Chapter XVI
The Cyborg and the Noble Savage:
Ethics in the War on Information Poverty

Martin Ryder
University of Colorado at Denver, USA

ABSTRACT

This chapter provides a brief summary of the technical and social hurdles that define the so-called 'digital divide' and it considers the celebrated 'One Laptop Per Child' project as one response to the problem of digital poverty. The chapter reviews the design of the XO laptop with particular interest on the ethical territory that is traversed in the implementation of a low-cost computer intended for millions of children in underdeveloped nations. The chapter reviews how XO designers negotiated between ethics and feasibility as they confronted numerous problems including infrastructure, power consumption, hazardous materials, free vs. proprietary software, security, and the cost of labor. Apart from technical considerations, this review of the XO evaluates the notion of cultural hegemony and how the imposition of such technology as an educational tool might be balanced by considerations of local control and user agency.

INTRODUCTION

The *digital divide* is the *white man's burden* of the present era. As technically advanced people become enriched by the knowledge they create, there is a consciousness that millions of disconnected people lack the 'freedoms' associated with modern civilization. In this digital age, the billions who survive without computer technology are seen as languishing on a globe that can no longer sustain hunter-gatherers or subsistence farmers. The technical world of automation, manufacturing and mass consumption is increasingly hostile to the simple folk who live directly from the land. Modern humanity's ability to dominate nature has imposed serious consequences on pre-modern societies that depend completely upon nature for their sustenance.

Kipling's *White Man's Burden* captured the prevailing ethic of a colonialist society that justified conquest of non-Western cultures in the name of 'civilization'. It was a noble enterprise to lift savage populations from their 'simplicity' and hopeless poverty. This transformation began with skills of reading and writing. Literacy came first in the form of religion, then it flourished under the tutelage of commercialism. Today, the medium of literacy has migrated from parchment to silicon and the electronic well of knowledge is deep and boundless. Those who draw from the well continue to enrich it as they are enriched by it. But most of the world's people remain disconnected from this knowledge source. They do not speak its language, they are unaware of its powers, and they are completely consumed by the more urgent necessities of daily living.

The focal point of this chapter is the celebrated OLPC (One Laptop Per Child) project founded in 2005 by Nicholas Negroponte and a core team of the M.I.T. Media Lab. OLPC is an aggressive project that addresses the core issues of information poverty head on. The stated goal of OLPC is "to develop a $100 laptop – a technology that could revolutionize the way we educate the world's children."[1] In working toward this goal, the designers have grappled with problems of technical feasibility, organizational pragmatics, social and political considerations, and the overarching problem of cultural hegemony. Negroponte's non-profit team has wrestled between government ministries (as customers) and corporate interests (as suppliers) over questions of content, connectivity, power sources, the user interface, privacy, licensing, component sources, manufacturing, distribution and scores of related issues. What has emerged is a very novel technology at a very low cost with the potential for wide distribution in equally novel markets.

The ethical issues that we confront in this chapter are as numerous, complex, and varied as the science of ethics itself. They traverse several major traditions of ethical theory including natural law, utilitarian theory, and deontology and the applied fields of environmental ethics, engineering ethics and computer ethics. The very fact that we are addressing this issue - *the digital divide* - places us immediately into a state of anguish associated with Sartre's existential ethics. While embracing the new powers that we inherit from information technology, we accept responsibility for ourselves in the use of these powers. And yet, as a free people, we also accept responsibility for the impact of our choices upon those who do not possess such power. Can a moral person ignore the growing knowledge gulf between our present-day civilizations? Who of us is justified in raising the question of digital poverty? Can the Western mind presume to understand a life of survival without technology and then dare to suggest a technical solution? In advancing our technologies to the farthest reaches of humanity, what are the unintended consequences of our actions? Do we, as Albert Borgmann (1999) suggests, risk the possibility of forever losing touch with nature?

This chapter will address some of the salient ethical issues associated with the digital divide and the moral implications of one specific intervention: the OLPC project. We will briefly consider some of the engineering ethics associated with the design and world-wide distribution of a child's laptop computer. We will also consider the issue of cultural hegemony that is unavoidably associated with this project and observe the manner in which the designers have consciously addressed this concern.

BACKGROUND

The notion of a 'digital divide' was coined during the second half of the Clinton administration. The expression is a spin off of the 'great divide' theory of Jack Goody (Goody and Watt, 1968) (Goody, 1977) (Goody, 1986). The Goody thesis portrays literacy as a necessary precondition for abstract

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/cyborg-noble-savage/21583

Related Content

Systems of Ethical Reasoning and Media Communications
Mahmoud Eid (2012). *International Journal of Technoethics (pp. 69-75).*
www.irma-international.org/article/systems-ethical-reasoning-media-communications/69984

The Social Networks of Cyberbullying on Twitter
Glenn Sternerand Diane Felmlee (2017). *International Journal of Technoethics (pp. 1-15).*
www.irma-international.org/article/the-social-networks-of-cyberbullying-on-twitter/181646

Law, Architecture, Gameplay, and Marketing
Peter J. Wasilko (2013). *Digital Rights Management: Concepts, Methodologies, Tools, and Applications (pp. 115-132).*
www.irma-international.org/chapter/law-architecture-gameplay-marketing/70975

A Unified Approach towards Multimedia Watermarking
Ali Al-Haj, Ahmad Mohammad, Samir Abou El-Seoud, Tuqa Manasrah, Lama Rajaband Tahani Al-Khatib (2013). *Digital Rights Management: Concepts, Methodologies, Tools, and Applications (pp. 376-399).*
www.irma-international.org/chapter/unified-approach-towards-multimedia-watermarking/70985

Toward an Environmental Law of Essential Goods: A Philosophical and Legal Justification For 'Ecological Contract'
John Martin Gillroy (2018). *International Journal of Technoethics (pp. 42-50).*
www.irma-international.org/article/toward-an-environmental-law-of-essential-goods/208948