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HEDGING THE COMMONS: GOOGLE BOOKS, LIBRARIES, AND OPEN ACCESS
TO KNOWLEDGE

by

Evelyn Bottando

An Abstract

Of a thesis submitted in partial fulfillment of the requirements for the Doctor of
Philosophy degree in Communication Studies in the Graduate College of
The University of Iowa

July 2012

Thesis Supervisors: Professor John Durham Peters
Associate Professor Kembrew McLeod

This dissertation analyzes the legal, social, technological, and cultural environment that gave rise to Google's library partnership program in order to propose an institutional corrective to Google's project to digitize cultural heritage. Interview research done with those actively involved with Google's project revealed the need for a history of the present. The class action settlement proposed sweeping changes to copyright warranting a quick response by a community of scholars seeking to advance a balanced vision of Anglo-American copyright, one where the public benefit to use and appropriate works is weighted alongside private incentives to create. The process created the conditions for institutional renewal in the public sphere through the creation of a Digital Public Library of America. By combining archival, critical legal, and interview research methods, this dissertation provides a narrative that is both analytical and deeply contextual. Google's digitization partnership in France is contrasted with its library partners program in the United States, examining Google's work in light of competing visions of intellectual property within a trans-Atlantic context.

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Title and Department

Date

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Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

PH.D. THESIS

This is to certify that the Ph.D. thesis of

Evelyn Bottando

has been approved by the Examining Committee
for the thesis requirement for the Doctor of Philosophy
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To Stephen Adler Ball, the greatest orphaned work.

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Finally, I want to thank and caution all readers and future readers of this dissertation. Dissertations are experiments. This is only the beginning of a particular line of inquiry. Each chapter will morph into something unexpected in the years to come. I will review my interviews and perhaps create a narrative that may seem contradictory to the one presented here. I humbly present this document and look forward to what lies beyond the boundaries of these pages.

ABSTRACT

This dissertation analyzes the legal, social, technological, and cultural environment that gave rise to Google's library partnership program in order to propose an institutional corrective to Google's project to digitize cultural heritage. Interview research done with those actively involved with Google's project revealed the need for a history of the present. The class action settlement proposed sweeping changes to copyright warranting a quick response by a community of scholars seeking to advance a balanced vision of Anglo-American copyright, one where the public benefit to use and appropriate works is weighted alongside private incentives to create. The process created the conditions for institutional renewal in the public sphere through the creation of a Digital Public Library of America. By combining archival, critical legal, and interview research methods, this dissertation provides a narrative that is both analytical and deeply contextual. Google's digitization partnership in France is contrasted with its library partners program in the United States, examining Google's work in light of competing visions of intellectual property within a trans-Atlantic context.

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CHAPTER I INTRODUCTION

Entering Google's office in Cambridge I was greeted with all the sights and sounds typically associated with the Google work environment: brightly colored office furniture, an LCD screen zooming onto Stonehenge via Google Earth, and Google's bright multi-colored logo. The colorful atmosphere stood in cold contrast to the reality before me. Before passing further, I must sign a non-disclosure agreement (NDA). The touch-screen computer interface offered a wide selection of NDA's. Was I there for a job interview? There's an NDA for that. Was I there for a business meeting? There's an NDA for that too. "Interview for dissertation research" was not an option. I clicked "Interview – general business" and moved past a dispenser filled with multi-colored peanut M&M's®. Jon Orwant, the Engineering Manager who formerly directed the Google Books project in Cambridge, MA, later assured me non-disclosure agreements are standard industry practice.

The Google workspace is an assemblage of shared workrooms, what Yochai Benkler called "commons-based peer production," decentralized and collaborative work environments enabled by networked forms of work (2006). Inspired and built within the collaborative practices of the open source programming community, these elements are tempered by the legal and cultural realities of Google as a corporate entity. The entire contents of the white board behind Orwant - a series of letters, numbers, and terms like "kernel" – were proprietary. "If it's a business NDA, that is fairly standard. It involves products we are launching in the future...we ask that people not talk about them" (Orwant 2010). The NDA ensures information is not leaked to competitors. If Google's workspace embodies a commons-based model of research work and sharing, the commons is enclosed.

These are the contradictory experiences of Google, contradictions faced throughout the entire dissertation research process and experienced by libraries that

partnered with Google to digitize their books. Google's presence in our daily lives is much the same. We are invited to participate, to "search," but not all aspects of the company are openly available. Labor practices, technological development, experimental technologies – some things remain off limits. Google's inviting atmosphere is hedged by a reality that looms large as more Internet companies make initial public offerings. Google is simultaneously a search technology that was once developed at Stanford University, a publicly-traded company not owned by any single individual, and a global brand engaged in political struggles throughout the world.

The ideology of the library stands in contrast to the rhetorical worldview established by Google and other high-tech, publicly-traded companies promising access to searchers on the World Wide Web. Where Google competes across multiple platforms for market share, libraries exist to fulfill other purposes. Libraries, no matter their location, are tasked with the preservation and circulation of knowledge. Public libraries, and many academic libraries, allow entry and exploration without legal restriction. While not unfettered spaces of complete freedom (some proof of identification is necessary for a public library card), libraries do not exist in the same kinds of competitive arrangements as Google. To preserve and share knowledge, libraries often turn to companies like Google to strategically forge private-public partnerships to make use of the company's research and advanced technology.

Google's Library Partners Program dreamed the utopian dreams often assigned to early Google and to libraries. Described as Google's "moon shot" by Marissa Mayer, Google's former vice-president, the company aimed to digitize millions of books, make them available online, and create a massive index and book store for all scanned books (Kelly 2006; Striplas 2009; Toobin 2007). Google's partnership with libraries sparked the greatest controversy, igniting the next major legal battle in the twenty-first century copyright wars. Google partnered with libraries to quickly digitize full collections of library materials, revealing the social desirability of a "digital corpus of books from

major research libraries” (Samuelson 2010: 1040). Libraries throughout the world chose to partner with Google because of the promise and possibilities enabled by quick digitization. To digitize on a massive scale, Google’s library partnerships benefited from weaknesses in a copyright system still negotiating new technologies (Litman 2001; Vaidhyanathan 2006). Google relied upon its interpretation of fair use, one of the remaining public interest provisions of copyright law, to make digital copies of library materials still in copyright. As a substantial number of library holdings remain in copyright, a number of authors and publishers sued Google for copyright infringement (Lavoie & Dempsey 2009; Lessig 2006, Samuelson 2011).

In light of these lawsuits, many feared library partnerships with Google promising a broad-based opening of access to information would enclose knowledge within Google’s corporate shell (Darnton 2009; Jeanneney 2007; Vaidhyanathan 2011). Many critics feared the project would become what Lewis Hyde called in *Common As Air: Revolution, Art, and Ownership* the “third enclosure.”

If the ‘second enclosure’ means the invasion of exclusive rights into old and recognized cultural commons, perhaps we need yet another category, a ‘third enclosure,’ to name this blind prospecting, this preemptive planting of claim stakes in fields not yet understood. In these cases, we cannot even name the commons that are lost; they lie in futures now foreclosed. (2010: 70).

Digitizing copyrighted books created new private property from the shelves of libraries by creating an institutional subscription database with a to-be-determined price. This caused fear that Google’s ambitious project would manage its own needs at the expense of libraries partnering in the project (Kahle 2009; Vaidhyanathan 2005; Samuelson 2010). The library, an institution that has long supported fair use and the circulation of knowledge, would be placed at risk for Google’s benefit. These concerns were substantiated as Google moved forward with a far-reaching class action settlement with members of the Authors Guild and the American Association of Publishers in 2008, leaving libraries to be spoken of and spoken for in a settlement that would have long-term consequences for the future of libraries, copyright, and digital access to knowledge.

The Settlement revealed tensions between the law and technological development, developments that have dramatic impacts on the way libraries will function in a time of increasing digital access. The Author's Guild and the American Association of Publishers both sought ways to enforce copyright protections, viewing digitization as a means to destabilize strong copyright controls. Google, a technology company with an interest in swift digitization, pushed forward to answer a long-desired need expressed by libraries. Tasked with preserving knowledge, many libraries hold vast archives with little access. Digitization promised to expand possibilities for the circulation of little-known works. Google offered a technological fix that was of benefit to both the company and its library partners, but threatened agents seeking stronger controls of digital texts. The state, mediating the settlement, was tasked to negotiate the public benefit of Google's swift digitization work in light of consequences for future access to resources.

My fascination with Google's project to digitize books grew from my increasing awareness of the perils of academic production. Attending a large university in the Midwest, my library and professors introduced me to a rich store of books and journal articles. As I participated in numerous academic conferences, I discovered that among Australian, British, and Israeli colleagues I was a veritable human citation index. The sharing of resources within the United States Ph.D. academic classroom made me a vital resource for peers who, in other environments, did not share a bibliography of the latest research being posed about copyright and intellectual property within the American academy. As I began to partner with copyright researchers in Europe, the situation perpetuated itself. As Eva Hemmungs Wirtén noted, the expansion of intellectual property rights in subject matter, time, and space has gone global (2011b). While the ramifications for extensions of the realm of intellectual property are best countered with international mobilization, most conversations favoring a rich public domain are rooted in the common law tradition that favors a balance between the private incentive to create and the public benefit for the circulation of texts. Many lessons can be gleaned from

European legal traditions. Yet, civil law's more "black-letter readings of the law" has not attracted as much interdisciplinary interventions as copyright critiques based in common law systems (2011b: 262).

I began with a small paper, "Googling Books in Academia." My goal was to investigate case studies and evidence gleaned from interviews to explore the way Google Books became a part of academic practice. I wondered what the consequences could be for future thinking about the relationship between Google and one key democratic institution – the library. It was a complicated study. The development of Google Books traverses the history of the book, the history of reading, intellectual property, and the hope of developing modes of praxis that support semiotic democracy, "the ability of citizens to employ the signs and symbols ubiquitous in their environments in manners that they determine" (Vaidhyanathan 2006: 292).

Siva Vaidhyanathan, who recently published *The Googlization of Everything*, a comprehensive critical study of default social trust imparted to Google and its business model, spoke as a keynote at the 2008 Association of Internet Researchers (AoIR) Conference in Milwaukee, Wisconsin. Filled with scholars in the field of Information Science, Ph.D.'s, Ph.D. candidates, fandom scholars, policy studies, Internet ethnographers, and information technology industry representatives, it was an appropriate audience for Vaidhyanathan's critical message. I met Carmel Vaisman at a doctoral colloquium presentation earlier that day, then a Ph.D. candidate from Hebrew University of Jerusalem whose anthropological research examined Hebrew girls' personal blogs. Vaidhyanathan's main premise in 2008 was to exercise restraint in trusting Google. Vaisman and I spoke moments earlier regarding her use of Google Books. When it is not possible to get research in Israel, she consulted Google Books to review the latest research in her field.

In the keynote address, Vaidhyanathan advanced concerns raised by Marc Andrejevic in *iSpy: Surveillance and Power in the Interactive Era* (2007). Google offers

products feeding from the “digital enclosure,” “the creation of an interactive realm wherein every action and transaction generates information about itself” (2). Like many Internet companies, mere use of Google products becomes the private property used by Google to aggregate, sort, and sell data. For me, talking to Vaisman and hearing from Vaidhyathan on the same day was an exercise in cognitive dissonance. Vaisman gained access to resources not at her library through Google Books. I used Google Books earlier to review a new book on Internet research. Hillis, Petit, and Jarrett noted in *Google and the Culture of Search* many researchers and students know of no time before Google (2012). Google’s everydayness and the promise of expanded access contrast with some of the most critical voices of Google’s project to digitize books in the United States. I wondered whether this critique was not the luxury of the privileged.

Google, because of its strong brand identity and seeming ubiquity, has often become the focus of intellectual discourse centered on its library partnership program. This comes at the expense of understanding the importance of the role of libraries in the public sphere. Why was there was at any point a rush to digitize? And why with Google? The role of the library, central to the digitization process, has often been overlooked. This dissertation seeks to be a corrective to these discourses through proposing the birth of a new digital library initiative as a means to shift agency to the libraries and librarians involved in Google partnerships.

In order to propose an institutional alternative to expand digital access to resources found in libraries, this dissertation analyzes the legal, social, technological, and cultural environment that gave rise to Google’s library partnership program. Interview research done with those actively involved in Google’s project has revealed the need for a thorough history of the program that incorporates viewpoints not often covered in popular press accounts of Google’s digitization efforts with libraries throughout the world. The class action settlement proposed sweeping changes to copyright that warranted quick response by a community of scholars seeking to advance a balanced vision of Anglo-

American copyright, one where the public benefit to use and appropriate works is weighted alongside private incentives to create. The differences in the way stakeholders framed Google's digitization project reveal competing visions regarding how citizens should be able to access information in a digital environment. Google's vision of access involved quickly digitized copies of library holdings to partners enabling keyword search and digital preservation with parameters for its use negotiated by the company.

Google's contracts with the libraries required them to sign non-disclosure agreements that prohibited them from openly discussing various aspects of the project. This contradiction in openness is only one of the many that encircle Google's controversial project. This dissertation seeks to examine these tensions by using a combination of archival, critical legal, and interview research methods to set forth a narrative that is both analytical and deeply contextual. Since Google partnered with libraries throughout the world, this dissertation also examines Google's work within France to digitize books in order to provide a contrast to its library partners program in the United States. By engaging in this research on both sides of the Atlantic, I have been able to examine Google's work in light of competing visions of intellectual property in the twenty-first century.

Much of the discussion of Google's digitization efforts has focused on an analysis of the complex settlement agreement between the Authors Guild and the American Association of Publishers. This discussion has all but ignored the Google's origins as a library research project before it became a search company for the World Wide Web. This introductory chapter begins with Google's early history in order to put into context the legal, social, and cultural relationships that coalesced to create Google's library partnership programs and their critique. This early history is contextualized within the history of fair use in the United States, a key factor in the decisions made by major libraries and Google to embark on a project to digitize books. Using the emerging field of Critical Information Studies, Google's project to expand access is placed within the

larger context of efforts to understand the ways in which subaltern counterpublics appropriate copyrighted works in order to gain agency in the public realm. Finally, this introduction will theorize the library as a vital element within the public sphere to emphasize the need for a library-based alternative to what I call “Google’s books.”

History

“In the beginning, there was Google Books.” Google’s own corporate web page traces the history of Google’s project to digitize books back to 1996 when the Google co-founders Sergey Brin and Larry Page worked as graduate students for Stanford’s Digital Library Technologies Project. The partners were tasked to enable a digital library to work by indexing the content of books, analyzing the connections between books, and determining a book’s relevance using algorithms (Google 2012). The technology developed by Brin and Page involved “webcrawling,” a software application where an automated script captures and analyzes information much faster than a human can perform the same indexing function.

“In this paper, we present Google.” By 1998, Brin and Page published the results of their research in *Computer Networks and ISDN Systems*, a journal circulated among academic researchers, computer network managers, and scientists involved in the design and implementation of computer networks. Since 1996, Page’s webcrawler indexed and tracked data to measure the importance of web pages (Auletta 2010). By 1998, Brin and Page incorporated Google, Inc. A computational parallel to Seattle garage rock, Google began as a garage-based company in Silicon Valley. The technology that began as a project for Stanford’s library became a company dedicated to analytical indexing of web search results.

