



AESTHETICS CS-E5600
Sanna Lehtinen, PhD

Philosophy of Technology

4 March 2019

Philosophy of Technology

- Practicalities
- Philosophy of technology in general
- Theory of technological mediation
- Posthuman, transhuman
- Aesthetics and technology?
- Group task: Roboaesthetics

Learning Diary

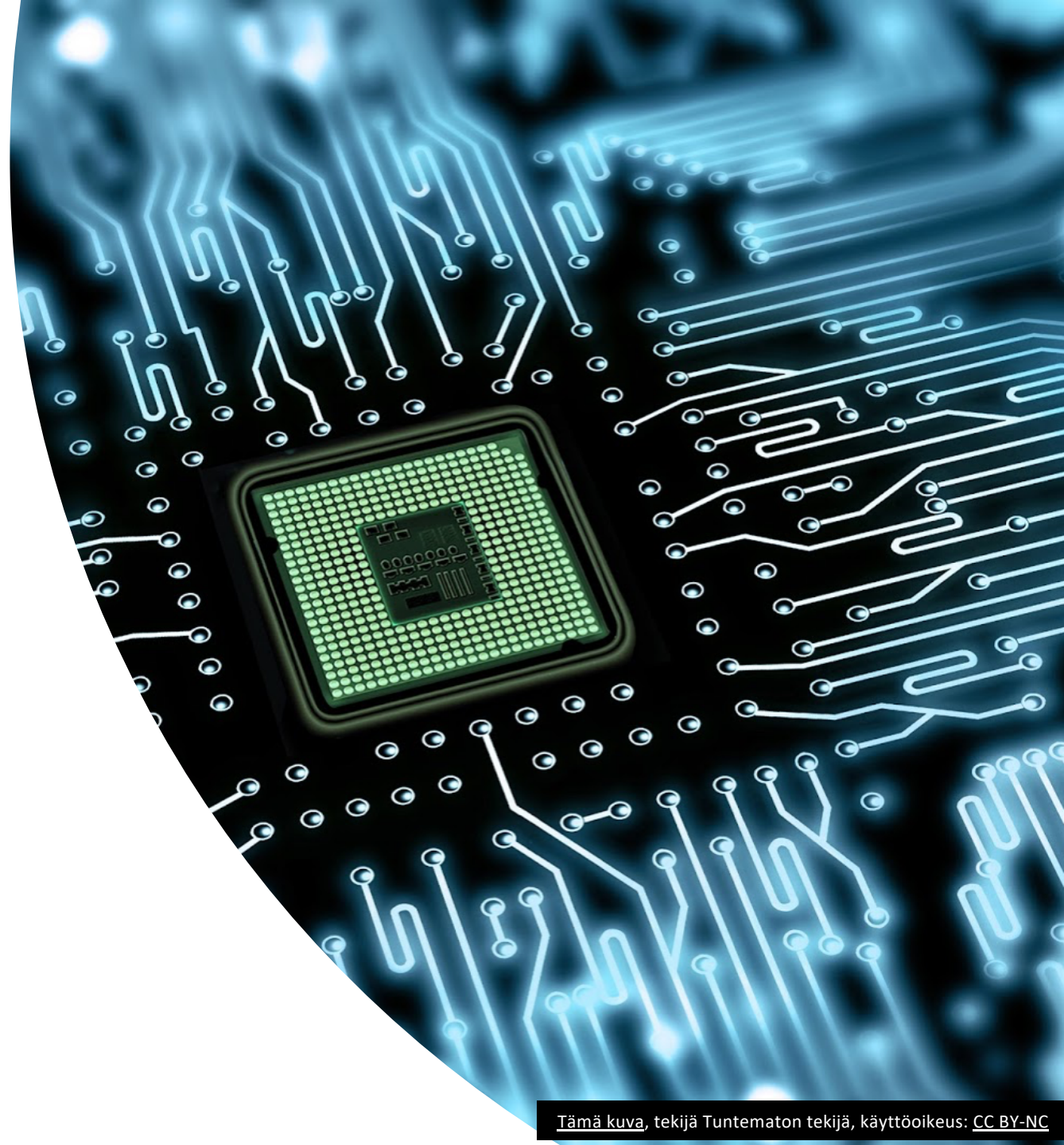
- Final deadline Mon 1st April
- Submit the learning diary as one document (Word, PDF, a document containing an external link, etc.) to MyCourses *Assignments*
→ *Learning Diary*
- 50% of the grading, grade scale 0–5

