

Chapter V

Social Technologies and the Digital Commons

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ABSTRACT

This chapter investigates the premise that software is culture. It explores this proposition through the lens of peer production, of knowledge-based goods circulating in the electronic space of a digital commons, and the material space of free media labs. Computing history reveals that technological development has typically been influenced by external sociopolitical forces. However, with the advent of the Internet and the free software movement, such development is no longer solely shaped by an elite class. Dyne:bolic, Streamtime and the Container Project are three autonomously-managed projects that combine social technologies and cooperative labour with cultural activism. Innovative digital staging platforms enable creative expression by marginalised communities, and assist movements for social change. The author flags new social relations and shared social imaginaries generated in the nexus between open code and democratic media. In so doing the author aims to contribute tangible, inspiring examples to the emerging interdisciplinary field of software studies. “Humanity’s capacity to generate new ideas and knowledge is its greatest asset. It is the source of art, science, innovation and economic development. Without it, individuals and societies stagnate. This creative imagination requires access to the ideas, learning and culture of others, past and present” (Boyle, Brindley, Cornish, Correa, Cuplinskis, Deere, et al., 2005)

INTRODUCTION

Software—sets of programmed instructions which calculate, control, manipulate, model, and display data on computing machines and over digital networks—is culturally loaded. Whenever we load programs, we also load messy clusters of cultural norms and economic imperatives, social

biases and aesthetic choices, into machines and networks whose own histories are linked to larger sociopolitical forces. Increasingly instrumental in facilitating new forms of cultural expression and social activism, software is used to connect and mobilise diverse communities, interest groups, and audiences; spanning local, regional and global levels.

New social assemblages, and new social relations, are thus arising out of software-assisted communication, collaborative production and the exchange of creative, intellectual artifacts¹ This model of autonomously-managed generative activity is termed “peer production.” The knowledge-based outcomes of peer production are framed as contributing to a global “Digital Commons.”² Just as the concept of the earthly commons centres around communally shared and managed material resources—land, trees, water, air, and so on—the Digital Commons can be imagined as shared immaterial resources. These are wildly proliferating nodes of electronic spaces, social technologies, intellectual goods, and cooperative labour processes enabled by, and manifested through, the Internet. The voluntary labour driving this phenomenon is occurring on an unprecedented scale, generating demonstrable effects on both knowledge generation and social organisation.

Chronicles of software as corporate culture abound, revealing the light and shadow of the giants, from IBM to Amazon to Google. Similarly, the rise of the free software movement, the open source software (OSS) participatory programming model, and the evolution of the Internet and then the World Wide Web, are well documented.³ Less visible are the histories of the pixies, those nimble social technologies arising from the nexus of the free software movement, cultural activism, and new hybrid forms of peer production. Where documentation does exist, it is more likely to be within the fields of new media art, tactical media, and the emerging academic interdisciplinary field of software studies, or in project Wikis and blogs.⁴

This chapter places collaborative software development within the context of software as culture. Specifically, I examine some instances of software-assisted peer production in the cultural expression of social activism. The first part of the chapter draws attention to some sociopolitical factors that shaped the development

of computing, giving an historical context to my proposition that software and culture are intrinsically interconnected. This is followed by a brief sketch of current theoretical propositions about some relationships between capitalism, computing technologies, knowledge-based labour, and network society.

In the second part of this chapter, I will identify distinguishing features of the Digital Commons, outlining the cooperative processes which enliven it. Moving from theory to practice, I will highlight three exemplary projects to illustrate the kinds of content, processes, and social relations contributing to the Digital Commons. I will introduce the *Dyne:bolic* distribution of the GNU/Linux operating system, and the *Streamtime* network for producing content in crisis areas. The *Container Project*, an open access digital media hub in Jamaica, will then be introduced. Speculation on future trends will signpost efforts to contain the circulation of knowledge and cultural material via systems of “digital enclosures.” I will conclude by speculating on possible directions for social technologies, as network nodes proliferate globally, thereby increasing public spaces for creative cooperation. Increased peer participation and cultural diversification give rise to a concept of a multitude of interlinked Digital Commons. Such networked imaginative productive spaces not only could meet the challenges thrown down by the socially elite proponents of the new digital enclosures, but also prefigure possibilities for new global democratic sociopolitical forms.

BACKGROUND

The evolution of computing is woven through with histories of power, capital, and social control. Each major innovation benefited from a rich accretion of ideas and inventions, sometimes spanning centuries, cultures, and continents. Specific political imperatives (serving national or imperial interests) and wider societal forces shaped the develop-

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