change**: they both had a **non-conformist epistemology**

versus the modern **mainstream** technophobia and techno-philia

Theory of tech. determinism – as an implicit and involuntary critique of slavery, as anticipation

- only half of the determinism of relations between slaves and technology (low level of tools → existence of slaves) The other half – that Aristotle could not infer just because of the low technological level – (existence of slaves → low state of technology/ innovations and diffusion) (Aristotle could not think the possibility of different rhythm of innovations...)
- Aristotle provided the theory of tech. determinism as a hypothesis (in his time to conceive autonomous tools – fantasy) / reductio ad absurdum (the alternative suggested model – not probable for Aristotle)
- It was an **abductive reasoning** (the most economical explanation) within a complex assemblage of theories
- because slaves take precedence of all other instruments – because of the *contradictions* intimated in the whole problem – the theory of slaves-technology relations: **open; Tech. determinism – heuristic device (but if the conditions change?), sketch of utopia – indirect critique (then slavery – inevitable evil)**