Main Group Task: Imaginary Garden

- Add the name of your group/project & the names of the group members to *Assignments* → *Groups*
- Make preliminary plans with group members on what/how you will be working on the project during the next 2 meetings (11.3. & 18.3.)
- Don't forget the group work report by 1st April:
Assignments → *Group Work Report*

Philosophy of Technology (PoT) in General

- Studies the nature of technology and its social effects
- Strong focus on ethics
- Defining technology
 - Technology learns from or imitates nature
 - Fundamental ontological distinction between natural things and artifacts
- Alienation vs. techno-optimism



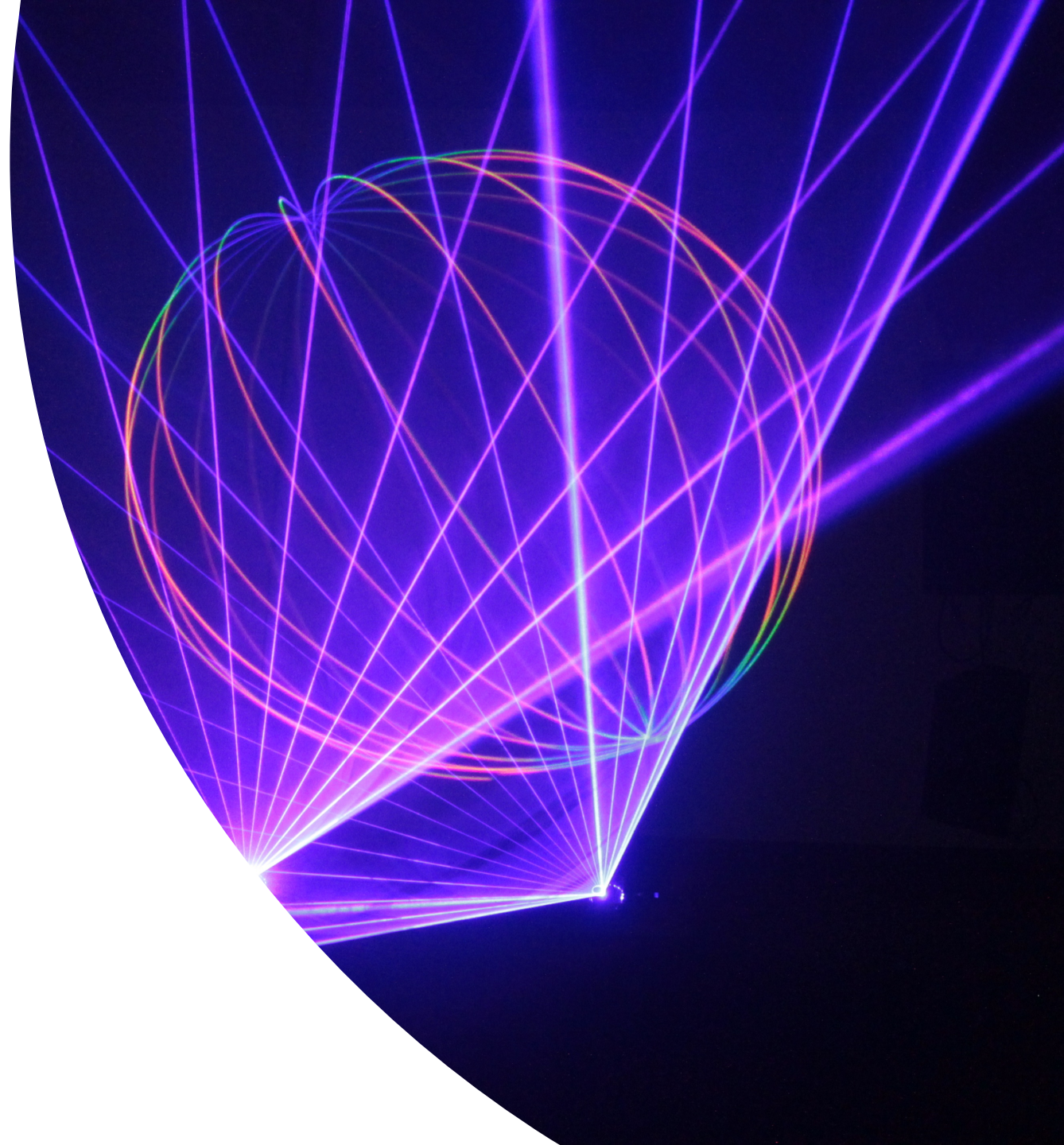
The 2 "Cores" of Technology

- **Instrumentality:** the totality of human endeavours to control their lives and their environments by interfering with the world in an instrumental way, by using things in a purposeful and clever way
- **Productivity:** the totality of human endeavours to bring new things into existence that can do certain things in a controlled and clever way



Current top concerns within PoT

- Development of technology as the outcome of a process originating within and guided by the practice of engineering
 - Role and degree of societal control?
 - Consequences for society of the implementation of technologies?