By 2002, Brin and Page returned to the library. Stanford University and the University of Michigan became the two starting points for Google’s work to digitize books. Larry Page approached The University of Michigan libraries after giving a talk as an alum of the university’s computer science program. Paul Courant, now the Dean of

Libraries at the University of Michigan, was then Provost. Talks between Bill Gosling, then the University of Michigan's head librarian, and John Wilkin, who then headed the University of Michigan's library digitization efforts, resulted in a decision to partner with Google for library digitization efforts. Google's early project, termed "Project Ocean," involved a partnership to scan and digitize all of Stanford's public domain materials (Murrell 2011). In 2003, Google's Sheryl Sandberg (now Facebook's Chief Operating Officer) approached Harvard Librarian Sidney Verba with the idea that Google would massively digitize the university's books in a time period much shorter than onsite digitization efforts or those conducted with partners like the Internet Archive.

On September 13, 2004, Google engineers filed for a patent for the company's book digitization technology. Unlike other digitization processes, Google's infrared cameras detected the groove of a book and had the ability to flatten the page without flattening the book. At the Frankfurt Book Fair that year Google announced "Google Print," its efforts to compete with Amazon.com's online bookstore and Look Inside the Book™ browsing program. The Frankfurt Book Fair, an established event in the world of publishing, resulted in partnerships with Blackwell, Cambridge University Press, the University of Chicago Press, Houghton Mifflin, Hyperion, McGraw-Hill, Oxford University Press, Pearson, Penguin, Perseus, Princeton University Press, Springer, Taylor & Francis, Thomson Delmar and Warner Books for Google's new online avenue to advertise and sell books.

Google, Libraries, and Lawsuits

By December 14th of 2004 Google announced its Library Project, its partnership with five English-language libraries - The University of Michigan, Stanford, Harvard, Oxford, and The New York City Public Library (Carlson & Young 2005). While most libraries focused only on partnering to digitize public domain materials, materials that posed no danger of infringing copyright law, The University of Michigan allowed Google to digitize the entirety of its collection including books in copyright, in the public

domain, and books deemed orphans (Murrell 2011). These eight million books form the basis for lawsuits filed against Google for what the Authors Guild and several publishers called massive copyright infringement.

For purposes of creating a mass index of digitized books within the bounds of copyright law, works produced before 1923 and that are not of foreign authorship are considered to belong to the public domain. Extensions to copyright term limits throughout the years caused confusion for researchers, scholars, and libraries seeking to expand access to books. Soon after a book is produced, it loses commercial viability but remains in the stacks (Boyle 2008). Of the eighteen million books Google sought to digitize, nine percent were in copyright and in circulation, sixteen percent were in the public domain, and seventy-five percent of books were out of print (Lessig 2006). Out of print books are often abandoned by publishers who find no commercial viability for their public circulation. In some cases these books may have known copyright owners. In other cases, they may belong to the public domain. During the years of 1923 and 1963, if a copyright holder failed to renew registration of their copyright, the work became public domain material. Other out of print books are orphaned, a term described by the United States Copyright office as those "...where the owner of a copyrighted work cannot be identified and located by someone who wishes to make use of the work in a manner that requires permission of the copyright owner" (United States Copyright Office 2006).

To both the members of the Authors Guild and several publishers, Google had committed copyright infringement by digitizing copyrighted books. On September 20th, 2005 the Authors Guild filed a class action lawsuit against Google. By October 19, 2005 five publishers - McGraw Hill, Pearson, Penguin, Simon and Schuster, and John Wiley and Sons – had filed a civil suit against Google for the digitized copies it made of copyrighted material. The Association of American Publishers joined this suit a month later. The primary complaint of these parties was that Google's partnership with libraries had caused "massive copyright infringement" caused by Google's partnership. In

particular, The University of Michigan's relationship with Google was cited in both court documents as evidence of Google's failure to abide by the rules of United States Copyright law.

Both libraries and publishers had partnerships with Google allowing books to be digitized, indexed, and searched, but those partnerships were formed with the permission of publishers on behalf of the copyright holders to display text for advertising purposes. These agreements were "opt-in." Copyright holders had choice and control regarding Google's use of copyrighted materials. The American Association of Publishers joined the class action suit though many in the association had existing partnerships with Google. Books. Copying without expressed permission formed the basis of the class action lawsuit against Google (Authors Guild et. al. v. Google Inc., 2005; The McGraw-Hill Companies, Inc. et. al. v. Google Inc., 2005). In the case, Google claimed fair use as it only used "snippets" of copyrighted works it did not seek permission to display on its book search page. For the plaintiffs a copy created without permission of a copyright holder, no matter its use, was a violation of copyright law.

Google, Technology, and Fair Use

The view of publishers and the Authors Guild traces back to earlier technological threats toward a vision of an exclusive copyright. Sony's Betamax was the first mass-market domestic videocassette recorder. Universal and Disney teamed up to take Sony to court, claiming that the technology enabled massive copyright infringement. In *Sony v. Universal*, when the videocassette was copyright's great threat, the Supreme Court supported a users right to "time-shift." Television watchers had the right to watch television beyond the boundaries of the broadcast schedule and Sony was not held liable for copies made on its Betamax home video recording system (Hilderbrand 2009; Lessig 2004). For Adrian Johns in *Piracy: The Intellectual Property Wars from Gutenberg to Gates* (2009), the outcome of the case was as much about the Supreme Court's resistance to stifle technical innovation as well Justice John Paul Stevens' stated resistance to

“control conduct within the home” (453). In the balance, the positive benefits for home-based videocassette recording outweighed any speculative harm that could come to Universal and Disney. While often left to the margins, Sony’s success in the home-based video industry outpaced a product developed by Universal’s ally MCA. “DiscoVision,” a laser-disc home playback technology, did not allow a recording option (449).

Home-based recording technologies like Betamax came eight years after the 1976 revision of the copyright code, when the first explicit guidelines for fair use became encoded in the law. The 1976 copyright code was seen as a much-needed update to the 1909 copyright code. The technical landscape of copyright industries had changed. Televisions, radios, photocopiers, and other copy media not accounted for in the 1909 copyright code became an integrated facet of domestic life. It was also a turning point for the user’s rights interpretations of copyright law, codifying guidelines for citizens’ use of copyrighted materials. The four-part balancing test for fair use, determined on a case-by-case basis, takes into account:

- the purpose and character of the use,
- the nature of the copyrighted work,
- the proportion of the excerpt used in relation to the entire work,
- the market impact of the use. (Hilderbrand 2009: 84).

The history of the 1976 statute has links to the central compromise of intellectual property. As Johns notes, “There clearly must be occasions when the principle of property has to leak a little” (452). Fair use in the United States and its counterpart fair dealing in Canada have been heralded as evidence that copyright laws must have a balance of interests between users and producers of content (Boyle 2008; Hemmungs Wirtén 2008; McLeod 2005; Vaidhyathan 2001). Quotes, criticism, and educational uses of copyrighted material are necessary to the process of knowledge production. Each factor represents a point along the continuum of intellectual property where space is to be left open for a citizen’s use of copyrighted materials without expressed permission of the

copyright owner. The “purpose and character of the use,” for example, delineates whether the purpose is for profit or for a nonprofit or educational use.

In the United States, many fair use cases arise when a matrix of social, cultural, and technical changes collide with the law. Technology industries in the United States have good reason to accept the costly burden of fair use defenses. *Sony v. Universal* reversed the ninth circuit’s ruling that Sony was partially liable for copyright infringements made by the design of the device. The bill for Sony’s contributory infringement was set at the statutory \$100 per copy, a “cost that would have left Sony with billions in damages (Johns 2009: 453). The case took eight years to resolve. For technology industries the cost of a fair use cases is balanced by the economic incentive allowed by the American version of fair use. In other common law countries, fair dealing is a user-focused exception to exclusive copyright. Commercial uses are not as protected. Particular to American copyright law, commercial fair use enables the commercial use of copyrighted material in a way that benefits U.S. based computing and technology industries and allows them to function in an unregulated economy.

By 2006 copyright scholars framed the Authors Guild and Association of American Publishers’ lawsuit against Google as a case of old media vs. new media. Lawrence Lessig argued that Google’s Book Search project would “google-ize” the book, showing only snippets of those works that are in copyright but out of print (2006). Fred von Lohmann, Senior Intellectual Property Attorney for the Electronic Frontier Foundation, wrote, “I believe Google has a strong fair use defense here” and argued that Google’s use of copyright materials was much closer to what is considered a “transformative” use (2005), citing *Kelly v. Arriba Soft* to defend Google’s practice of scanning first and asking questions later. Arriba Soft, what later became Ditto.com, indexed images from all over the Internet. Les Kelly, a photographer, discovered Ditto.com indexed thumbnail-sized images of his photographs and sued the company for

copyright infringement. The trial court and ninth circuit determined Ditto's work to be fair use (Kelly 2003).

Google had the resources available to afford the technical and legal costs of a massive digitization project with libraries in support of the company's corporate mission to "to organize the world's information and make it universally accessible and useful" (Brin 2009). The Library of Alexandria, seated at the heart of the ancient papyrus trade, solidified the use of papyrus as the tool for the creation and recording of information (Innis 1951). For libraries and publishers throughout the world, Google offered its platform as a means to orient the search for books. Not only was Google's system a means of searching the World Wide Web, Google brought its own system to bear on the organization of digitized books (Nunberg 2009; Vaidhyanathan 2009). The speed of Google's digitization efforts produced a "metadata train wreck" for libraries and researchers who wrangled with the "fire hose of data" sent by Google (Nunberg 2009; Soderdahl 2010). Libraries and those concerned with the access and circulation of knowledge depend upon accurate digital metadata, data about data. Metadata for books scanned by Google included book titles, copyright dates, author, and publisher information. Good metadata is necessary for library organization and copyright clearance. Libraries had to manage errors coming from Google scans with their own budgets. The public benefit of Google's work contrasted with its private incentive to control aspects of the digitization process while benefiting from the public resources of libraries.

Brewster Kahle stood as one of the most vocal critics of Google's project when in 2008 and 2009, Google settled with the Authors Guild and American Association of Publishers in a far-reaching class action settlement that went beyond the company's original "snippet view" design for searching their vast catalogue of digitized books. Kahle founded the Internet Archive, a non-profit digital library with the stated goal of "universal access to all knowledge" (Internet Archive 2009). Early on he forged strategic alliances with corporate partners, universities, and museums, to provide libraries an

alternative to Google's partnership model. Kahle's Open Content Alliance (OCA) included Google corporate rivals Microsoft and Yahoo! (Hafner 2005b). Kahle claimed the settlement would produce a court-sanctioned monopoly for Google, "a perpetual license to scan and sell access to these in- copyright but out-of-print orphans [orphaned works], which make up an estimated 50 to 70 percent of books published after 1923" (Kahle 2009: A21).

The Internet Archive and Project Gutenberg contrast to Google's efforts to expand access to books, presenting a vision that does not threaten copyright holders or attempt to reform copyright law. Project Gutenberg, a non-profit, foundation-funded initiative began offering access to digitized books in 1971. It is the oldest digital library initiative, focusing from its inception on public domain books and other out-of-copyright archival material. The non-profit work of Project Gutenberg posed no threat to publishers or copyright holders, only offering digitized access to works already in the public domain (Hart 1971). The Internet Archive expanded digital library initiatives in 1996 by offering permanent storage and access to digitized collections of websites, music, movies, photography and public domain books (Kahle 2004). Both Project Gutenberg and the Internet Archive publish using open file formats, formats where the mode of data presentation "is transparent and/or its specification is publicly available," presenting visions of opening access to books and other content by working within the boundaries of copyright law (Openformats.org 2012).

Echoing Kevin Kelly of *Wired*, Orwant claimed the settlement enabled the company to cut through the "Gordian knot" caused by years of congressional appeasement of lobbyists and other industry representatives from major record labels, Disney, and the Motion Picture Association (Kelly 2006; McLeod 2005). Efforts to extend copyright's term limit continue a long-standing practice by Congress, which has typically left significant decisions about transformation of copyright to industry experts (Litman 2006). Constant extensions of copyright term limits and the language of

intellectual property have slowed flows of cultural resources to the public domain (Boyle 2008; Hyde 2010; Lessig 2004; McLeod 2005; Vaidhyathan 2001).

Libraries, tasked with serving the needs of the public, struggle with expensive licensing fees and conditional permissions for use allowed by the limited monopoly extended to holders of copyrights. For libraries, a rich public domain removes additional economic burdens on an institution already burdened by the rising costs of subscription journal prices, decreased funding, and increased need for services to the public (Darnton 2010b; Hall 2009; Hemmungs Wirtén 2008; Striphas & McLeod 2006).

Google's efforts to slash through rights clearance for orphaned works, a subset of books created by extensions of copyright term limits and registration requirements, and their efforts to swiftly digitize library resources offered promise to libraries with little support for massive digitization programs. Rather than cut through the "Gordian knot" of rights clearance, a class-action settlement between the Authors Guild and the American Association of Publishers constructed new knots of its own. Libraries and the reading public were not party to the settlement, determining the future of access to orphan works without any representation from an institution aligned solely for the interest and benefit of the public. The class action settlement itself claimed to represent "authors" and "publishers" as a class, when it could only represent the claims of a particular subset of authors, members of the Authors Guild, and those publishers represented within the American Association of Publishers (Samuelson 2011).

Despite lack of representation in the Settlement, libraries did not remain passive agents to the process. Amidst litigation, libraries forged coalitions to manage data and expand access to resources within the term limits of copyright law. This was an aspect of the controversy often overlooked by responses in popular media toward the controversy. Seeking to create a beneficial legal environment for libraries to manage orphaned works outside of the Settlement, new coalitions formed among libraries and legal scholars seeking to develop beneficial legal regimes for the archiving of materials. These

coalitions, developing outside of the controversial settlement, created the potential for the creation of a new entity within the public sphere focused on the powerful ability of libraries to advocate for copyright laws that strengthen the public domain, access to resources, and a healthy information ecology.

Theory

Critical Information Studies (CIS) guides this examination of Google Books and its consequences for opening access to information. Siva Vaidhyanathan described CIS as a “transfield,” one that cuts across traditional academic borders to unite philosophers, librarians, legal scholars, historians, computer scientists, and cultural studies scholars to craft critiques that explore the area’s four focus points for scholarly debate and analysis:

--The abilities and liberties to use, revise, criticize, and manipulate cultural texts, images, ideas, and information;

--The rights and abilities of users (or consumers or citizens) to alter the means and techniques through which cultural texts and information are rendered, displayed, and distributed;

--The relationship among information control, property rights, technologies, and social norms; and

--The cultural, political, social, and economic ramifications of global flows of culture and information. (Vaidhyanathan 2006: 293)

The decisions made now concerning the Google Books settlement have had major impacts on future access to books and knowledge, placing this scholarship within the focus areas of CIS. The class action settlement, though undecided, attempted to revise years of unchanged copyright law outside of legislative action (Samuelson 2011).

Orphaned works were the major focus of the Authors Guild and American Association of Publishers original case against Google. Most of the works scanned from library partner shelves have difficult to assess ownership. Changes to the length and registration requirements for copyrights created stacks of books whose copyright ownership is unknown (Boyle 2008). Beyond orphaned works, the settlement created a de facto

compulsory license to exploit orphaned works without gaining consent from copyright holders. Typically, decisions to expand the realm of compulsory licenses have been the realm of the United States Congress. The Settlement replaced legislative inaction with class action, but gave only Google a license to exploit orphaned works.

Central to CIS is its focus on interdisciplinarity and engaged scholarship where critical actions are taken in the public sphere in order to ensure future access to our shared culture (Lessig 1999, 2001, & 2004). The field is indebted to a history of scholarship and interdisciplinary practice that emerged from the Institute of Social Research in 1930's Frankfurt under the leadership and guidance of Max Horkheimer and Theodor Adorno. CIS borrows Critical Theory's tendency to resist "naked empiricism and positivism, and favors considerations of 'flows', 'flux', and 'process' to explain human phenomena" (Vaidhyathan 2006: 296). This field helps to better contextualize the issues and debates surrounding the privatization of access to cultural resources, and how this privatization may shut out voices of subaltern counterpublics (Coombe 1998).

