



Abstract

## Aspects of Mind Uploading †

## Olle Häggström

Department of Mathematical Sciences, Chalmers University of Technology, 412 58 Gothenburg, Sweden; olleh@chalmers.se

† Presented at the IS4SI 2017 Summit DIGITALISATION FOR A SUSTAINABLE SOCIETY, Gothenburg, Sweden, 12–16 June 2017.

Published: 9 June 2017

Mind uploading is the transfer of a subject's mind to a computer using whole brain emulation. There are many aspects that seem critical to a possible future such technology. After quickly reviewing a number of them, including practical (will uploading be technically possible?), ethical (is it morally permissible to develop uploading technology?) and sociological (what will a society dominated by uploads be like?), I will focus mainly on two philosophical issues, mainly following Section 3.8 in [1]. These are the consciousness issue (will the upload be conscious?) and the personal identity issue (will it be me as opposed to merely a copy of me?). Both are open questions, but I will argue in favor of affirmative answers to both.

The consciousness issue is troubled by the near-total lack of consensus on how consciousness comes about in the material world. The main theory supporting an affirmative answer to the consciousness issue is the computational theory of mind (CTOM), which says that consciousness arises from (or is) the right sort of computations, regardless of material substrate. In the talk I will show that arguments against CTOM put forth by Pigliucci [2] and Searle [3] are confused, or at best unjustified intuitions.

The answer to the personal identity issue depends on what personal identity is, but will be yes if there is nothing more to me surviving at a future time t than the existence at time t of some person that is sufficiently similar to me in terms of memories and personality traits. Let us call that weak survival. A no answer to the personal identity question means that there is some additional condition on top of weak survival that is needed for real survival. In the absence of any evidence, Occam's razor compels us to reject the existence of such an additional condition. The most commonly favored (but rarely articulated) candidate for such a condition seems to build on a type-token distinction for the particles that constitute our brains, but this fits badly by what we know about physiology and physics.

Conflicts of Interest: The author declares no conflicts of interest.

## References

- 1. Häggström, O. Here Be Dragons: Science, Technology and the Future of Humanity; Oxford University Press: Oxford, UK, 2016.
- 2. Pigliucci, M. Uploading: A Philosophical Counter-Analysis, in Intelligence Unbound: The Future of Uploaded and Machine Minds; Blackford, R., Broderick, D., Eds.; Wiley Blackwell: Chichester, UK, 2014.
- 3. Searle, J. Minds, brains and programs. Behav. Brain Sci. 1980, 3, 417–457.



© 2017 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).