

Philosophy of New Technology Design

2018-2019

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Class, Two Credits

Course Description

The course deals with philosophical dilemmas that arise in the process of technology design. Among the questions the course asks are: Is technology value-neutral, or does it embody social values? If technology embodies values, in what ways does it do so, and how can we recognize them? Who is a responsible designer, and what are her responsibilities? Where is the mind located – is it restricted to the human body, or does it extend to technological artefacts? The course readings consist of papers in philosophy that address current technologies, particularly digital technologies.

Course Aims

- acquaintance with key issues in philosophy of new technology design;
- development of the ability to implement these issues to actual technology design.

Requirements

- regular reading and attendance;
- exam.

Grade Break-Up

- exam 100%
- up to 5% bonus for meaningful participation in class.

Course Plan

1. Introduction

Section A: Technology and Values

A central question in the philosophy of technology design is whether technology embodies moral, social, and political values, or whether it is value-neutral.

2. The Politics of Artefacts

Winner, Langdon. 1980. Do Artifacts Have Politics? *Daedalus* 109(1): 121-136.

Joerges, Bernward. 1999. Do Politics Have Artefacts? *Social Studies of Science* 29(3): 411-431.

3. The Value-Neutrality Thesis

Pitt, Joseph C. 2014. "Guns Don't Kill, People Kill"; Values in and/or Around Technologies. In *The Moral Status of Technical Artefacts*, edited by Peter Kroes and Peter-Paul Verbeek, 89-101. Dordrecht: Springer.

4. The Case against the Value-Neutrality Thesis

Van de Poel, Ibo and Peter Kroes. 2014. Can Technology Embody Values? In *The Moral Status of Technical Artefacts*, edited by Peter Kroes and Peter-Paul Verbeek, 103-124. Dordrecht: Springer.

5. Mediation Theory

Kiran, Asle H., and Peter-Paul Verbeek. 2010. Trusting Our Selves to Technology. *Knowledge, Technology & Policy* 23(3-4): 409-427.

Coeckelbergh, Mark. 2015. *Environmental Skill Motivation, Knowledge, and the Possibility of a Non-Romantic Environmental Ethics*, 145-153. New York: Routledge.

Section B: Theoretical Frameworks and Approaches

This section introduces the main approaches to ethics of technology: the deontological approach, which evaluates actions by the intention that lies behind them, utilitarianism, which evaluates actions by their outcomes, virtue ethics, which identifies good virtues of people or technology, the “veil of ignorance” approach, which tries to strip ethical judgments from their local context, and the ecological approach, which considers the ramifications of technology to future generations.

6. Deontology, Utilitarianism, and Virtue Ethics

Wallach, Wendell, Colin Allen and Iva Smit. 2008. Machine Morality: Bottom-up and Top-down Approaches for Modelling Human Moral Faculties. *AI & Society* 22(4): 565-582.

7. Is Virtuous Technology Possible?

Tonkens, Ryan. 2012. Out of Character: On the Creation of Virtuous Machines. *Ethics and Information Technology* 14(2): 137-149.

8. The Veil of Ignorance

Duff, Alistair S. 2011. The Rawls-Tawney Theorem and the Digital Divide in Postindustrial Society. *Journal of the American Society for Information Science and Technology* 62(3): 604-612.

9. The Ecological Approach

Jonas, Hans. 1973. Technology and Responsibility: Reflections on the New Tasks of Ethics. *Social Research* 40(1): 31-54.

Section C: Case Studies

This Section surveys interesting case studies that raise themes that were covered in the course.

10. Internet Pornography

Grebowicz, Margret. 2013. *Why Internet Pornography Matters*, 50-63, 64-81, 113-124. Stanford: Stanford University Press.

11. Autonomous Cars

Lin, Patrick. 2016. Why Ethics Matters for Autonomous Cars. In *Autonomous Driving: Technical, Legal and Social Aspects*, edited by Markus Maurer, Chris Gerdes, Barbara Lenz, and Hermann Winner, 69-85. Dordrecht: Springer.

Hicks, Daniel J. 2018. The Safety Argument for Autonomous Vehicles: Lessons from Philosophy of Science. *IEEE Technology and Society Magazine* 37(1) 62-69.

12. Smart Gadgets and the Extended Mind

Carter, J. Adam & S. Orestis Palermos. 2016. The Ethics Of Extended Cognition: Is Having Your Computer Compromised a Personal Assault? *Journal of the American Philosophical Association* 2(4): 542-560.