While seeking to indicate how CIS breaks from the Critical Theory tradition established by the Frankfurt School, Vaidhyathan's call for a new engaged field reveals more connections than disconnections. He writes, "CIS goes beyond the Hegelian and Marxian roots of early Critical Theory...[engaging] with the empirical, specifically the commercial, technical, and scientific" (2006: 296). One understanding of research coming from the Institute is a critique of the "culture industries" as those industries producing standardized popular culture commodities that encourage a de-politicized population. This interpretation missed the nuance of the lives of Horkheimer and Adorno, whose *Dialectic of Enlightenment* (1972), a work that is often pointed out as a critique of popular culture's dominant influence, producing a vision of popular media consumption as false consciousness – a view that continues to reverberate in much United States-based political economic research (Havens, Lotz, & Tinic 2009).

Horkheimer, Adorno, Bertolt Brecht, and Thomas Mann were a part of a German émigré community of scholars in Los Angeles attempting to understand the advance of capitalism and the culture industries in the years between 1942 and 1944 (Peters & Simonson 2004). Highly concerned with the dangers of mass culture, the Frankfurt School created interdisciplinary research focused on critiques of both the commodities of the culture industries and the industries themselves. Such a focus left off concerns of the agency of users to appropriate the products of mass culture for their own individual readings, a focus picked up as critique by Raymond Williams, Stuart Hall, and members of the Centre for Contemporary Cultural Studies at the University of Birmingham, also known as British cultural studies.

Raymond Williams once critiqued “There are in fact no masses, but only ways of seeing people as masses” (1958: 293). The idea of “mass communication” fell out of favor in the 1970s when centralized forms of media common from the 1930s to the 1960s no longer became the daily norm of media consumption. Peters and Simonson note that this shift changed the “conceptual landscape” of how scholars understood the importance of media. They wrote, “Historically speaking, the postbroadcast era is also the postmodernist era: just as the central forums of mass communication broke apart after the 1970s, so too did many of the central theories of social, political, and cultural life” (2004: 2). The climate for Williams’ critique was enveloped at a point in time where new vocabularies of understanding media created a varied space for critique beyond the focus of industries and mass produced products toward questions that included feminism, critical race theory, and active audience research.

Later, James Carey revived understandings of mass, relating mass not to weight or size but Catholic ritual, placing the technologies of communication within the daily practices and habits of a public. Google, a company embedded within the daily lives of those searching the web, became a “mass” medium in the sense of its consecrated status as a search engine (Hillis et. al. 2012). As this dissertation focuses on Google’s role as an

institution challenging copyright laws, Google as a part of everyday ritual becomes extremely important to understand the taken for granted nature of both Google and the influence of intellectual property in daily life.

This dissertation, following CIS, seeks to provide an engaged narrative examining issues of copyright and intellectual property from an interdisciplinary perspective. CIS develops from the history of cultural studies as well as critical theory, an often criticized but critically important contribution to academic discourse. In his article, “Cultural studies: two paradigms,” Stuart Hall outlined the complex articulations between thought and historical reality that led to breaks in the early traditions of cultural studies, troubling the distinction between high and low culture. The study of culture was once framed as the ability to know the best of all that had been said (1980). Culture enabled the “will of God to prevail” (Arnold 1960: 42). Hall and members of the Birmingham school asserted that this view of culture removed working class means of expression and worked to embed within the academy as a space for women, blacks, queers, and third-world citizens to not only be gazed upon but to open up discussions of self-empowerment. With Raymond Williams and the British Cultural Studies tradition, culture was removed from its pedestal to be placed firmly within the everyday lives of citizens. Culture was “a whole way of life,” radically connected to everyday experiences and practices (Williams 1958: 63).

The interdisciplinarity of cultural studies is its own form of praxis, challenging institutional separation of scholarship with a desire to engage texts, media industries, and media apparatuses within broader contemporary questions of political engagement (Baetans 2005). Cultural Studies scholarship, aligned with the importance of expression and critique to read against hegemonic narratives, runs against the materiality of intellectual property law. The objects of cultural studies research – representations, industries, and audiences – are enmeshed within the very material consequences of intellectual property law. CIS builds from this interdisciplinarity to cross fields engaged in critique from within systems of copyright, commercial distribution, information and

cultural policy. Libraries working as institutions of pandisciplinarity invite multiple readings and readers. Libraries are spaces where the arts and sciences merge for the creation of research. The library, characterized by Vaidhyanathan in a programmatically and idealistically liberal way as “a temple devoted to the antielitist notion that knowledge should be cheap if not free—doors should be open” (2004: 119), serves the needs of a broad and engaged public even as constrictive readings of intellectual property law resist even the most idealistic vision of the library’s social role. It is from this social role where citizens within the public sphere gain access to texts that would otherwise remain restricted.

Fair Use in CIS

Libraries engage with a reading public, a public of active creators and appropriators of content in a time when expansion of the realm of intellectual property has increasingly become the norm. Google’s work to digitize library resources rests within a particular historical context as outlined by Lewis Hyde in his *Common as Air: Revolution, Art, and Ownership* (2010) and *The Gift: Creativity and the Artist in the Modern World* (1979/2007). Hyde points to the fall of the Soviet Union in 1991 as a moment that set the stage for rhetoric of unimpeded market triumphalism, positing the Soviet Union as a counterweight and “oppositional force” to free-market capitalism. In the shadow of the Soviet Union’s fall, “the West entered a period of unabashed market triumphalism, during which many things long assumed to be public or common...were removed from the public sphere and made subject to the exclusive rights of private ownership” (2010: 12). Hyde points to the fall of the USSR as one symbolic moment in a history. The deregulation of media industries under the governments of Margaret Thatcher and Ronald Reagan had begun many years prior, but Hyde points to the fall of the Soviet Union as a major symbolic event used to argue for market triumphalism.

It is during this time from the 1970’s to the early nineties when affordable technology enabled users and library patrons the ability to produce, reproduce, and

distribute content. From the Xerox machine to Mickey Mouse's brush with near entrance into the public domain, content industries resisted technological innovation, attempting to use law as a tool to solidify their vision of what access to the cultural landscape could be for citizens – a move toward what Lawrence Lessig called “permission culture” (2004). Henry Jenkins' *Textual Poachers: Television Fans & Participatory Culture* (1992) examined the agency of the audience that do not seek permission to create appropriated texts. Jenkins work develops from work done by Ien Ang (1985; 1991) and John Fiske (1992) to challenge notions of a passive television audience and presented scholars with qualitative research showing the audience's engagement and negotiation with programs. *Textual Poachers* posits that audiences graze the landscape of media texts, “poaching” and transforming for their purposes works from popular media. Jenkins updated his examination of television fans to explore active fandom on the Internet in *Convergence Culture: Where Old and New Media Collide* (2006) to include internet memes, fan remakes of movies and television shows, and *Star Trek* slash films point to a rich culture of active fan production on the Internet. While Jenkins' work focuses mainly on the practices and attitudes of young, early adopters, taken as a whole his research seeks to celebrate the ability of an active audience to creatively appropriate and build upon popular narratives on the Internet without seeking individual permission of copyright holders to create alternative texts. Taken as a whole Jenkins, Fiske, and Ang celebrate the ability of an active audience to creatively appropriate and build upon popular narratives.

And yet:

©

It is no surprise that the surge of active audience and fandom studies developed around the time of a rise in popularity and availability of the home VCR and the cassette tape as a recording device. How else does one make slash films pairing scenes of Spock gazing lovingly at Kirk? Or a story of the Carpenters performed using Barbie Dolls? These are examples of film produced and distributed because of the VCR's development

as a home video device. *Superstar: The Karen Carpenter Story* (1987) by filmmaker Todd Hayes was originally developed on 16 mm film. Yet, when legitimate distribution stopped because of the unauthorized use of the Carpenter's music, dubbed VHS tapes spread throughout a community of cult fans for the film (Hilderbrand 2009).

The historical moment for the rise of the VCR and the codification of fair use guidelines in the United States occurred when the displacement of the "author" as a singular entity gained momentum in the academy. Barthes' 1968 essay entitled, "The Death of the Author," shifted the focus of literary criticism away from the author as the dominant means of understanding and creating the meaning for a text and critiqued the idea that the author has any control. Foucault redefined the idea of the author as not the genius of the romantic era, but a "legally prescribed entity" (Foucault 1972: 9). The displacement of the author as the genius creator was part of the same anti-elitist intellectual tide that promoted shifts toward active audience research. While the focus in cultural studies shifted, the terms of the law did not. Rosemary J. Coombe writes, "The so-called death of the author affords little anxiety in the humanities or social sciences, but it is greeted less sanguinely in legal studies, where entire regimes of property hinge upon the author's unquestioned positivity" (1998: 284).

Alice Randall's *The Wind Done Gone* is an excellent example of a copyfight where the estate of Margaret Mitchell, who penned *Gone With The Wind* as a story "exploring the antebellum South through the eyes of Scarlett O'Hara" did not approve of Randall's work that "retells the basic plot...from an African American perspective, particularly that of a mixed-race child of a slave and her owner" (Schur 2009: 144-145). Following Coombe's argument, the Mitchell estate's ability to attempt to shut down creative appropriation of the original work--an attempt that ultimately failed--shows how texts that could stimulate discussion among an alternative or oppositional public are often silenced through the mechanisms of the law. Seeking to "create conditions conducive to dialogic democracy," Coombe advocated the law "abandon universalisms that prohibit

the emergence and expression of alterity. Only a legality attentive to an ethics of contingency can accommodate such proliferations of difference” (1998: 298-299).

Copyright industries filing lawsuit after lawsuit have enclosed much user-generated creativity behind legal restrictions, creating a chilling atmosphere for the publication of critique and parody. Both The Digital Millennium Copyright Act (DMCA) of 1998 and the Sonny Bono Copyright Term Extension Act of 1996 served to extend previous limits on copyright and, in the process, limited user’s rights. The Sonny Bono Copyright Term Extension Act extended the term limits of copyright to an extent that significantly reduced diffusion of published works into the public domain.

Consequentially, the considerable extension of copyright’s term limit created a culture where generations have grown with limited expectations for use of copyrighted materials and the knowledge of a published works transition into the public domain.

The DMCA expanded the realm of intellectual property by taking away agency from “Congress, courts, librarians, writers, artists, and researchers” by putting the “power to regulate copying in the hands of engineers” (Vaidhyathan 2001: 174). Engineers and technology companies to abide by the requirements of the DMCA were prohibited from manufacturing devices that defeat technological protection measures lobbied for by industries seeking to stem against claims of technological piracy. One of the most publicized fights in the early history and tragedy of the DMCA involved eBook protection measures. Dmitry Sklyarov, a Russian Ph.D. student conducting research in cryptanalysis for ElcomSoft, came to the United States to deliver the results of his research for the DEF CON hacker convention, the creation of an advanced eBook processor that could break Adobe’s eBook protection codes. United States agents detained Sklyarov in July of 2001, and Sklyarov was released five months later remaining under United States supervision for a year (Hemmungs Wirtén 2004). Research and publisher anxiety over eBooks converged in the Sklyarov case. At ElcomSoft, Sklyarov was a researcher. At DEF CON, Sklyarov was a hacker to be detained. The Sklyarov case

represented the anxieties of publishers, engineers, and the state to police the creation of code processing and research.

Google, a company that feeds on and is fed by Jenkins' textual poachers, resides in tense location to copyright laws. The YouTube platform engages with the everyday lives of citizens throughout the world, though not in uniform ways. Searching for slash films or out-of-print Soul music? It's on YouTube. Videos of police brutality in Greece, Muammar Gaddafi auto-tuned and remixed? It's on YouTube, preceded by an advertisement. Everyday life is filled with "poaching," a tactic de Certeau described as a means to manage life within systems of discipline (1984). YouTube becomes an everyday working citizens' way to "make do" with the travails of everyday life, and for active protest. Computing industries secure advantage in the marketplace by creating new distribution devices for these modes of daily consumption. The distribution of "the banal" became an industry for itself when platforms managed by Google found means to monetize access (Striphas & McLeod 2006).

The promise of access made available via low cost technology and online communication platforms masks how Google structures the web for those using it. All are welcome to upload to YouTube, but Google manages and maintains access to information stored on its servers in relation to its interpretation of the law. While the safe harbor provision of the Digital Millennium Copyright Act (DMCA) protects service providers from third party posting of copyrighted content, Google employed an algorithmically-based ContentID system to automatically filter out materials claimed to violate copyright. Content ID's automated system does not take into account whether a use of copyrighted content is fair use; it thereby acts as a mechanized censor (Lohmann 2010; Sawyer 2009).

A Google search depends on automated scripts and spiders that crawl and index websites, images, and other content. When Lessig defended Google's book digitization project for "google-izing" the book, it was a reference to the already common practice of

search as a ubiquitous method of web discovery and a form of knowledge practice, that which has been discussed in legal scholarship as a public benefit and “transformative” use of copyrighted material (Hillis, Petit, & Jarrett 2012: 12). Google organizes and orients users’ experiences on the World Wide Web. Google “google-izes” not through unique content creation, but through indexing access. Its power is logistic. It colonizes “our desktops, indexes, calendars, maps, correspondence, attention, and habits,” blending into the everyday lives of web searchers like the calendar or the clock (Peters n.d.). It acts as a filter, what Siva Vaidhyanathan called “infrastructural imperialism.” Google creates and controls platforms and pipelines for cultural information transmitted in digital form. Even as legal scholarship regards Google’s work as a benefit to the public, Google sets the terms of access and use for cultural products in ways that are “not exactly content-neutral,” but not necessarily “content-specific” (Vaidhyanathan 2011: 109).

Google, Libraries, and Open Access

It is at this intersection where the social conditions seem dire. It has become easier for users to reuse, distribute, and create their own collages, parodies, satires, slash-films, and other expressions that may or may not include information from copyrighted or trademarked content using for-profit platforms like Google. Subaltern counter publics seeking a means of expression utilize Google platforms, even as Google sets the limits of platform participation. In response, many activist groups and organizations have arisen to counter second (Boyle 2008) and third (Hyde 2010) enclosures of the commons. In the midst, open access movements have arisen to work to reduce the costs of academic publishing, joining practical and progressive discourses to claim a stake in favor of a rich commons of intellectual resources.

Gary Hall analyzed and supported the development of open access publishing efforts in his 2009 book *Digitize This Book! The Politics of New Media, or Why We Need Open Access Now*, describing open access as a “means for the free and fair distribution and exchange of knowledge and information on a worldwide scale” (9). Robert Darnton

in *The Case for Books* (2009) trumpeted the importance of movements toward open access in the academy, specifically heralding Harvard's mandated participation in their institutional repository to store and share research of Harvard's academic community. Choice is not removed from Harvard's work to open access to faculty research. Faculty may sign a waiver if they choose to opt-out. Specifically Gary Hall defines open access research as

digital, online, and free of charge to those able to connect to the Internet, without having to pay subscriptions either to publish or to [pay per] view, in its purest form, anyway. This in turn means free to upload to and download from, read, print, reproduce and distribute copies, and also free of most licensing and copyright restrictions. (2009: 3)

Libraries have a long history with the term "open access." The phrase traces to 1894 and references patrons' "unrestricted access to the publications kept on library shelves" (Davis 2009). In an interview with Christopher Kelty, he described open access as a movement that grew from Free Software's attempts to fulfill the "desire for and possibility of authentic public spheres (or an authentic civil society) constituted independently of conventional forms of power such as that of governments and corporations" (2008: 561). While Kelty's note points to the potential power of open access scholarship, popularization of open access research began in the nineties within the scientific disciplines. In 1991, Paul Ginsparg created arXiv.org, an online archive of scientific research for physicists hosted by Cornell University Library. arXiv.org represented an effort to reproduce academic research through the use of online repositories, offering online access to research in Physics, Mathematics, Computer Science, Quantitative Biology, Quantitative Finance and Statistics (Ginsparg 2001; Olijhoek 2011). It was an effort to provide online access to scientific research, reducing the cost of academic journal publishing, rising "four times faster than inflation for nearly two decades" (Suber 2004). The movement for open access to scientific research expanded in 2001 with the establishment of the Public Library of Science (PloS), a non-profit library of scientific literature licensed for reuse and redistribution (Olijhoek 2011).

