


【Grant-in-Aid for Transformative Research Areas (B)】

Dystopia Ethics: Toward Future Technologies With Uncertain Self-boundaries

	Principal Investigator	University of Tsukuba, Institute of Humanities and Social Sciences, Associate Professor OTA Koji	Researcher Number: 80726802
	Project Information	Project Number: 24B102 Keywords: Self, Technology, Philosophy of Technology, Ethics of Technology	Project Period (FY): 2024-2026

Purpose and Background of the Research

● Outline of the Research

Since the dawn of civilization, technological advancements have fundamentally shaped human environments and experiences. This technological milieu profoundly influences our “self-existence”, i.e., what we do, think, feel, and ultimately become. However, the modern notion of self, which is autonomous and equipped with free will, often obscures its fluid nature and the pervasive influence of technology on it.

Recently, there have been rapid advancements in technologies intervening in the human body and mind, thus posing novel challenges, both theoretical and practical, to the modern notion of self. With the intersection of technology with daily human life, a radical revision is required in how we understand self-existence, going beyond the periodical re-evaluation of this notion in the history of philosophy.

What this situation needs is an alternative model of the self that can embrace technological innovations to transform one’s bodily and mental functions so that one can enjoy existential freedom. We develop such an idea of the self – the self that “lives technology” – through a proactive analysis of the potentially deleterious effects of technologies on our self-existence, which is vital to ensure that technological advancements positively contribute to the human future.

Our project targets emergent technologies that are currently in conception or development stages, by examining them through the lens of philosophical inquiries. It offers a forward-looking contribution to real-world ethical discussions, marking a departure from customary sci-fi-based or social-critical dystopia studies.

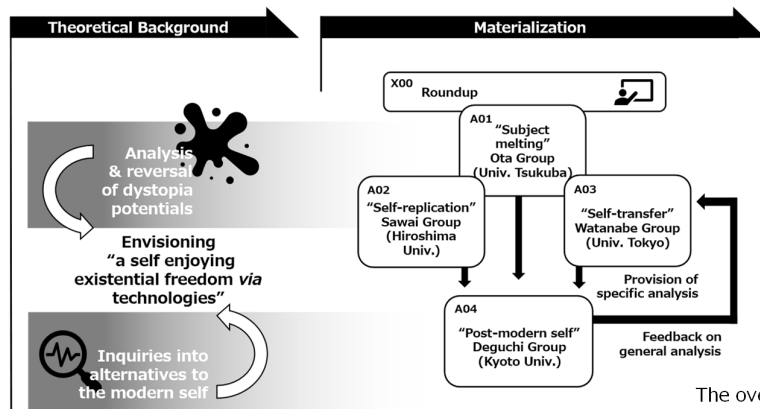


Figure 1.
The overall picture of the project

In this project, we examine three technologies: direct brain-to-brain communication, cultivation of human tissues, and transfer of consciousness to machines. Their dystopia potentials, particularly through blurring of the “boundaries of the self”, are assessed. By synthesizing this analysis with post-modern conceptions of the self, we envision a human society that achieves existential freedom along with technological advancement.

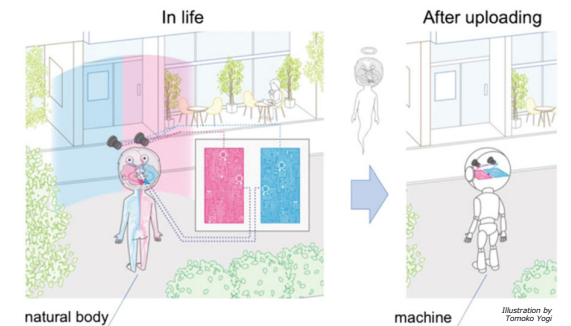


Figure 2. Concept of uploading through mechanical replacement of the human brain (Watanabe 2022)

Expected Research Achievements

● **Research A01. Thought Fusion Technology and the Ethics of ‘Subject Melting’ (Ota Group):** We explore technologies that connect human brains and machines and/or that enable direct communication between human brains. This project investigates the “subject melting,” a state in which the boundaries between thoughts of a self and others blur, and its impact on social interactions and societal structures.



A01 PI
Koji Ota
University of Tsukuba

● **Research A02. Ethical Considerations of “Self-Replication” Using Human Culture Techniques (Sawai Group):** This group establishes a robust ethical framework for human developmental studies, such as embryo model research and aborted fetal tissue research. Recognizing the growing gap between scientific advancements and societal understanding, we develop a framework through dialogues with both experts and citizens.



A02 PI
Tsutomu Sawai
Hiroshima University

● **Research A03. The Transfer of Self on the Frontline of Uploading (Watanabe Group):** Principal Investigator Watanabe has elaborated the idea of “uploading”, wherein a brain hemisphere is connected to a machine hemisphere, thus enabling the transfer of memories and consciousness from the former to the latter. This research analyzes ethical and social implications of uploading in terms of the identity and continuity of self or consciousness.



A03 PI
Masataka Watanabe
The University of Tokyo

● **Research A04. Establishing the Post-modern Self against Dystopia (Deguchi Group):** This research develops a postmodern concept of self that can circumvent the dilemma of “technology acceptance or dystopia”. The key ideas are “Self-as-We”, a collective self that re-evaluates the modern autonomous self, and ‘I-as-Me’, a self as a patient of thought and action. By synthesizing these, we assess the self-boundary invasiveness of emerging technologies.



A04 PI
Yasuo Deguchi
Kyoto University

Homepage
Address, etc.

<https://dystopiaethics.jp>

PI: Koji Ota (University of Tsukuba) ota.koji.fw@u.tsukuba.ac.jp

Assistant PI: Tetsushi Tanibe (Waseda University) tanibe@waseda.jp