Knowledge Exchange in the Digital Era

by Jeremy Dormitzer

Introduction

Digital computing has fundamentally changed the way that our society creates, digests, and exchanges knowledge. Although these changes increase access to information, enable global discourse, and connect minds on opposite sides of the world, they also have troubling power and privacy implications. These implications are not widely discussed in popular literature. However, some scholars and activists have long been aware of the dangers of knowledge exchange in the digital age. In his 1979 work "The Postmodern Condition: A Report on Knowledge" (specifically chapter one: "The Field: Knowledge in Computerized Societies"), the French philosopher Jean-François Lyotard predicted a shift in the status of knowledge. He believed that the advent of computers would cause knowledge to become commoditized, a unit of exchange rather than something with inherent value. Furthermore, he detailed the problematic political and economic consquences of this shift. As we will see, many of his predictions have already come to pass.

More recently, software developer and privacy activist Richard Stallman has articulated many similar concerns. Although Stallman primarily talks and writes about software, the concerns of his philosophy closely parallel those of Lyotard's book. Stallman believes that the idea that software can have an owner leads to invasive privacy breaches and a growing power imbalance in which business interests trump those of the greater good of society. Stallman advocates for a simple but powerful solution to this problem: software should not have owners. He offers a compelling case for "free software" (Stallman explains this concept with the phrase, "free as in freedom, not free as in beer"), and in his many essays and talks he demonstrates why free software solves the privacy and power concerns he sees in the modern world.

In this paper, I endeavor to show how Stallman's "free software" philosophy can be used to address Lyotard's concerns about knowledge in the digital era. I begin with an analysis of Lyotard's concerns for the changing state of knowledge, tracing his reasoning from its foundations to its consequences. Next, I perform a similar analysis of Stallman's problem, and explain how free software solves it. I show that Stallman's conception of software plays the same role in his work as does knowledge in Lyotard's. This sets the stage for the body of the paper, in which I extend Stallman's reasoning about software to the field of knowledge in general. I show that, when generalized, Stallman's "free software" philosophy offers hope that Lyotard's concerns could be mitigated. I conclude with an exploration of the implications of "free knowledge".

Lyotard's Prediction

In order to understand Lyotard's predictions about the changing status of knowledge, we must first investigate his conception of knowledge. He begins by narrowing his topic of discussion to scientific knowledge only; this allows him to get specific about how and why knowledge is changing. Having settled on a topic, Lyotard gives a preliminary definition of knowledge: "Scientific knowledge is a kind of discourse" (Lyotard 1).