Libraries embraced open access publishing to “correct imbalances in the scholarly publishing system” (Joseph 2006: 84). When the rising costs of journals eroded academic library budgets, librarians faced cutting book purchases. Joining together with other libraries throughout the United States and the world, academic libraries protested high journal costs from Elsevier, one of the largest academic journal publishers (Willinsky 2006).

Google’s book digitization project and its partnership with libraries is a complicated contribution to the horizon of initiatives seeking to open access to information. Google is not an open access organization, yet Google’s public discussion of its book digitization project and partnership with libraries spoke as if the company opened access to information previously withheld within library walls (Suber 2009). In Sergey Brin’s op-ed to the *New York Times* in 2009 he wrote “even if our cultural heritage stays intact in the world’s foremost libraries, it is effectively lost if no one can access it easily” (A31). Google’s promises of access reside within its own history to gain revenue from user-generated content on YouTube. Once purchased by Google, videos produced by amateurs and remix artists mingled with industry produced content to court advertising revenues (Andrejevic 2009; Kim 2012).

Similarly, Google manages and maintains its Book Search platform and conservatively interpreted copyright threats in its digitization work with libraries. As Harvard librarian Robert Darnton publicly noted at the seminar “A New Digital Republic of Letters?” the library digital copy received by Harvard Libraries had no reading function. Google made institutional decisions preferring conservative interpretations of copyright and access to information at the onset of the digitization process. While quality and access determinations varied from library to library, early decisions made by Google at Harvard reveal a decision making process not dedicated to open access to digitized materials through Google’s scans, but “googl-ized” access to digitized books from

libraries. It was a kind of access that required libraries to work together to correct errors and manage the massive amounts of data that came from the project.

Google's work to digitize books in libraries is at best a hedge, a hedge against the commons and against the power potential of libraries in a democratic society. The phrase "hedging the commons" came from an interview I conducted with Lewis Hyde at the cafeteria in the Harkness Commons on Harvard's campus in May of 2010. Hyde spent the past six years working on *Common as Air* (2010), a defense of the commons in a time of where claims to cultural ownership in the form of "intellectual property" have become the standard metaphor driving access to informational resources. Property, as Lewis Hyde notes, is delineates particular rights of action. Within critical legal and humanities-based scholarship, many scholars have questioned the advance of "intellectual property" as a guiding metaphor for an expanding number of creative works and innovations (Vaidhyanathan 2001). Digital access to books, for example, enables in many cases only pay-per-view access. Readers must accept access restrictions built into the technology of Kindles, Nooks, iPads, and other eReading devices (Litman 2001).

Hedging has a double meaning. "Hedging" fences-in of land using shrubs or trees. A hedged enclosure is permeable, green, and appealing to the eye. The spatial metaphor of a green enclosure migrated to the world of gambling and finance by the fifteenth century. To hedge became a way to avert risk. Google presented early in the process as a corporate actor valiantly attempting to expand access to information held within library walls. While promising to expand access to the works digitized from library collections, the class-action settlement, Google's early decisions involving the copyright status of library books, and its relations internationally revealed Google not as a radical seeking to challenge copyright laws but as a conservative entity hedging its risks to expand access to information the company digitized from libraries. In consequence, Google's digitization efforts put at risk libraries' attempts to expand access to research in digital form. Libraries resting at the fault lines of culture in the "late age of print," must negotiate the

shifting “social, economic, and material coordinates of books” in the face of the denser model of industrial organization, shifting patterns of readers lives and, new laws that govern ownership of informational commodities (Striphas 2009: 3).

The Library in the Late Age of Print

Libraries must negotiate these shifts while fulfilling their role as a space where print commodities become shared resources for a reading public. Vaidhyathan early spoke of the library as a space of unfettered access, but later wrote, “We should not pretend that libraries operate independently of market forces or without outsourcing many of their functions to private firms” (2011: 165). Focused keenly on the present, Vaidhyathan’s analysis is supported by the history and development of libraries.

Hardly intended as spaces of unfettered access, the first public library movements in England were attempts to uplift the manners of the masses. Jeremy Bentham, the nineteenth century English jurist and reformist, opposed radical tactics but supported trade unionist Francis Place’s view that greater access to information would be of a great social benefit to all classes. While Place focused on the “radically poor,” Bentham supported public libraries to “channel the subversive urges” of the underclass (Battles 2003: 148). In contrast, the first libraries in the United States were private collections or subscription-based book societies, hardly the realm for antielitism (Lerner 2009). Four years after England passed The Public Libraries Act of 1850, the Boston Public Library opened in the United States. It would be years before the concept of a public library system would take hold in the United States, as survey research showed the United States had minimal access to books (Battles 2003).

When I asked in an interview with Paul Courant, Dean of the University of Michigan’s library system, “What is a library?” he simply replied, “It’s where the books are” (Courant 2010). Courant has a point, but perhaps this is actually libraries are the location to discover knowledge, be it in books or eBooks. Matthew Battles, a librarian at Harvard’s Widener library and the author of *Library: An Unquiet History* (2003),

described libraries as “spaces of inspiration” (2010). Robert Darnton, the head of Harvard Libraries, described libraries as “centers of learning” (2009: xv).

As cooperative institutions tasked with the preservation and diffusion of knowledge, libraries are centrally situated in the circulation of texts. “The Library,” Darnton writes, “remains at the heart of things...[pumping] nutrition throughout the university, and often to the farthest reaches of cyberspace...” (2009: 10). Whether within a major university or in the community, the library is a space of cooperative access to resources susceptible to political pressures like any other public institution (Ostrom 1990; Wiegand 2011). Hemmungs Wirtén notes that it is both in the library and the laboratory where private and public rearticulate each other, in a “continuous to and fro movement” (2006: 290). The library exists within a web of relationships formed between literary creation and distribution producing and reproducing both writers and readers. Kristeva’s notion of the writer/reader articulates the text and the library as a space where the binary of individual writer and the solitary reader is broken. The library is a space where writing and reading converge (1969). It is a space that creates the conditions for invention, inspiration, and creativity.

The library continues to serve as this space in the late age of print despite increasing pressures by content industries to conform to a pay-per-view model of access. As both providers and consumers of the products of these industries, libraries must, as Darnton notes, have “a business plan” (2009: 12). It has become ever more difficult for libraries to manage the costs of providing their services in the face of the increasing costs of academic journal subscriptions, eBook lending platforms, copyright permission pressures, and storage management. In order to fulfill their noncommercial role, libraries have to find ways to negotiate their way in an environment in which knowledge is increasingly treated as a purely commercial product. Libraries exist within circuits of capital and the circulation of knowledge. Relating with private contractors is a must. Libraries must, as Darnton notes, have “a business plan” (2009: 12). Tasked to serve the

public good, libraries must fulfill this role while managing the costs of their services. The library in the public sphere has a unique stance to represent the reading public, presenting as a space of unfettered access to knowledge that remains fettered by the increasing costs of academic journal subscriptions, eBook lending platforms, copyright permission pressures, and storage management. In order to have a creative culture of active creators, libraries provide access to literature for populations that would otherwise not have access to this knowledge. When commercial distribution will only distribute what is deemed commercially viable, libraries preserve access to information beyond profit-based considerations to serve citizens choosing to share resources.

The Power Potential of Libraries in the Public Sphere

This dissertation builds from Hannah Arendt's vision of the public sphere to support an alternate institution to advance the needs of the reading public and libraries. In her *Human Condition* (1958), Arendt outlined a vision of the public sphere that spontaneously appears as a space of action. Power, understood as not a fixed concept like force or strength, arises from collective action. Google's library partners program, the class action settlement with the Author's Guild and the Association of American Publishers, and the responses and critiques by librarians and activists throughout the world became a transformative historical juncture where agonism, played out in the public through critique, created the potential for new ideas to flourish. Saddled with the consequences of Google's massive digitization program, libraries, librarians, archivists, and legal scholars worked to critique and analyze the value of Google's project and the consequences for future access to information in the United States despite irreducible differences.

Libraries, spaces accommodating multiple publics, continue to support access to information as fundamental to their role in the public sphere (Buschman 2003). The library is a space of great potential in the midst of enclosures to common spaces and threats waged by the expansion of intellectual property (Hemmungs Wirtén 2008). For

these reasons, this dissertation supports a library-based alternative to the promises of access made through Google's project to digitize books.

Plurality is the condition of action in the Arendtian public sphere, and it is through action where new beginnings are found, what Arendt called "natality". Action is tied to natality, that birth is both a biological fact and a symbolic possibility for "second birth," the birth of new ideas in the world (Kristeva 2001: 84). Arendt's natality does not depend upon originality but on the potential for political action to present new social realities (Calhoun 1997; Levinson 2001). Analyzing Google's project through interviews and legal analysis alongside historical research, actions taken by libraries and legal scholars present the potential to birth a new institution dedicated to the public benefit through collective action, the Digital Public Library of America. While promoting itself and grand visions of a digitized universal library, Google's digitization project and its settlement with the Authors Guild and American Association of Publishers forged new alliances in the library world, alliances that have the potential to bring about positive changes for copyright law in the United States that will enable expanded public access to information that would otherwise remain off-limits because of extensions to the copyright term limits.

Methods

This dissertation combines historical, critical legal, ethnographic, and interview research methods to tell the story regarding how libraries have responded to the potential benefits and threats of Google Book search and begun to work together in ways toward expanding access to cultural resources. Examining the connections that enmesh public and private institutions, I borrow from the practice of collage, weaving together artifacts to put voices in conversation with one another that would not often be placed on the same page. The process of writing itself "allows all manner of strange couplings: the distant influence the near, the dead speak to the living, and the many read what was intended for the few" (Peters 1999: 37). The nature of the print production and scholarly thought

depends upon collage to one degree or another. Researchers stitch together clashing patterns in hopes of producing alternate readings of the world. The “textual thickness and the visual density of everyday life” lends toward this mode of writing and research (Coombe 1998: 52). As the writing evolved, I incorporating myself as a subject of my own research, a development inspired by Hannah Arendt’s emphasis on storytelling as a “fundamental human activity” of the human condition and work done by CIS scholars to “write jargon-light prose,” an attempt to write in a way that was both personal and could give research purchase with a scholarly audience concerned for libraries and copyright as access to literature becomes increasingly digital (Benhabib 1990: 188; Vaidhyanathan 2006: 301).

Combining multiple methods enabled me to examine the elements that crystallized decisions to partner with Google, and the consequences these decisions have had upon access to cultural resources found in libraries. Seyla Benhabib interpreted Arendt’s use of narrative as a way to present the failed hopes, “untrodden paths, and unfulfilled dreams” of those living through totalitarianism. I appropriate Arendt’s narrative method to center the importance of access, not only in the terms concocted by legal settlements, but access provided through the process of interview itself. Even those selected for interview were chosen for their access to spaces within the controversy deserving of more than a cursory review (1990: 196).

Interview research lies at the core of this dissertation. In total, twelve interviews were woven within analysis to deepen understandings of Google’s project to digitize books in libraries. Interviews gathered at the University of Michigan, University of Iowa, Harvard University, École Normale Superior of Lyon, The Royal Danish Library, and the Bibliothèque Publique d’Informations in Paris involved an engaged relationship between the interview subject and my position as a researcher. Interview research was done with a focus on developing a conversation from loosely structured interview questions. This process enabled a written process that contrasted my role as a researcher with those

interviewed. Interview subjects ranged from public intellectuals whose work shaped debates concerning Google's relationship with libraries in the United States and in France, to workers whose role contributed in ways not often known or publicized.

Interview research is a complex relational play between interview subject and interviewee requiring sensitive attention to ethics. Those interviewed were not focused on as people, but as epistemic individuals bound within complex webs of relationships that are at once technological, social, legal, and bound within particular cultural spaces. Ethically the interviews required sensitive attention to the interview subjects' particular roles within an ongoing legal conflict. While an ethnographic interview format enables the flexibility of an open conversation, it could not be ignored that the occasion for this research put some interview subjects at odds with an ongoing legal case. Ethically, this research required responsible engagement with interview subjects sensitive to the context of an ongoing legal controversy.

Robert Darnton, director of Harvard Libraries, Sidney Verba, former director of Harvard Libraries, Paul Courant, Dean of the University of Michigan Libraries, John Orwant, former engineering manager of Google's corporate office in Cambridge, Massachusetts, Lewis Hyde, writer and professor, and Patrick Bazin, former director of the Municipal Library of Lyon were actively involved in debates and the results Google's Library Partner program. While Darnton, Courant, and Hyde's voices have appeared in public commentary, Orwant and Bazin offer perspectives not often covered in public discussions of Google's relationships with libraries. Direct quotes from interviews wove a narrative that engaged interviewee words with the political and social climate in which they were spoken.

In order to move beyond directors of libraries and provide a broader perspective of library initiatives to digitize resources, I also interviewed John Wilkin, former director of the University of Michigan's digitization efforts and current director of the shared digital repository HathiTrust, Paul Soderdahl, Associate University Librarian for

Information Technology at the University of Iowa libraries and member of HathiTrust's Strategic Advisory Board, Harry Lewis, professor of computer science at Harvard University, and Anne Karle-Zenith, former project manager of the Copyright Review Management System at the University of Michigan. Yves Winkin, the Director of the French Institute of Education, offered a point of view toward Google's work and its political actions in France.

Particular interview subjects lent themselves toward narrative characterization. Paul Courant, Robert Darnton, Sidney Verba, and Patrick Bazin presented significantly different responses to Google's library partnership program in the United States and in France. Courant, Darnton, Bazin, and Verba's narratives were enhanced through the use of contextual cues, attention to the detail of design and structure of their working space, and a details of the history of the librarians' lives were used to add depth to the understanding of the many people involved with Google's Library Partners Program.

Finally, this dissertation puts the history of technological change within libraries into context through a discussion of early industrial developments in library storage technology based on archival research. Archival research borrowed from texts within the field of library and information sciences, juxtaposing the history of technological transformation within the library with a deeply contextual re-reading of library history through the lens of a history of European and American developments in intellectual property law.

Chapter Outline

In *Terms of Use: Negotiating the Jungle of the Intellectual Commons*, Eva Hemmungs Wirtén wrote, "Institutions are rarely just private or just public" (2008: 6). Yet, many discussions of the Google Books project take for granted Google as corporate-actor and that libraries represent the public good. Chapter two seeks to provide a corrective to this tendency by going back to a time in the history of libraries when film became the preferred mode of storage, taking distance for a moment from the bits and

bytes of a world with digitization. Chapter two is a case study illustrating the historical formation of libraries and their relationship to changing technologies of storage, read through the lens of a critical uncovering of intellectual property's past. By putting the past in dialogue with the present, historical analysis offers perspective on the Google digitization-library partnership of today.

