Computers and Machines: A Symbiosis?

Reflections on the concept of the machine and the machinic

The machinic dominates our everyday life. If you want to know something you ask the google engine. Production of goods is driven by numerical controlled machines. Money we get from the automated teller machines or, we transfer it by using the algorithms of the smartphone. Normally, we are not aware of the machinic, it remains unconscious. In order to understand the nature of the machinic, we will study its relations with its environment and its transformations and transductions (Simondon) throughout history. In doing so, we will relate the machine concept to other basic concepts, such as algorithm, automaton, tool, medium, sign, etc. In the seminar we read together selected documents of basic concepts of computer science, each of which we contrast with core statements of a particular philosopher: Leibniz, Babbage, Lovelace, Turing, Reuleaux, Simondon, Guattari....
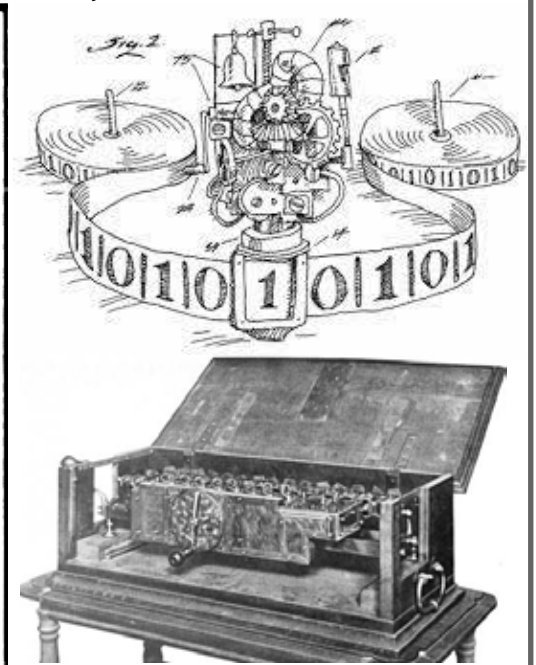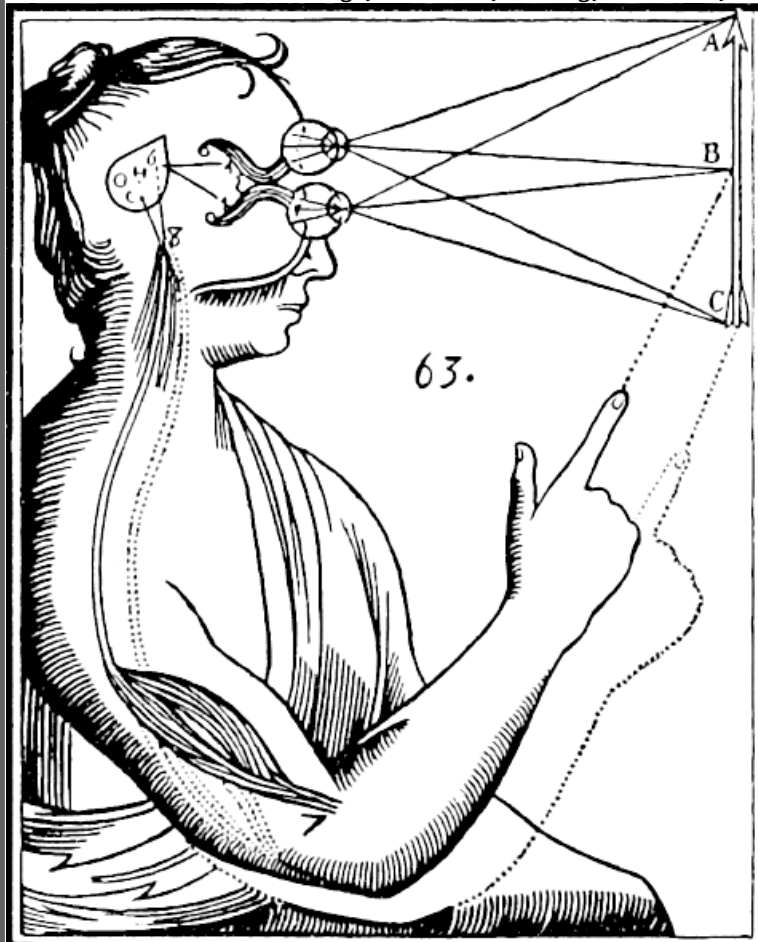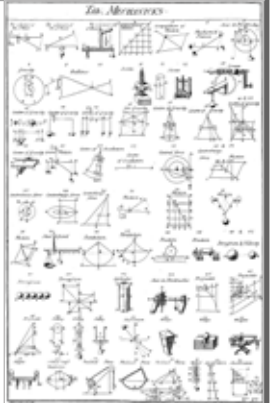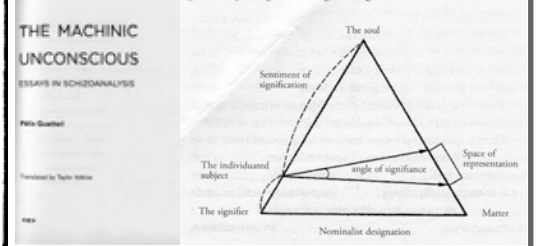

THE MACHINIC
UNCONSCIOUS
ESSAYS IN SCHIZOANALYSIS

Félix Guattari

Translated by Taylor Adkins

The Machinic Project

The course will be organized in two threads - a technological thread and a philosophical one:

The philosophical thread will take place on Monday. We will read together texts of four different thinkers about technology:
- Karl Marx, Norbert Wiener, Gilbert Simondon, Bernard Stiegler

The technological thread will take place on Wednesday. This thread will be organized through presentations about import steps in the genesis of the digital machine and artificial intelligence:

12.4.

The machinic and related terms, definitions of the machine concept
Discussion, how we will organize the course

19.4.

Genealogy of the machine 1: From Archimedes to Leibniz (Calculating machines)

26.4.

Genealogy of the machine 2: From Babbage and Lovelace to Turing

3.5.

The Turing Machine and the dawn of Artificial Intelligence

10.5

Vannevar Bush: "As we may think"

17.5.

Augmented Human Intellect: Douglas Engelbart

24.5.

Sketchpad: Ivan Southerland

31.5.

Man-Computer Symbiosis: JC.R. Licklider

7.6.

A Cyborg manifesto: Dona Haraway

14.6.

Life on Screen: Sherry Turkle

21.6.

Personal Dynamic Media: Alan Kay

28.6.

Artificial Intelligence: Joseph Weizenbaum

5.7.

Résumé

14.7.

Outlook: The machine and beyond

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