Postphenomenological Approach to PoT

- Instead of a general theory of technology, focus on individual technologies
- Neutral approach
- Context central



Technological Mediation

Peter-Paul Verbeek, University of Twente

<https://www.youtube.com/watch?v=FVhrLwBNbvU>

Theory of Technological Mediation 1/2

- Recent development in postphenomenological theory (Peter-Paul Verbeek)
- Theory is a tool to analyze the roles technologies play in human existence and in society
 - Combines philosophical analysis with empirical investigation



Theory of Technological Mediation 2/2

- Technologies mediate human-world relations (= experiences and practices)
 - NOT just material objects (vs. humans as living creatures)
 - NOT just tools or extensions of human beings



How technologies mediate our relation with the world (Ihde)

- *Embodiment relation* (e.g. glasses)
- *Hermeneutic relation* (interpretative, explanatory relation; e.g. thermometer)
- *Alterity relation* (interactive relation e.g. ATM)
- *Background relation* (not typically aware of e.g. heating system in a house)



How technologies mediate our relation with the world (Verbeek)

- Mediation more complex with contemporary technologies
- New forms of technologies, e.g.
 - Hybrid beings (e.g. biotechnology)
 - Immersive environments (e.g. smart city; AR)



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MORAL MACHINES? ETHICS AND POLITICS OF THE DIGITAL WORLD

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Programme

Programme

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Post/transhuman?

- Advances in genetics, robotics, informatics, and nanotechnology (GRIN) in the last several decades
 - Speculation about the future of the human race; *how* will we change
- GRIN technologies offer hopes, and raise concerns, about far-reaching transformations of human persons
 - New biotechnologies offer the prospects of precise manipulation of genomes (life beyond distinct species)
- We have never been only human (Braidotti)
 - 'The Posthuman' (or 'transhuman') helps us make sense of our flexible and multiple identities

”[...] the posthuman condition introduces a qualitative shift in our thinking about what exactly is the basic unit of common reference for our species, our polity and our relationship to the other inhabitants of this planet.”

Rosi Braidotti

”Our capacity to reshape the future has never been more powerful. Yet our ability to foresee the consequences of what we do has not kept pace.”

Christopher Groves

Robo aesthetics?

- Philosophy of technology perspective
- Not only about designing the external features of robots (or “cyborg romanticism”)
 - How we interact with robots (instead of whether we find robots visually attractive, even though that is also an important and interesting matter)
- Focus on human-technology interaction
- Artificial Intelligence = Artificial Perception
- Diversity of robot types (differing functions/qualities/levels & modes of interaction etc.)

Literature

- Braidotti, Rosi (2013). The Posthuman
- Broncano, Fernando (2009). The Melancholy of the Cyborg
- Ihde, Don (2009). Postphenomenology and Technoscience
- Musiał, Maciej (2016). "Magical Thinking and Empathy Towards Robots"
- Verbeek, Peter-Paul (2005). What Things Do. Philosophical Reflections on Technology, Agency, and Design

Group Task: Robo-aesthetics

- Watch video: Fernando Broncano's interview
- Choose 1 robotics case
- Find information about your robot and think about its aesthetic implications
- Starting questions:
 - Describe your case (what is it/him/her? how/where/when does it work?)
 - How does your case exemplify the aforementioned human–technology relations?
 - Environmental/ecological implications of your case?
 - On what type of perception does the case rely on?

Cases

1. Gilberto Esparza: Nomadic plants
2. Octobot, the MIT soft robot
3. Hiroshi Ishiguro: Telenoid
4. "Researchers test people's reactions to drones" (article, SDU 19.1.2018)
5. Goshka Macuga: To The Son of Man who Ate the Scroll (2016)
6. Maija Tammi: "One of Them Is Human #1" (Erica)
7. Kuri home robot