Chapter three utilizes interviews to help add to the conversations surrounding libraries' partnerships with Google. Primary sites for this research include the University of Michigan, Harvard University, and the Municipal Library of Lyon. As institutions, these libraries serve as foils to one another. The University of Michigan library is a large Midwestern university supported by in part by state tax dollars, student tuition, and support from outside foundations. The Widener Library, the largest in Harvard's library system, is one of the largest libraries in the world. Both universities and their library directors, interviewed for this research, presented competing visions for Google's project to digitize resources. To contrast a very United States-centered set of arguments, Patrick Bazin who was once the library director of France's second largest library, offered a history and reason for his decision to partner with Google for library digitization projects in France. In each of these cases, the libraries and librarians involved envisioned that they were expanding access to information in some way. The voices of case histories are supplemented by an interview with Google engineer, Jon Orwant, who once oversaw book digitization efforts at Google's Cambridge, MA office. This chapter uncovered how Google successfully courted libraries to join their project at Harvard, the University of Michigan, and the Municipal Library of Lyon.

Chapter four analyses the consequences of the Amended Settlement Agreement with the Authors Guild and the American Association of Publishers. This chapter finds that the creation of the Book Rights Registry, a collective rights management organization for books, presents the chilling possibility that the licensing of copyrighted books could be secured down to the level of the individual page and even the quote.

Furthermore, only Google and appointees of the Authors Guild and American Association of Publishers would have the right to manage such licenses. For those in the scholarly community who are accustomed to copying small portions of books for fair uses, this pay-per-view structure placed on the book should present quite a shock. As Lewis Hyde writes in *Common as Air*, “Ungoverned spaces make for fertile breeding grounds” (2010: 69). The unintended consequences of a measure to expand online access may ultimately contribute to future restriction of using these texts. This chapter explores the consequences of governing what was once left ungoverned in books, licensing at the level of the page.

Chapter five proposes that a newly formed organization, the Digital Public Library of America, would serve better than Google’s project as a means for expanding access to works found in libraries. Early in the history of Google’s class action, members of Harvard’s Berkman Center began work to create this entity, one that could speak on behalf of the public domain. From this germ of an idea there has grown a new meta-library institution that not only speaks for the public domain, but has begun to actively lobby for a balanced vision of copyright in a time of digital access to knowledge. The work of the Digital Public Library of America contrasts and complements that work done by those libraries involved in HathiTrust. The libraries that partnered with Google received a tremendous amount of data from Google’s scans. In consequence, several of them joined together to form a shared digital repository called, “HathiTrust.” Chapter five provides an analysis in support of the benefits of increased collaboration between HathiTrust and the Digital Public Library of America. It argues that the Digital Public Library of America would serve as a better means than the Google digitalization project for the development of a balanced ecosystem of knowledge in the United States. It further sets forth a proposal for a mutually beneficial partnership between Google and this new digital public library initiative. The collaborative efforts envisioned by this chapter conform with Hannah Arendt’s vision of power and the promise of natality in the public

sphere. Such efforts contain the potential to remove at least some of the hedges from the commons that Google's partnerships with libraries have placed there, whether intentionally or not.

CHAPTER II

MEMORIES OF MICROFILM, MURMURS OF DIGITIZATION

For film did not fall from heaven, but rather it can only be understood through the fantasies and the politics that its invention was responding to.

Friedrich Kittler, *Optical Media*

Introduction

“Little Boy” and “Fat Man” fell upon Hiroshima and Nagasaki on August 6th and 9th of 1945, the same year Vannevar Bush’s article, “As We May Think,” received two printings in *The Atlantic*. Bush, a leading figure in the United States’ scientific research community, pushed for the marriage of science and military during World War II. His article called for scientists to transition from wartime pursuits toward advancing the “task of making more accessible our bewildering store of knowledge” (Bush 1945: 101).

Microfilm was the technological backbone of Bush’s Memex, a device envisioned to store all “books, records, and communications” It was an early prototype of the personal computer and was meant to serve as “an enlarged intimate supplement” to human memory (Bush 1945: 102). An overlooked modern technology, microfilm once evoked visions of the technological sublime just as certainly as digitization does today. The miniaturization of knowledge in microfilm form evoked a sense of wonder from the moment of its invention (Nyce 1994).

This chapter is a case study examining the history of microfilm's development into a standard storage technology for academic libraries. Microfilm’s evolution reveals a history of trans-Atlantic tensions involving intellectual property and shifts in global power. Many of the same controversies exist today between Google and libraries. Copyright issues, concerns for the preservation of library materials, and dreams of the library of the future are features of both past and present dialogues concerning access and storage of library materials. By putting the past into dialogue with the present, this

analysis of microfilm's development offers an historical perspective on the current Google Library Partners program.

Very little has been written about the history of microfilm. Even less has been written about the politics concerning how the business of microfilm came to have such widespread adoption in the United States and around the world. Microfilm was, for the twentieth century, an adaptable medium for storage and transmission that advanced thanks to strategic moments of piracy and government intervention. This chapter will tease out tensions between the history of innovation, intellectual property, and the evolution of the library to better understand what Google's offer to digitize books means for libraries today. It begins with the early history of microfilm, the medium's invention, and ends when the technology becomes an accepted facet of library space.

The Invention of Microphotography

1853 was a pivotal year for the spread and advancement of microphotography. William Sturgeon, a scientist known for his experiments with electricity, died and his friend Dr. Joule commissioned a sculptor to carve a tablet in his memory. J.B. Dancer, the inventor of microphotography, was commissioned to photograph the tablet before its installation in a church. The sculptor delivered the tablet to Dancer's home where he made a standard negative and then copied that negative with his microfilm camera, producing a positive image only a sixteenth of an inch in length. Dancer originally began creating microphotographs by installing a microscope lens on a camera while experimenting at his optical shop in downtown Manchester. Dancer gave away several microfilm copies of the Sturgeon inscription to scientists in the area. Six years later, these gifts verified Dancer as the inventor of microphotography in England.

Dancer was a businessman and inventor in the bustling cityscape of Manchester. Among "the crunching wheels of machinery, the shriek of steam from boilers, the regular beat of the looms," Dancer created a new novelty product, microphotos (de Tocqueville 1958: 76). Dancer's product grew in popularity until the manufacture of

microphotographic slides formed the larger part of his business. Other photographic inventors in the area began to experiment with microphotography independent of Dancer's work. As the practice grew, the question of the identity of the true inventor of the new medium came to fascinate the nineteenth-century citizens of Manchester. The fight was not over who had the first patent. The fight was over who had the most creative mind.

The fact that Dancer gave away several copies of his work to friends and colleagues would be pivotal evidence in future arguments concerning the invention of microphotography (Luther 1959). It was an industrial era representation of the power of publicity and its intersection with the right social network (Benkler 2006; Hyde 2007; Bruns 2008). One reading of this narrative could posit it as a retelling of so many "great man" inventor narratives that have been written. Inventors are just as much products of discourses as the devices they create. A process of argument requiring advocates and evidence within the scientific community supported Dancer as the singular inventor of microfilm.

By 1854, the editor of Manchester's *Photographic Journal* had begun selling microphotos as novelties. A few years later, in 1856, Dancer applied for a patent on a more refined version of his process. As arguments arose concerning who truly invented microphotography, Joseph Sidebotham of the Manchester Photographic Society rose in 1859 to defend Dancer as the true inventor. In a paper entitled, "On Micro-photography," Sidebotham spoke before the Society to make claims on behalf of his friend and colleague (Luther 1950a).

Other scientists seeking to claim the invention as their own only had published accounts of their work as their evidence. Sidebotham had the Queen of England. Not only did Dancer give microphotographs of William Sturgeon's inscription to artists and friends, he was the first to microphotograph the Queen. Thanks to good publicity, Dancer could claim microphotography as his unique invention in 1853. The gifted images of

William Sturgeon's death inscription served as anecdotal testimony to Dancer's early inventiveness. His images of the Queen removed any doubt that Dancer was the true inventor of microphotography.

I recognize the irony, in a dissertation that advances arguments for the commons and weaker copyright regimes, that this history re-tells the story of individual invention and inventors. It is an attempt to show the process of inventions and the means with which an inventor is invented. It is a process that happened, in the case of Dancer, with strategic and successful publicity. It reveals within the culture of inventors at that time, the desire to be distinguished as the individual inventor, even as microphotography was being separately developed in many locations throughout the Manchester area.

The Invention of Microfilm

It was a triumphant day for guerrilla marketing. A most unusual ring was found on the Champs-Élysées and brought to reporters assigned to the area. Looking into a tiny peephole, the reporters discovered an image. The next day Paris's newspaper pages were filled with prose about a new invention that would let the owners gaze at their beloveds privately. Of the invention, the reporters wrote, "Nothing could be more extraordinary...than to find in the setting of a ring...a portrait...the size of a carte de visite" (Luther 1959: 35).

Dagron was an unremarkable Parisian portrait artist who left the French countryside at an early age to study chemistry and physics, the science supporting photography. Looking for a product to lift his shop out of a slump, he turned to microphotography. Dancer's microfilms had traveled to Paris in 1857 via Sir David Brewster. Upon seeing them, the Parisian shopkeepers quickly got to work incorporating microphotographs into opera jewelry, with an attached magnifying glass to improve viewing. Seeing the potential of the new invention, Dagron filed a patent (Luther, 1950b).

France No. 23,115 granted June 21, 1859 was the first French patent granted for microfilm. Dagron's design differed from others in its sleekness. The magnifier and film

were so compact they could be built into the keys men used to wind their pocket watches. Dagron's invention, an improvement upon the work of local shopkeepers who kept the magnifying glass on the outside, revolutionized the way Parisian men viewed naughty images of women.

Dagron was a very savvy businessman. It was he who dropped the ring. The very next day Dagron entered the police station to claim it after priming the newshawks for the hunt. Paris was again abuzz with tales about the ring. First the press flocked to the product. Then they flocked to the man. Dagron assured them that the novelties would be available at his Parisian shop for a good price. According to Ross King's *The Judgment of Paris: The Revolutionary Decade That Gave the World Impressionism* (2006), Dagron created both the device and content for it. *The Surprised Bathers* and *The Joyful Orgy* were a few of his biggest hits. Porn profits and popularity were not enough for Dagron. As his business matured, he began to sue his competition.

In an effort to retain his monopoly, Dagron and Company filed a lawsuit against the Martinache Company, charging invasion of his patent in the summer of 1861. Martinache had successfully filed patents for his own microfilm viewer on April 4th and May 7th of 1861. Dagron lost in his company's lawsuit against Martinache, but then appealed. When his appeal failed, he offered to purchase Martinache. On July 23rd Dagron and Company purchased the Martinache Company for roughly \$45,504.49 USD (Luther 1959).

While Dagron and Company's lawyers were busily involved in patent fights, one of the employees, M. Berthier, created a new process for the production of microfilm. Berthier filed French patent No. 50,469 on July 18, 1861 for a process that improved image viewing by shifting the focus of the eyes. The process was an adaptation of work developed by Sir Brewster of England. A patent was granted nevertheless. Dagron filed a patent for his worker's invention in England (Zubatsky, Krummel, & Veaner 1983).

Fights between Dagron's company and his competition continued. He brought suit against a group of fifteen opticians in Paris who created similar microfilm viewers. The lower court ruled in the opticians' favor, but this was not enough. Dagron appealed. Justice M. de Lelain-Chomel did not waste time. After reviewing the decision of the appellate court, he ruled in favor of the opticians, thus dismissing Dagron's patents and breaking his company's monopoly over microviewers. In the long and bitter fight, the opticians requested both damages and publicity. The opticians wanted the ruling to be published in the press and posted all over Paris. The judge dismissed these pleas. Dagron paid only the costs of the court trial (Luther 1959).

Louis Dagron, credited as the first to invent microfilm, successfully courted the Parisian press through a strategic use of publicity. This publicity boosted the popularity of his product, microfilm viewers that looked like tiny pieces of jewelry. This device was a great conduit for the local porn industry. As Dagron grew into Dagron and Company, the company began to file lawsuits. The failed lawsuit against the Martinache Company resulted in a merger of Martinache with Dagron. Dagron lost in a bitter patent battle between his company and a group of opticians who sold a similar micro-viewing device. The losing side attempted to seek damages that included embarrassing publicity. The judge dismissed the pleas. Dagron and Company paid all court costs.

Microfilm at War: The Franco-Prussian War

Dagron and his company met with continued success after the court case. Dancer left the business of microfilm to research respiratory diseases and broader concerns linked to public health in industrial England. Dagron continued to expand the business of microfilm. He won an honorable mention for his microphotographs at the Universal Exposition of Paris in 1867. The scientific press continued to marvel at Dagron's work. One article wrote, "those astounding 'microscopic photographs' invented by M. Dagron, whereby he places a monument on a ring and a portrait on a pinhead" (Luther 1959: 44).

Dagron became the court photographer for Emperor Napoleon III, and his business even expanded into America.

In Prussia, Otto von Bismarck, General von Moltke, and the Prussian General Staff began the Seven Days War and tested theories developed by Karl von Clausewitz. Clausewitz used historiographical research to examine the Thirty Years War of 1618 – 1648, a war fought primarily in what is now Germany. The Thirty Years War destroyed entire regions and bankrupted most combatant powers. Episodes of famine and disease significantly decreased the population of the German states, Bohemia, the Low Countries and Italy. Clausewitz developed theories of war that merged Hegelian dialectical theory with systematic views of science from Enlightenment thinking. In his writings, he rejected the Enlightenment view of war as chaotic muddle and opted for a multivariate approach involving the complex interplay of the economy, the technology of the age, the social characteristics of the troops, and the commanders' politics and psychology (Clausewitz 1873; Sumida 2008).

The war was a swift way for Otto von Bismarck to shift power away from Austria and toward Prussian leadership. It was a move to unite the northern German states and exclude Austria. It emboldened Napoleon III, the Emperor of France, who saw Bismarck's maneuver as an excuse to flex France's military muscle. On July 19, 1870, Napoleon III declared war against the Prussians. It was an embarrassing folly for the French empire. Krupp steel artillery, efficient railways, and a series of swift victories in eastern France culminated in the Battle of Sedan, where Napoleon III was captured with his whole army on the second of September. The war continued as out of the rubble emerged one man who would proclaim the dissolution of the Empire and the birth of the Third Republic. Léon Gambetta, a one-eyed, thirty-two-year-old anti-imperialist sparked a bit of public rhetoric that struck a chord within the hearts of the humiliated French. He called for continued resistance against the Prussians. The war continued. This time, France would fight with their scientists (Wawro 2003).

The Prussians besieged Paris and left it isolated from the rest of the French world. Under the rhythmic boom of Prussian guns, the Parisians hungered for news no matter how trivial. They wrote letters, but the messengers of these missives faced death at the hands of Prussian forces and Krupp artillery (Sheppard 1871). Desperate in their isolation, they turned to the best scientists Paris had to offer. René Dagrón, photographer, and Albert Fernique, professor of engineering, were among the men who would leave in a balloon named *Niépce*, for the man noted for producing the world's first known photograph. Another balloon, aptly named the *Daguerre* for the daguerrotype photographic process, held M. Nobécourt, an expert in the care of messenger pigeons, Jubert, the pilot, Pierron, an engineer, M. Pierron's dog, and pigeons trained to carry news back to Paris (Hayhurst 1970).

The *Daguerre* and *Niépce* faced perilous conditions. The *Daguerre* and all those within were the first casualties of modern industrial warfare. Bismarck consulted with Krupp, the armament maker, regarding these ballooned blockade-runners. Krupp had a simple answer: Use our product. It was a long-range, breach-loading artillery rifle used four years previously in the Battle of Sadowa, the battle that ended the Seven Weeks' War of 1866 (van Crevald 1977). The crew of the *Daguerre* was brought down from the sky with one push of a button.

Dagrón and crewmates successfully made it to Tours to meet Gambetta and the rest of the French government. At Tours, Dagrón photographed government dispatches, shrunk them to a minute size, printed them on lightweight collodion membranes, and fitted the microfilms into canisters strapped to the legs of carrier pigeons (King 2006). A forest ranger was able to recover one mailbag from the lost *Daguerre*.

