

## About:

In the late 1960s, a series of landmark performances, such as Robert Rauschberg's "Open Score" (1966, NYC), exhibitions such as "Cybernetic Serendipity" (1968, London) and books, such as Marshall McLuhan's *Understanding Media*, marked a turning point in popular culture. Once esoteric notions of "information", "openness", "feedback", and "media" began to reach wide audiences and they were shaping new ideas about art and the artistic process. Indeed, to understand art as an open-ended process was a direct consequence of cybernetic thinking.

Cybernetics emerged after the second world war, as an attempt to rethink the changing relationships between people, animals, and machines. They were no longer perceived as fundamentally different from each other, but as being coupled in "open systems" and interacting with one another through "feedback". "Thinking", or "intelligence" no longer seen as the exclusive domain of self-conscious human beings, but was redefined as the ability to read and react to the environment. Thus, now also machines could be seen as thinking.

While cybernetics as a term fell out of fashion in the 1970s, its basic assumptions and ideas provide much of the common sense of today's techno-social worlds and remains crucial to understanding both artificial intelligence and social media.

In this module, we want to investigate the origin, transformations and continuing relevance of cybernetics, and the problematic ways in which it established an equivalence between humans and machines. We will read texts, watch movies, analyze art from the last 50 years. We will discuss all of this as it relates to the experiences of our own daily lives and artistic positions.

The module will be held in English.

## Monday, Oct 21

### Introduction:

- Who we are and what are our interests?
- Overview of the week
- Course Requirements
  - Presence
  - Participation
  - Written paper 2-3 pages, to be handed in by Sunday, Oct. 27

Input: How to manage openness and uncertainty. Why does Cybernetics still matter?

<https://bengrosser.com/projects/facebook-demetricator/>

<https://bengrosser.com/projects/twitter-demetricator/>

### Robert Rauschenberg: Open Score (1966), Video, 15 Min, & 18 Min Interviews

[Whole Earth Catalogue](#), 1968 (PDF)

Fred Turner - Keynote: [From Counter-culture to Cyberculture](#), HKW, 2013 (09:30-19:30)

Wiener, Norbert. 1948. *Cybernetics; or, Control and Communication in the Animal and the Machine*. Cambridge, MA: MIT Press. (reading together: pp. 5-12 (basic concepts), pp. 25-29 (artificial limbs and slave labor))

16:30 - 18:30 (voluntary)

Uncomputable – Panel Discussion with Beatrice Fazi, Alexander Galloway and Dieter Mersch (part of the ITH Autumn Academy: After the Digital Turn – Beyond the Digital)

## Tuesday, Oct, 22

### Foundational Exhibitions

#### Cybernetic Serendipity, (Institute of Contemporary Arts, London, 2.8.-10.10.1968)

- [https://monoskop.org/Cybernetic\\_Serendipity](https://monoskop.org/Cybernetic_Serendipity)
- [Introduction by curator Jasia Reichardt](#), 7 Min. 1968
- Reichardt, Jasia. 1968. “[Cybernetic-Serendipity-Getting-Rid-of-Preconceptions-Jasia-Reichardt.](#)” Studio International - Visual Arts, Design and Architecture, 1968.
- Norman Bauman. Five-year guaranty. In: Reichardt, Jasia, ed. 1968. *Cybernetic Serendipity : The Computer and the Arts. Exhibition Catalogue*. Institute of Contemporary Art, 2 August – 20 October, 1968. London: Studio International, p.42-43

#### Exhibition Visit: Vera Molnar

Museum of Digital Arts (MUDA) 31.08. 2019 – 09.02 2020 <https://muda.co/veramolnar/>

#### Information (MoMA, New York, 2.7 - 20.09. 1970)

- McShine, Kynaston. 1970. [Information : \[Exhibition\]](#), July 2 - September 20, 1970, The Museum of Modern Art, New York. New York: The Museum of Modern Art.
- [https://monoskop.org/Information\\_\(1970\\_exhibition\)](https://monoskop.org/Information_(1970_exhibition))
- [Hans Haacke, Poll](#), 1970

#### Software - Information Technology: Its New Meaning for Art (Jewish Museum in Brooklyn, New York City, 16.09 - 8.11.1970)

- [https://monoskop.org/Software\\_\(exhibition\)](https://monoskop.org/Software_(exhibition))
- Burnham, Jack. 1970. “Notes on Art and Information Processing.” In *Software - Information Technology: Its New Meaning for Art. Exhibition Catalogue* (16.09 - 8.11.1970), 10–14. Brooklyn, N.Y: Jewish Museum. ([PDF](#))

## Wednesday, Oct, 23

11\_00 - 13:30 Hacking as an Artistic Strategy Lecture and Discussion (part of the ITH Autumn

Academy: After the Digital Turn - Beyond the Digital)

Dammbeck, Lutz. 2004. **Das Netz**. Documentary Film, 121 Min.

## Thursday, Oct, 24

Deleuze, Gilles. 1992. "Postscript on the Societies of Control." October 59: 3-7.

Zuboff, Shoshana. 2018. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. First edition. New York: PublicAffairs. (read pp. 339-348, 403-416)

Adam Curtis: The Trap, Part 1

## Friday, Oct, 24

Stalder, Felix. 2018. The Digital Condition. Cambridge, UK ; Medford, MA: Polity Press. (read: The dark shadow of cybernetics, pp. 139-143)

### Nudging

Experience: Ben Grossner's Demetricators

Afternoon:

Individual Writing, Mentorate

From:

<https://wiki.zhdk.ch/fs/> - **Felix Stalder, Prof. DfA**

Permanent link:

[https://wiki.zhdk.ch/fs/doku.php?id=cybernetics:how\\_machines\\_think\\_i&rev=1571297596](https://wiki.zhdk.ch/fs/doku.php?id=cybernetics:how_machines_think_i&rev=1571297596)

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