

Humans Using Machines, Humans as Machines: Implications for Teaching and Learning

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What is the relationship between computers and human beings? Whether or not humans are essentially computers, as some theories assert, learning does involve “information processing.” Some educational methods (computer-based and otherwise) require students to handle information in a mechanical way that undermines both the development of critical skills and a genuine understanding of the material. This essay is a reflection on the ways in which computers in education can undermine student learning, especially in the development of advanced cognitive abilities, and the ways in which it can greatly enhance it, by providing challenges that foster critical analysis and genuine understanding. Inspiration is drawn from Neal Stephenson’s novel, *Diamond Age*, and his belief that students ought to live “interesting lives” and be “subversive.” Examples of interactive virtual learning experiences are drawn from David Leech Anderson’s work with *The Mind Project*, a research and curriculum project in the cognitive and learning sciences.

Keywords: computer-aided instruction, educational technology, The Mind Project, Turing Test, Ray Kurzweil, Neal Stephenson, subversive, virtual labs

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Machine Bureaucracy and Planetary Humanity: A Dialogical Understanding of Personhood for the Development of Identities in the Electronic Age

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In this contribution it will first be explored what pressure a machine bureaucratic society puts on the development of personal identities. Related to this the meaning of a dialogical understanding of personhood will be explored. It will be shown, how dialogue understood as responsiveness towards others and as participating in the ongoing conversation of human history makes human beings more complete, whereas machine bureaucracies tend to reduce the full potential of human beings and being human. It will be shown how information technology is at the crossroads of both tendencies. In developing this dialogical understanding of personhood the focus will be on the philosophy of living speech of Rosenstock-Huessy since he gave the most articulate presentation of it. Finally some consequences of this approach for the design and moral evaluation of information systems will be proposed.

Key Words: Planetary humanity; Rosenstock-Huessy; electronic age, identity, dialogue, biography, personhood.

This contribution was first presented at the conference “Ethics, Technology and Identity” in June 2008 at the Technological University Delft. Any comments, discussion and suggestions for further research are welcome to the author: j.o.kroesen@tudelft.nl.

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Internet, Public Sphere and Political Marketing: Between the Promotion of Communication and Moralist Solipsism¹

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The empirical basis of this article is taken from material that circulated on the Internet during the campaign for the referendum on whether to ban the sale of firearms and ammunition to civilians, which took place in Brazil on the 23rd of October, 2005, and resulted in a landslide NO vote against arms trade prohibition. The aim of the paper is to use the experience of the aforementioned referendum to analyze the impact exerted by the Internet on political dynamics and the public sphere. The paper begins with a short discussion of existing views on the impact of the Internet on politics and it is followed by an introduction to political marketing and the Internet. In the third section I analyze the official websites, followed by a fourth section on the use of SPAMS in the campaign. In the conclusions I argue that the over-optimistic forecasts maintaining that new communication technologies would enhance democracy, as is widely claimed in the literature on this issue, have been to some extent wishful thinking and should be contrasted against the backdrop of historical experience. The political uses of the Internet in the referendum show a far more complex reality. Alongside the Internet's positive aspects are also negative ones, such as its potential to harm the public sphere.

Key Words: Internet, Public Sphere, Political Communication, Democracy

¹Translated from the Portuguese by Enrique Julio Romera.

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Don Ihde and the Challenge of Technology Transfer

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This paper investigates an example of cross-cultural technology transfer as conceived by Don Ihde, a widely esteemed philosopher of technology. Ihde presents a definition of technology and an example of inter-cultural technology transfer. Ihde's example concerns technology transfer from Western culture to the New Guinea Highlanders. White colonists left behind used sardine can lids. The lids were then discovered and used as a form of headdress ornamentation by the native Highlanders. Ihde claims that this example constitutes a transfer of technology. Ihde's example does not support his theory. The claim of this paper is that, while Ihde's sardine can lid example fails, according to his definition of technology, it is still useful in adjudicating technology transfer generally. To help illuminate Ihde's theory of technology transfer, a contemporary example of alleged "misuse" of transferred technology, regarding Zimbabweans and female condoms, is examined.

Key words: New Guinea, Highlanders, Don Ihde, phenomenology, postphenomenology, technology transfer, Larry Hickman, Peter-Paul Verbeek, George R. Stewart

This paper is a revised version of my presentation at the 2007 annual conference of the Humanities and Technology Association held October 4-6 at the Rose-Hulman Institute of Technology in Terre-Haute, IN. I originally presented a much smaller version of the paper for Larry Hickman's *Philosophy of Technology* seminar (Southern Illinois University Carbondale Fall 2005). Bruce Buchanan may be reached at bruceb4t@siu.edu.

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Green Technology and the Design of a Green Lifestyle

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Ecovillages are illustrative of a growing social and environmental trend. They bolster the view that adopting green technology is a promising and realistic resource on the road to sustainable living. These ecological cohousing neighborhoods and communities are being designed as places where residents can live in harmony with nature and with each other. Using green technology in the various forms it holds, these new communities are raising important questions about the role and importance of green technology in the local and global efforts to respond to an environmental crisis. Using anthropological methods to analyze the ways in which some residents of Ecovillage at Ithaca use green technology to create a green lifestyle, this paper describes the challenges and opportunities residents negotiate as they struggle to create a social and environmentally sustainable way to live.

Key words: green lifestyle, ecovillage, cohousing, consumption

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Sustainability and Ethics

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For the past several decades there has been a growing scientific consensus on the causes and effects of climate change. As time passes, and the already solid information mounts, a shift towards sustainability has emerged as the most sensible strategy to address the mounting climate crisis. But with two crucial questions confidently tackled (the veracity of climate change and the best strategy to address it) one last crucial question has yet to be answered – how should sustainable practices be implemented and who should be the implementers? Using a mix of Mill's and Bentham's utilitarianism, Rawls' Theory of Justice and both consequentialist and deontological ethics, this paper comes to the conclusion that the Northern industrial nations have ethical, legal and practical obligations to assist Southern developing nations build sustainable models of existence.

Keywords: Sustainability, Ethics, Utilitarianism, Environment, Politics

What is Sustainability?

Despite its wide use in academia and contemporary popular culture, there is still no consensus on the definition of *sustainability*. Peculiarly, it is simultaneously a precisely niche and ambiguously loaded term. In the western tradition,

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