Not all members of the *Daguerre* crew passed on. From the wreckage of the *Daguerre*, six pigeons would again be called to battle. These pigeons were released to convey microfilmed news to Paris. Six identical messages were sent on each bird: "Large blue and yellow balloon fell at Joissigny. Prussians captured balloon, voyagers. Have

been able to save a mailbag and six pigeons” (Luther 1959: 57). The redeployed pigeons faced wind, shells, and Prussian fighter falcons along their way. Other pigeons would not redeploy for the French. Captured by the Prussians, they would be used to send false information to a beleaguered Paris.

Pigeons as Data Transmitters

Paris was not the first to employ pigeons as data messengers. The history of the pigeon as a data transmission medium dates back to Noah. Out of the Ark flew a pigeon. Julius Caesar used pigeons in the conquest of Gaul. Greeks used them to convey the names of the victors of Olympic Games. In ancient Baghdad, merchants used a pigeon postal service. In the early years of telegraphy, pigeons were used to fill in the gaps when there was a lack of wires. Paul Julius Reuters, the founder of Reuters wire service, flew pigeons bearing news and stock prices between Brussels, Belgium and Aachen, Germany in 1860 (Blume 2004; Humphries 2009). Reuters’ pigeons could best the train by two hours when the wires were down.

The Rothschild family made a fortune in the markets thanks to timely news received via pigeon. Victory for Napoleon at Waterloo meant that British debt would be devalued. A British win would cause the value of British debt to rise. The stakes were high. The Rothschild family had been using pigeons to communicate across the vast reaches of their financial empire for some time. Nathan Rothschild received word in London of the British win. British debt was undervalued. Rothschild bought. Even the government would not get wind of the win until the next day (Ferguson 2000).

Harold Innis (1951), James Carey (1989), and James R. Beniger (1986) have written of the telegraph’s importance in reshaping culture, society, and economy. Electronic communication, once harnessed through the telegraph wires, increased the speed and efficiency of commerce. Carey wrote that thought could travel by the “singing wire” (1989). From the human imagination flew new visions for the transmission of knowledge, commerce, and scientific information. For Innis, the telegraph destroyed the

monopolies of the press, post, and political power. Beniger wrote of a history of crisis and control as steam power and electricity reformulated the daily habits and practices of bureaucracy. Innis, Carey, and Beniger wrote of the telegraph, but missed the importance of the pigeon.

The pigeon remained a vital form of communication for Northern powers even until World War II. As a source of data transmission, the pigeon was superior on many accounts. Pigeons bested railroad communication by two hours for the transmission of financial data (Humphries 2009). Pigeon messengers were a trusted source of data transmission because it developed throughout centuries as a practice of artists and experts. Pigeons did not depend upon coal, oil, rubber, copper, steel, or industrially processed goods to function. Pigeons needed only the organic substances of food and expert care. Before Dagron invented microfilm, the pigeon-human communication network could not transport massive amounts of information, with mass representing both amount and weight. A pigeon could only carry so much without hindering its flight. Reducing the size of government information meant reducing the weight of heavy communications. The pigeon, once harnessed with canisters full of microfilm, became an effective answer to retain communication between Tours and Paris under the bombardment of Krupp artillery. The robustness of the pigeon network was upheld by the pigeon's natural ability to find home, one exploited by animal breeders seeking to develop swifter birds. Competitions showcased breeders who developed the swiftest breeds. These competitions resulted in the modern Homing Pigeon, a breed that continues to be flown in races throughout the world (Blechman 2007).

The pigeon as a tool of communication in wartime flies between the realms of common practice and patentable science (Hyde 2010). Both Dancer and Dagron were given temporary monopolies on the knowledge and process of photographic image reduction. The practice of animal husbandry, reliant upon the apprenticeship model, is a product of education from expert trainers. Men like M. Nobécourt were autodidacts who

either followed the work of others, were trained by an expert pigeon fancier, or a combination of both methods. The line between patentable and not patentable is not distinct when tracking the development of microfilm as a medium for entertainment and communication in a time of war. For example, M. Berthier's invention that gained him French patent No. 50,469 was only a minor improvement upon Brewster's work (Ardern 1960).

Each inventor relied upon open sharing of scientific knowledge to create patentable works. Animal husbandry, the practice that created the swift homing pigeon, had existed since the domestication of animals. Pigeon fanciers do not rely upon patents for their work. It would be an absurd thing to do. Yet, the practice of pigeon fanciers significantly altered the genetic expressions of the species. For ten thousand years humans bred pigeons for amusement, art, commerce, and war. A patent was not filed for the process. Animal husbandry brings to question tensions inherent in the historical invention of the scientist as individual author. It would be easy to distinguish pigeon breeding as a practice gleaned from commonly shared knowledge, as noted in Lewis Hyde's *Common As Air* (2010). However, as Eva Hemmungs Wirtén notes in *Terms of Use: Negotiating the Jungle of the Intellectual Commons* (2008), the mere idea of a public domain or a commons is only understood through the dynamic power relations shaping everyday life. One author does not exist for the production of the homing pigeon. It was a product of multiple authors working over a large wingspan of time. This form of collaborative authorship complicates the neat distinctions of scientific authorship cemented into law in the early industrial era. At this point in history, only the concept of "God" would be granted a patent for the evolution of the pigeon.

The End of the War

Despite the best efforts of Dagon, the pigeons, and pigeon fanciers, Paris fell to the Prussians on the 28th of January 1871. The Third Republic signed the Treaty of Frankfurt by May 10th, 1871 during the time of the Paris Commune uprising. Information

networks were not isolated to pigeons and Dagron's microfilms. Before the outbreak of war, Karl Marx wrote in five days an address for the International Workingmen's Association against it. Untold in a story centered on Dagron and his patents are the actions of the Parisian workers who invaded Palais Bourbon at news of the loss at Sédan. Gambetta and the Government of National Defence (GND), which grew from the worker uprising, continued the war effort. In Marx's first address, he opposed the Franco-Prussian war of 1870. By Marx's second address, after the GND took power, he wrote, "Vive la Republique!" (Marx 2009). Now Paris had to be defended to honor the rise of the workers to power.

The Paris Commune briefly ruled Paris from March until May 28, 1871. Both Marxists and Anarchists claimed it as the working class's first achieved rise to power during the Industrial Revolution. The 1871 Treaty of Frankfurt ruled the lives of the *paysans* of Alsace and Lorraine, both territories ceded to the Prussian empire as a result of the war. The residents of the region had until October 1st, 1872 to decide between remaining in the region to become German citizens or leaving to remain French (Howard, 1990). And what of the pigeons? The pigeon post ended on February 1st, 1871. The last pigeons were released on the 1st and 3rd February. The remaining pigeons became the official property of the state. They were sold as racing pigeons for an average price of only 1 franc 50 centimes. Two pigeons, reported to have made three journeys, were purchased by an enthusiast for 26 francs (Luther 1950b).

Microfilm Crosses the Atlantic

Microfilm found new life on the new continent. By April of 1871, the pigeon post microfilms were being sold in the United States. Dagron and Dancer entered their twilight years as the United States began to rise as a new global power. By March of 1887, the Franklin Society of Philadelphia contracted with the Century Company to microfilm over 25,000 page proofs to protect against loss. That summer Dagron published a lengthy description of his microfilm processing method in the *Philadelphia*

Photographer and The Camera. By November, Dancer would pass on at the age of seventy-five (David 2012).

The next years of microfilm's life in the United States began much like the medium's birth in England. In 1889 Eastman began manufacturing nitrocellulose film, the material used as a propellant for firearms and rockets as well as for movies and x-rays. Edison contributed to the growth of the film business by adopting Fordist production methods. He promoted the standardization of the 35-mm film reel. It was not long before new patents would be granted for old processes. By March of 1890, The United States Patent and Trademark Office would grant Patent 448,447 to an inventor by the name of Madsen. By 1900, the team of Jansen, Gardiner and Kandler received U.S. Patent No. 655,977 for a bank check-microfilming camera (DeSola 1944).

The bank check as an invention to be microfilmed was itself a product of a long evolution. A check is simply a written order to a bank by a depositor at that same bank to pay a third party a sum of money from the depositor's account. The check, dependent upon paper and ink, enabled the spread of swifter commercial transaction. It also enabled fraud. To keep commerce honest, banks held large archives filled with used checks. Even with the invention of insurance companies to protect contents in case of fire, damage, or other "Acts of God," a secure filing system of bank archives was needed to keep a depositor's trust. If one company should sue another for violation of any particular law, the financial documents of that company would need to be reviewed. Bank librarians had to be prepared for these events. In addition to storing paper money and handling daily transactions including debts, credits, and deposits, the bank's archives were vital to the litigious society developing around modern commerce (Beniger 1986).

The storage of historical financial data in the form of the paper check was a financial burden. A mounding amount of checks needed to be stored and easily retrieved. Offsite storage meant another rent, increased insurance payments, increased travel costs, and an employee to keep the site secure. Microfilm lifted the hefty cost of offsite storage

by shrinking the space required to control bank check documentation and keep check fraud at bay.

Microfilm first came to America as it did to Paris and Manchester, as a novelty good. Five years after the end of the 1870 Franco-Prussian War, the “microscope-bijoux” found a new audience at the summer Centennial Exposition in Philadelphia of 1876. By 1900, microfilm retained a minor novelty market and expanded into the market for information storage and retrieval. The need for microfilm responded to the expanding use of paper in American everyday life. The daily news first began daily periodicity in response to the flow of market data and then evolved into the penny press. Advertising became such a prominent feature of the marketplace that specialized trade journals developed by 1865. By 1870, patents had been issued for the process of labeling. In 1889 Quaker Oats effectively used publicity for their new product, Aunt Jemima’s ready-made pancake mix (Beniger, 1986).

Aunt Jemima was the creation of Billy Kersands, the African American comedian, songwriter, and minstrel show performer who wrote the first version of his hit song “Old Aunt Jemima” in 1875 (Manring, 1998). It became Kersands’ most popular song and Aunt Jemima became a regular trope of American minstrelsy (Kip 2010). The Quaker Oats company appropriated the popular image to sell its new line of ready-made pancake mix to a mass consumer audience. To quote from the song,

The monkey dressed in soldier clothes,
 Old Aunt Jemima, oh! Oh! Oh!
 Went out in the woods for to drill some crows,
 Old Aunt Jemima, oh! Oh! Oh!
 The jay bird hung on the swinging limb,
 Old Aunt Jemima, oh! Oh! Oh!
 I up with a stone and hit him on the shin.
 (Kersands 1875)

Dewey and the Invention of the Modern Library

The cusp of the new century brought amazing transformations that increased access to knowledge. European institutions of higher education remained dominant, but

by 1861 Yale University became the first American university to grant a Ph.D. The form and format of modern life had shifted dramatically in the years that spanned microfilm's invention and eventual trip across the Atlantic to the new rising global power, the United States. It was at this time that both England and the United States began to develop public library systems.

In England, both elites and reformists saw public libraries as a means to quell the mob. In 1838 a radical reform movement called the Chartists began their own cooperative lending libraries, directly competing with commercially focused subscription libraries. Radicals, elitists, and the publishing industry found common ground supporting a movement for public libraries. By 1850 the Public Libraries Act became law in Great Britain (Battles 2003).

Advocacy for public libraries became feasible due to a dramatic rise in the sheer number of books, a result of the industrialization of book production. Gutenberg's bible is the reference point for the beginning of religious modernity but it was the publication of Jacob Abbott's *The Harper Establishment; or, How the Story Books Are Made* (1855), that revealed the importance of labor to the reproduction of the book. The industrial age turned field workers into a waged labor force. Cities became home to crowds and more books were produced through industrialized processes. Abbott's book describes the process behind the production of the modern book. The actual mechanisms of production involved the orderly assembly of waged workers segregated by gender into the industrial space. Industrializing the process of book production increased both the speed of publication and the amount of books printed. The mechanics of production mystified the experience of book production. For the end user the book as a unitary end product mystified the labor conditions involved in its production.

Just four years after Great Britain's Public Library Act passed, the Boston Public Library opened in the United States. Libraries were built upon a vision of open access to information, yet the 1876 report *Public Libraries in the United States of America* showed

that American libraries rarely had more than a few hundred books (Battles 2003). European libraries like the Bibliothèque Nationale de Paris and the central libraries of England held vast numbers of volumes. In the United States, large quantities of books could only be found in a few designated spaces. Harvard's Library began with Massachusetts' clergyman John Harvard's 1638 donation of 260 volumes. After the War of 1812, The Library of Congress was rebuilt with Congress's \$23,950 purchase of Jefferson's 6,487 books (Collins 2009).

As book production and dissemination increased, libraries contended with organization and storage troubles. The small commercial subscription library had no need for shelves. These libraries proudly displayed their books. Larger libraries, supplied by national copyright decrees or large endowments, crafted organizational schemes for their boundless supply. Each library used its own idiosyncratic organizational structure. Harvard's Widener Library still retains an organizational structure separate from most library organizational schemes. Matthew Battles writes, "The 'Aus' class contains books on the history of the Austro-Hungarian Empire; the 'Ott' class serves the purpose for the Ottoman Empire. Dante, Molière, and Montaigne each get a class of his own" (Battles 2003: 104). Organizational schemas are a form of poetic world making (Warner 2002). Thought of as rationalized systems separate from culture, the organization of Widener's stacks imagines, creates, and perpetuates a culture that continues to support the invented ideal of the romantic individual author. Even indirect address in the form of library categorization passively realizes a world through its address to the Widener library public. Without getting lost in the argument of the author's invention, it is easy to see that Widener's organizational system supports the reign of Montaigne.

For Melvil Dewey, famous library reformer and noted philanderer, efficiency was the main problem facing library organization. As a young student library assistant at Amherst College, Dewey was frustrated with the disorganization of Amherst's stacks. New books zoomed to the shelves. Many libraries were suffering under the weight of

explosive amounts of information. Older organization schemes simply would not work in the new knowledge economy. Dewey set out to combine two popular methods to reorganize knowledge. Numbers wedded epistemological categories to produce the Dewey decimal system (Battles 2003). Dewey's appreciation of efficiency expanded far beyond library stacks. Born in 1851, he was named Melville Louis Kossuth Dewey after the Hungarian reformer Lajos Kossuth. Later in life Dewey dropped his foreign-sounding middle name as a part of his advocacy for a simplified spelling system. His name change helped him efficiently assimilate into the dominantly white Anglo-Saxon culture of America's elites.

Dewey was not the only librarian creating advanced classification systems, but he was the most scandalous. By 1883, Columbia College hired Dewey as their head librarian. His first order of business was to advocate for women to join his new library school, a part of his plan to professionalize the field. At the time, women were segregated from standard college classes at Columbia. Advocating for women's equal entry was revolutionary for the time. Without seeking permission from the trustees, Dewey opened the library school to women (Wiegand 1996). Two years later, Columbia closed down his school and he had to move to another university. Dewey's advocacy earned him accolades among elite social reformers. It also helped him position down the role of the librarian, one of his goals for redesigning the library space. Dewey felt women were ideal for repetitive library work. Women were obedient. Women did not cause trouble. Dewey, like many late nineteenth-century advocates of communication efficiency, was crafting the female machine, an obedient search engine to obey his categories of organization.

Many students in Dewey's first class dropped out. Dewey groped and attempted to kiss female colleagues. He did not control his sexual impulses. One particular stenographer, hired to work at his Lake Placid retreat, became of interest to both him and his second wife. Dewey hired her based on the recommendation of New York City Episcopal Bishop Howard Chandler Robbins. Of her Dewey wrote in his simplified

spelling system that she “was bettr looking than I expected.” One summer Dewey kissed and caressed the stenographer in public. His second wife, Emily McKay Beal, recognized trouble and wrote to the young woman, “that if she had eni objection whatever she had onli to say so & it wdn’t be repeated” (Wiegand 1996: 353).

Dewey’s library vision did include room for women who could achieve high status in the public sphere. Mary Wright Plummer was that woman. Born of an elite family in the Quaker community of Richmond, Indiana, she graduated from Wellesley and was one of Dewey’s first students at Columbia. Upon graduation she helped launch the Pratt Institute Library School. By 1904, Plummer became the director of Pratt Institute’s Free Library, the first free public library in Brooklyn (Wiegand 1996). She developed the first children’s room in a U.S. library and began training librarians in youth services. Plummer evolved the librarian from the role of efficient machine to the role of surrogate mother (Garrison 1979).

Dewey’s construction of the woman as information retrieval machine was just one contribution to the development of modernity’s newest category of labor found in librarians, telephone operators, secretaries, and typists, the information professional. Outside of the United States, documentalists from Belgium, the Netherlands, and India developed alternative methods of information organization that would out-math Dewey’s hierarchical classification system. From bookshelves to workers, Dewey’s library was based on complete standardization and control. The backbone of the search system, Dewey Decimal Classification (DDC), was given both copyright and trademark protection by the United States government.

Beyond Dewey: Europe and the Universal Library

Mathematically, Dewey’s system was based on simple decimal categorization. In 1895, Belgian documentalists Paul Otlet, Henri LaFontaine, and their colleagues developed the Universal Decimal Classification (UDC) as an improvement to DDC. Their system advanced library classification theory by expanding the code beyond

categories and numbers. UDC incorporated Boolean “AND” search and special symbols to further subdivide categories for more specific information retrieval. Brackets, plus signs, colons, and more were included in the UDC system, making it a machine-readable format.

The Boolean backbone of the UDC system developed through the work of mathematician Sir George Boole. His 1854 mathematical treatise *The Laws of Thought* laid out an advanced logic system inspired by Jewish and Indian mysticism. In *Equations from God: Pure Mathematics and Victorian faith*, Daniel Jared Cohen wrote of Boole’s belief in the mystical unity of the number one. He believed that the mind has an “innate sense of ‘Unity’ that it constantly uses to synthesize its understanding of the world” (Cohen 2007: 77). *The Laws* was never intended as a purely mathematical vision. It was intended to extend and perfect Aristotle’s *Prior Analytics*, a logical system based on the premise of the syllogism. Boole created a rhetoric for modern times, a rhetoric with symbols and numbers.

Boole’s work remained obscure for many years, with no immediate practical application, until documentalists Otlet and LaFontaine began to use principles outlined in *The Laws* to construct a new vision of document organization. By 1895, Paul Otlet and Henri LaFontaine joined together to analyze Dewey’s published classification scheme. They met in 1891 at the Society for Social and Political Studies, a Brussels organization that attracted many of the most astute Belgian thinkers. While LaFontaine was fifteen years older than Otlet, the two shared a history of life in the legal professions and an interest in advancing document organization. Otlet’s major adolescent anxiety involved his frustration over inability to find his school papers. Early in his teens he began creating classification schemes for his own work. By 1934, he published his grande oeuvre *Traité de Documentation* (1934), a book that dreamed the visions of Vannevar Bush’s memex well before its invention (Buckland 1996).

In March of 1895, Otlet made a formal request to Dewey for permission to use and adapt his classification system. Dewey did not respond immediately, but later replied allowing Otlet to translate his Decimal classification scheme for a European audience. Otlet and La Fontaine did much more than translate. They went far beyond the boundaries of Dewey's permission to develop an international movement for a more robust library classification system (Rayward 2008).

The pair quickly dedicated themselves to the project of universal classification by organizing a conference to bring together librarians, editors, publishers, and other members of the public to discuss their new effort to advance bibliographic search. Their haste was not out of the mere joy of discovery. The Royal Society of London set out to advance its own international bibliography format. The Belgians were no competition for The Royal Society, which had "unassailable authority and prestige," (Rayward 1975: 46). Otlet and La Fontaine knew that The Royal Society had planned the International Conference on a Catalogue of Scientific Literature to be held in 1896 in London. Otlet and La Fontaine publicized their International Conference of Bibliography as a cooperative endeavor, a collective discussion of like-minded individuals to be held in September of 1895 (Rayward 1994).

The plan was purposeful. La Fontaine and Otlet knew that organizing an event far in advance of The Royal Society of England would give them a chance to present their work to The Royal Society as a fact of existence, rather than as speculation. The haste provided their work with necessary legitimacy and garnered the support of the Belgian government, which kept a watchful eye on the project. The Royal Society's International Conference on a Catalogue of Scientific Literature in 1896 would not just be a meeting of scientific and publishing minds. The British government sought to use the conference as a tool to assemble government representation from across Europe.

The work of the International Conference of Bibliography granted sufficient legitimacy to the work of Otlet and La Fontaine to allow them to establish the

International Institute and Office of Bibliography (IIB). The creation of this official post attracted like-minded scholars and scientists from across the European region. For La Fontaine, it helped him achieve a seat in the Belgian Senate in 1895. The pair would continue their work advancing bibliographic tools and facilitating cooperation and standardization. As the project developed, European scholars turned to microfilm as the medium of choice for document storage and retrieval.

Microfilm became the medium of choice after a considerable amount of preparatory invention by Otlet in terms of document organization. Otlet's dreams of universal organization of knowledge were key to the UDC structure. Otlet proposed "...the creation of a kind of artificial brain by means of cards containing actual information or simply notes or references" (Otlet 1990 [1891]: 16). By stripping a scientific article or book chapter into minutely subdivided cards, these organized bits could be rearranged into a daily updated alphabetical catalogue.

By 1903, Otlet foresaw that the emergence of what he simultaneously termed the "Biblion", "Universal Book", or the "Source" from the process of breaking down knowledge from the level of the paragraph and sentence into the level of the subdivided category. Otlet's Biblion would "...constitute a systematic, complete current registration of all the facts relating to a particular branch of knowledge...formed by linking together materials and elements scattered in all relevant publications" (Otlet 1903: 83). Otlet's ideas formulated an early plan for a hyperlinked documentation system.

Otlet searched endlessly for an automated means to access the multitude of data amassed by breaking books and articles into their subdivided parts. Emanuel Goldberg's work with photographic image reduction provided immense potential for Otlet and the project of universal document classification. Goldberg was born in Moscow, Russia, in 1881. By 1906 he received his doctorate from the University of Leipzig with a dissertation that examined the kinetics of photochemical reactions. As Goldberg progressed in his work he became the first Managing Director of Zeiss Ikon in Jena, then

controlled by the Carl Zeiss Foundation and a company best known today for its high-end camera lenses. While working at Zeiss, Goldberg retained a Professorship in the Institute for Scientific Photography at Dresden's Technical University. By 1925 Goldberg demonstrated an extremely high microfilm reduction rate, equivalent to putting the entire text of the Bible fifty times over on one square inch of film. This achievement was not surpassed for many years (Buckland 1996).

That same year, Otlet and Belgian inventor Robert Goldschmidt described an easily manufactured "microphotographic library." Otlet recognized the potential of microphotography for information retrieval and proposed the use of standardized microfiche by 1906. The filmed versions of books and articles were not meant as replacements, but as supplements to extend access to information far beyond constraints of the printed codex. Otlet and other colleagues began the seed for hypertext theory, an early pre-cursor to the World Wide Web protocol developed by Sir Tim Berners-Lee while he was a graduate student. Otlet and Goldschmidt's microphotographic library easily resembles an early dream of a World Wide library built from microfilm. The library consisted of pocket-sized viewing equipment and a portable cabinet only three feet high and three feet wide. Otlet and Goldschmidt's portable cabinet library could hold 6,562,500 pages of text (Buckland 2006).

The adoption of microfilm solved another technical constraint of paper technology: the making and distribution of copies. Book technology was heavy. Film technology was light. Mass became a key variable in the development of library storage technologies. A massive amount of books amassed through industrial processes constructed a desire to decompress the masses of books. Miles of books could be contained in one small, portable cabinet. The dreams built on microfilm in 1925 laid the foundation for what Otlet and H.G. Wells would call by the 1930s a "world brain" (Hahn & Buckland 1998). While seemingly simultaneous, utopian visions of a universal book or

a world brain were only one part of a social condition where burgeoning access and production of research drove demand for advanced organizational schemas.

Beyond Dewey and Europe: Ranganathan and the Universal Library

Otlet and La Fontaine built a new categorization scheme using Melvil Dewey's decimal classification without seeking permission, though Dewey had United States copyright protection and only granted the Europeans permission to translate, not expand upon his work. The UDC developed with no lawsuit from Melvil Dewey, bringing together scientists, archivists, librarians, bibliographers, documentalists, and government officials from across Europe to tackle the problem of document organization. Otlet, La Fontaine, and others involved with IIB advanced information retrieval systems by adding new symbols and Boolean logic to decimal classification. While Europeans and Americans both began dreaming dreams of a "world brain" Shiyali Ramamrita Ranganathan, India's "Father of Library Science," found Dewey's system intellectually lazy (Ranganathan 2001).

Ranganathan was born in the Southeastern region of British-ruled India to a family in the Brahman community. His father passed away when he was just six years old, and he was raised by his schoolteacher grandfather and two elementary schoolteacher parents. His life was steeped in Hindu religious lore at an early age. Ranganathan began his professional life as a math educator, earning both a B.A. and M.A. in mathematics in addition to a teaching license, which afforded him positions at universities around the region. Like today, teachers of the time were poorly paid. His attempts to request higher pay rates for teachers failed and, at the encouragement of a friend, he applied for the well-paid head librarian position at University of Madras in 1923.

The University of Madras created the position to oversee their poorly organized collection. None of the applicants for the job had any formal training, including Ranganathan. With his track record of teaching and scholarship, he was able to obtain the

position of head librarian with his only knowledge of the field coming from an *Encyclopedia Britannica* article read just days before the interview (Rajagopalan 1988). The life of head librarian was a life of limited activity in comparison with the lively world of the classroom. Within a week, Ranganathan attempted to leave the post. With the persuasion of the University president, he remained and was later sent to London to study their library system (Ranganathan 2001).

It was in London where Ranganathan became extremely dissatisfied with the disorganization of the library in Madras, viewing it as “backward.” Studying for nine months at the School of Librarianship of University College, then the only graduate degree program in library science in Britain, he closely observed the way libraries throughout England were organized to serve a broad spectrum of the population. He also observed a lack of efficiency among the libraries. Each library developed proprietary organizing systems for particular kinds of catalogued items (Kumar 1992).

In his studies he set to examine and critique the work of library organization. With a mathematical mind, he created an advanced classification scheme that would far outpace the work of Melvil Dewey. Ranganathan found Dewey’s decimal classification scheme a work of “intellectual laziness.” Devising what he termed the “Acknowledgment of Duplication,” he showed that any system of classification of information necessarily implies at least two different classifications for any one data point. He used the DDC to state his case. As the Dewey Decimal Classification system relied upon arbitrarily constructed hierarchies, Ranganathan showed that depending upon the prejudices of the one classifying, a book could be classified with two completely different DDC numbers (Ranganathan & Kaula 1992).

In a 1964 recording, Ranganathan reminisced on his correspondences with Melvil Dewey. In 1931, Ranganathan published his first book *The Five Laws of Library Science*, and sent Dewey a copy for his review. Ranganathan was surprised to receive a letter from Dewey in 1932, a response to his work. In it, Dewey wrote, “You say you write in your

book that the DC has been mangled...Let me know the addresses of the libraries. I am going to sue them in a court of law.” It was true that Ranganathan had addressed improper use of Dewey’s classification system in his book. Dewey’s threat to sue, with protection of the United States Copyright office, was not without warrant.

What Dewey writes next to Ranganathan reveals much about himself, library culture of the time, and his acknowledgement of the failures of his system. Dewey’s letter continues with a word of advice. In Ranganathan’s recording he remembers, “Then came the sentence, very good advice to me: ‘I find you are designing a new scheme of classification. Let me tell you how dangerous it is...It’s very dangerous. I have suffered’” (Ranganathan 1964). After warning him of the promises and perils of librarianship, Dewey asked, “Why do you think of doing another scheme of classification?”

The next lines reported by Ranganathan (1964) attest to Dewey’s own known fears of the drawbacks of his system:

I know that DC is fully American, or at best Anglo-Saxon, and I know that I have not provided adequate placings in it for Indian thought and culture. Instead of doing a new scheme, why don’t you write out a schedule in classics, Indian literature, Indian thought. I shall incorporate it in DC. (1964)

Ranganathan’s *Colon Classification* (CC), published in 1933 was the first faceted classification system for information retrieval. It was inspired by a set of Meccano toys Ranganathan saw in a store in London. Known more popularly in the United States as the Erector Set, the Meccano were a system of re-usable metal strips, girders, plates, axles and gears. It was a toy model that revealed the inner working of industrially mechanized capitalism (Brown 2007). CC used specific punctuation marks to identify each of five different facets of a work: personality, matter or property, energy, space, and time (Ranganathan 1965). With this system, Ranganathan could divide subjects into mutually exclusive categories.

From this history, it is not hard to see the cultural influence of each information ecosystem. Dewey created a proprietary structure built on arbitrarily constructed

hierarchies. Without Dewey's permission, Otlet, La Fontaine, and other Europeans advanced information categorization beyond Dewey's proprietary system enabling specialized document search. The Europeans violated Dewey's copyright protections to do their work. Dewey did not sue Otlet or the IIB for their work as it did not interfere with the market for his system.

Advancements in microfilm technology gave Otlet and others the ability to envision the creation of a "Biblion," a book of all books. Beyond the boundaries of the United States and Europe, Ranganathan advanced library classification by pointing out the prejudices inherent in Dewey's structure. As Ranganathan continued to publish and grow in his position as Librarian at the University of Madras, he lobbied for free public libraries throughout India and for the creation of a comprehensive national library. He also began a movement toward open access for knowledge.

Four of the five laws of Ranganathan's first book, *The Five Laws of Library Science*, include desires for open access to information. While the term "open access" is one yet to be fully theorized, Ranganathan's work provides an entry point to begin a history of the term. The book that frightened Melvil Dewey, exposing the prejudices of his system, also included a value for what Ranganathan called an "Open Access System" (1963: 300). Ranganathan's vision of the library widely differed from the dreams of his American and European colleagues. His five laws, foundational for the advancement of library organization, are simply:

1. Books are for use (Ranganathan 1963: 26).
2. Every readers his or her book (Ranganathan 1963: 81).
3. Every book its reader (Ranganathan 1963: 258).
4. Save the time of the reader (Ranganathan 1963: 287).
5. Library is a growing organism (Ranganathan 1963: 326).

If a book cannot be found, a book cannot be used. If libraries are not open to the public, how will readers read? If the public is a public of growth and change, than the library must also be a growing organism.

Colon Classification, his next work, tackled the challenges laid out in his *Five Laws*. If libraries are to be open, they are of no use to a public if the knowledge a user seeks cannot be found. What value is knowledge if it cannot be retrieved? While Otlet and H.G. Wells dreamed of the “world brain,” Ranganathan dreamed as well. His *Five Laws* challenged the static inefficiencies of England’s library system. It also envisioned a library beyond the Jeffersonian “Universal” ideal (Battles 2003). Instead of a library focused on book aggregation, Ranganathan’s library was reader-focused.

Microfilm Goes Mainstream

Microfilm matured in the American context, becoming the standard storage technology for libraries, information industries, and the government. From its early history of invention to its application within libraries, the military, and finance, microfilm was embedded in a social and cultural atmosphere that embraced this invention as a revolutionary new tool even as its application was embedded in the early developments of modern libraries and attempts to manage library storage. This section reviews how microfilm became embedded within the library system and world of publishing. It will naturally be selective, choosing key moments to illustrate an important point in time where widespread changes in the information ecosystem led to changes in the way libraries managed the information explosion of the twenty-first century (Cmiel 2005; Virilio 2000).

The Invention of On Demand Print

It was the quintessential eureka moment. Ted Schellenberg, an assistant to Professor Robert C. “Bob” Binkley, came to the University of Michigan’s campus in Ann Arbor to discuss Binkley’s new book *Methods for Reproducing Research Materials* (1934). Binkley taught history at Western Reserve University in Cleveland, Ohio and wrote the book while chairman of the Joint Committee on Materials for Research of the Social Science Research Council and the American Council of Learned Societies (Binkley, Luther, & Fisch 1948). Eugene Powers worked for Edwards Brothers, a small

publishing company that specialized in printing limited-edition university textbooks, and often corresponded with Binkley taking care of the second edition of his manuscript. All three, Schellenberg, Power, and Binkley, were enthusiasts for the potentials of microfilm.

Over dinner, Schellenberg and Power discussed the latest techniques for copying books. According to Eugene Power's biography (1990), Schellenberg told Power about a new camera designed by Captain R.H. Draeger of the United States Navy. Draeger had been assigned to China and wanted to leave with a large number of books, "more than he could afford to buy" (25). He mounted a camera on a mast over a flatbed, placing an open book beneath a glass cover. With a camera that held one hundred feet of film and automatically advanced after each click of the shutter, Captain Draeger left for China with over one hundred books on 35 mm film. Whenever he wanted to see his book on the page, he used the film to enlarge and print to paper. If done today, this would be called piracy. For Eugene Powers, it inspired a new business model.

Draeger's camera remained on use by the Bibliofilm Service, a private, non-profit subsidiary of the Science Service that made microfilm research available to anyone who needed it (Cmeil, n.d.). Draeger's camera was an adaptation of George McCarthy's flow camera, a camera invented by the former banking executive in 1928 to rapidly copy checks to help banks stem the tide against check fraud. As Schellenberg showed Power sample rolls of film made from the flow camera later that evening, Power got his flash of insight.

Traditional publishing houses of the time maintained warehouses with finished copies of works that were rephotographed from originals to fulfill book orders. This was the life of out of print (OOP) books. Draeger's adaptation of McCarthy's flow camera meant that books could be quickly photographed and placed on microfilm. With speed came an efficient new way to keep OOP books in circulation at a lower cost. Power had come up with an idea for on demand print. Power immediately got to work on the idea, one he felt would revolutionize the publishing industries and access to scholarly

information. He went to Bill Edwards, head of Edwards Publishing, with the idea to expand the market for his publishing house. This was the kind of work Power was hired to do. As a recent MBA who chose to stay in Ann Arbor while his wife pursued a career in higher education, Power was hired for his ability to see markets where markets had not yet been found. Yet, Edwards was skeptical about Power's plan (Power & Anderson 1990).

Power had created a vision for a new library subscription service. Most American libraries did not have access to the vast quantities of research held in European libraries. With titles that dated back to the medieval period, European libraries had established short-title catalogues (STC). STC books were bibliographic reference books that held references to existing works in short title form. Often these books covered incunabula and early printed ephemera. Some works included early magic books and advertisements for these magic books. The short title innovation itself was a means to reduce the amount of information found in the titles of older works, too long for the quick skimming eye of the modern audience. Powers planned to photograph STC books from the British Museum and offer the titles on positive film annually for \$500, roughly one-half cent per page.

Upon arriving in England in 1935, the British Museum offered the enterprising American STC books from the Museum as well as the Bodleian Library at Oxford and the University Library at Cambridge. In the Spring of 1936, Power announced what he deemed in his autobiography as "the first use of microfilm as a publishing medium" at the American Library Association (ALA) meeting in Chapel Hill, North Carolina (30). By fall of that year, six libraries had already subscribed to his service. Although Power had created a new market for Edwards' publishing business, Edwards provided his work with only minimal support. Bills needed to be paid. Power's new business innovation was just beginning to create a steady stream of revenue for the company. As it was his idea, Power had to continue his regular sales work during the day while spending his nights creating positive microfilm prints in a makeshift darkroom rented from the rear of a

funeral parlor. He could have outsourced this part of the operation, saving him time and late nights in a photo lab, but he did not receive the quality he desired from other businesses in the area. For the extra work, Power charged Edwards six cents per foot to develop photographs for the new STC subscription service.

Power's late nights among the caskets and embalming odors lead to the establishment of University Microfilms in 1938. Better known today as ProQuest, Power expanded the company to publish doctoral dissertations by 1939. To this day, each university has a publishing requirement for the creation of the thesis. In 1938, when Power started his business, a graduate student had to pay an additional \$300 fee to satisfy the University of Michigan's publication requirement. Powers believed that publication via microfilm would save valuable time and resources for both libraries and graduate students. It would be a great aid to the scholarly community, helping lessen the costs for graduate students to publish while lightening the amount of information libraries needed to keep in storage. It also created a new industry dependent upon library dollars, the subscription service.

Microfilming Europe

It was the fall of 1938. Eugene Power headed out to New York City for the American Philosophical Society and the American Council of Learned Societies' joint meeting to discuss scholarly publishing. Keyes Metcalf of the New York Public Library and Charlie Rush, associate librarian at Yale, were in attendance. Power spoke often about what was possible with microfilm. During the second day of the meeting, a note was handed to Power, "Next time you are in New York, come and see me – Frederick Keppel" (Power & Anderson 1990: 100). Keppel was the head of Carnegie Corporation.

Two weeks later Keppel leaned back in his chair and asked Power, What would you *like* to do if you could?
Well, sir, I would like to go to Europe and visit the principal libraries there and arrange to place a copy camera in each of them so I could form a network to obtain research materials. An American scholar would then be able to contact us and request documents from a foreign library and we could obtain them quickly and inexpensively for him via microfilm...

When you get ready, let me know, and I will send you the money. (Power & Anderson 1990: 101, emphasis in original)

In the months that followed Power traveled to Europe with his wife, Sadye, establishing connections to microfilm contents at The Hague, the Bibliothèque Nationale de France (BnF), the Munich Library, the Laurenziana Library in Florence, and the Vatican. His friend Jean Le Roy of the BnF joined he and Sadye in Switzerland on the way to the International Federation of Documentation meeting in Bern. In Bern, Power was the only American and, according to his biography, the only voice speaking up for the importance of microfilm. The attendees had other thoughts on their mind. “What if there is a war?” one attendee asked. Dr. Kruse, the head librarian of Staatsbibliothek in Berlin, replied, “There will be no war” (Power & Anderson 1990: 109 – 110).

On September 3rd, 1938 Britain declared war on Germany. Power had feared the rise of Hitler while working at libraries throughout Europe, knowing the regime’s tendency for book burning. Eighty percent of his business came from European libraries. At the declaration of war, he felt the last three months of work was for naught. His friend and colleague at the Bibliothèque Nationale, Jean Le Roy, would be dead months later. When Nazi soldiers occupied Paris in mid-June, they physically threw Le Roy out of the BnF. He died from injuries.

Microfilm: 1940 – 1950

At the onset of war, Power and University Microfilms depended upon revenue generated from microfilming dissertations and subscriptions to STC content. Microfilm was seen as the new breakthrough technology of the time. It was light, compact, and versatile. During the war, Power’s business created new and innovative ways for soldiers to read books. Books, when microfilmed, could be projected onto walls. Power’s not-for-profit company, Projected Books, used projection so immobilized soldiers could read books by having them projected on to the ceiling (Power & Anderson 1990).

In a time filled with eBook fascination, it is hard to imagine how much the world of books opened with the adoption of microfilm. A pastime of Victorian Era society, the

book remained a robust form of entertainment during the war years for both middlebrow and highbrow culture (Radway 1997). While television and radio gained prominence as vehicles of leisure in both domestic and ambient spaces, innovative marketing efforts by publishing industries kept the book alive as a trusted vehicle for entertainment and publisher profits (McCarthy 2001; Spigel 1992; Striplas 2009). To microfilm meant to expand the potential uses for books, not replace them. Printed works remained trusted sources for knowledge and entertainment. Other than Eugene Power, no one bragged about personal collections of microfilm. They bragged about their bookshelves (Striplas 2009).

Like Parisians during the Franco-Prussian war, soldiers globally desired access to the daily news during WWII. In war, data transmission ends when the messenger dies. Microfilm kept works in circulation. *Leningrad*, Dmitri Shostakovich's Seventh Symphony, was written during the city's siege in 1941. The score had its United States premier on July 19th, 1942. Both Russian and American audiences saw it as a symbolic act of defiance to Nazi militarism and totalitarianism. Ross notes that *Time* magazine ran a cover image of Shostakovich "in his fireman's helmet" (2007: 327). Shostakovich always felt that Toscanini, then the premier conductor of the NBC Symphony Orchestra, butchered the performance. The witnessing audience of NBC's national radio broadcast was enthralled by a performance Shostakovich saw as a "hack job" (Volkov 2004). The score premiered in the U.S. by travelling out of the U.S.S.R. on microfilm.

In this time period, microfilm moved from experimental medium to taken-for-granted technology. With the invention of the microfilm reader-printer, microfilm became a permanent fixture in the academic library and an efficient storage vehicle for the new American corporate enterprise, the information industry. Microfilm was big business for big data (Diebold 1945). By 1945 microfilm became a global industry with its own national trade association, the National Microfilm Association. NMA was headed in its years of existence by a group of men called "Microfilm Pioneers" (NMA Archives,

2012). Microfilm revolutionized the way librarians, scientists, archive specialists, and businesses viewed document storage and retrieval, creating the possibility of instant information (Gossard 1960). Vannevar Bush's "As We May Think," published a set of dreams already woven through years of microfilm's movement from avante garde technology to mundane mode of data storage and transmission.

Christopher Jenck's 1955 article for *The Harvard Crimson*, "120 Miles of Books," mused on the transition from Keyes D. Metcalf, the "professional librarian," to Paul H. Buck, "the scholar." It also tells well the problems of the postwar library and the library of today. Metcalf had a simple goal while head librarian: make more books available with less money. He succeeded. The staff went underpaid, the catalogues were disorganized, services to readers were cut, but Harvard had more books! Less money and more books meant more organizational problems for libraries and a lowered standard of living for library staff. Paul H. Buck was left to manage the mess. For libraries across the nation, microfilm became the panacea for the massive problem of amassed books and scientific information (Cmiel 2005).

Of Microfilm and Google Books

What is a chapter on the early history of microfilm doing in a dissertation on the Google Books project, a project aimed at scanning and digitizing the world's books? The trouble with the question is that it anticipates its answer. The relationship Google established between libraries to scan books and information all over the world is new only in the medium of operation. This chapter narrates the explosion of two information bombs. The first was the industrial revolution and the second was World War II. Each explosion of information wrought massive changes to libraries. From small shops to anarchic collectives, libraries were far from quiet institutions (Battles 2003). They were enmeshed into the politics of those envisioning them.

Dancer, Dagon, Dewey, Ranganathan, Otlet, Power, Bush – all of these men crafted dreams of the library's future. Who or what is a Google in light of the past? Is it a

Ranganathan or an Otlet for computerized times? Is it Power, selling microfilm subscription services as a business model and microfilming books during the war? The purpose of rummaging through archives is to find new ways of seeing old narratives. History repeats itself, but never in the same form. Our modes of expression change. Media change to fit and shape expression.

Libraries today are enmeshed in the politics surrounding the next major transition in access to published works, a transition toward digital reading. While managing demands for digital access, libraries in the late age of print face lessened public funding and increased costs. The roots of libraries and librarianship, uncover an evolution of the library as situated to manage spaces for readers. Through Ranganathan's vision of the library, the institution evolved to become a public space dedicated to open access for a reading public. Libraries, seeking to serve a digital reading public, have sought to expand upon their abilities to open access to information through digital access. Instead of Eugene Power and microfilm, Google courted libraries with a new technology to digitize access to library resources.

CHAPTER III

GETTING “IN BED WITH GOOGLE”: GOOGLING BOOKS AT HARVARD, THE UNIVERSITY OF MICHIGAN, AND FRANCE

So they wanted to play in the Versailles way.

Yves Winkin, Interview, June 28, 2011

Copyright is not an absolute right; it is a shared right. Copyright in one form or another is a balance of interests.

Eric Schmidt, eG8, May 25, 2011

Introduction

Setting: May 9th, 2011. The Château de Versailles. The special exhibit, “Thrones of Majesty,” explored the symbolic meaning of power verses authority. Power stands. Authority sits. Yves Winkin, then the head of the French Institute of Education in Lyon, other French dignitaries, bureaucrats, and members of Silicon Valley Elite wandered through Versailles unattended. Guests were given complete freedom to do as they pleased. Some sat in thrones specially reserved for the evening. The former Minister of Culture Jean-Jacques Aillagon shook Winkin’s hand as if they were old friends. Rama Yade, France’s popular minister of human rights, was in attendance. The best French champagne. Butlers and waiters that processed out in military style to serve the meal. This is how Google parties in the Versailles way.

Google rented the entire first floor of the Château de Versailles in advance of the E-G8 Forum, an invitation-only summit of leaders in government and the tech industry to discuss matters of the Internet in the context of global public policy. It was convened by French President Nicholas Sarkozy and sponsored by Publicis Groupe, one of the world’s largest advertising holding companies. In France, fears of online piracy have been supported by a set of laws that allow Internet service providers (ISPs) to surveil and suspend those who violate the law (European Digital Rights 2011).

The E-G8 brought together Jimmy Wales, Jeff Bezos, Eric Schmidt, Mark Zuckerberg, and other international interests to receive a clear message from Sarkozy on French copyright and the establishment of a more “civilized” Internet. President Obama and First Lady Michelle Obama also attended. Cory Doctorow, head of *Boing Boing* and an advocate of the Free Culture movement, refused. Of it Doctorow wrote, “I was invited to the EG8 and declined. I believe it's a whitewash, an attempt to get people who care about the Internet to lend credibility to regimes that are in all-out war with the free, open net” (Doctorow 2011).

Inside the E-G8 Google’s chief executive officer Eric Schmidt challenged Vivendi CEO Jean Bernard Levy. In the meeting Levy stated, “I don't think you can compromise on copyright. It's the right of the artist to decide how his work is used.” Schmidt shot back, “I would be opposed to any absolute statements. Copyright is not an absolute right; it is a shared right. Copyright in one form or another is a balance of interests” (Reuters 2011).

Inside the Château de Versailles, it was another affair. Winkin and his colleague thought it was a prank. “Here we had received this invitation and it was so over the top” (Winkin 2011). His colleague went through old photos on his smart phone to show me the look of the invitation, the Google logo on fine linen paper.

There were just a few of us to be there in some kind of public secret event because we were supposed to be cultural or economic key decision makers. We were there to propagate the good news that indeed Google was a patron of the arts. (Winkin 2011)

Winkin and his colleague were seated toward the back, an indication of their lower status among the attendees. Winkin was the director of the French Institute of Education, housed at the École Normale Supérieure (ENS) in Lyon. Education is publicly funded and centralized in France. To be a director of a major French institute at the ENS Lyon is similar to being the director of a special institute at Harvard or Yale in the United States. While an invitation was sent out to only three hundred people, six hundred

showed. Even those seated with Winkin were of notable importance for shaping French copyright law. Winkin mentioned sitting with the person in charge of the controversial National Center for Music (CNM), a project started by the Sarkozy government to help reform and advance the French music industry. The French music industry has seen a loss of profits in recent years and piracy has been blamed. The CNM was created to revitalize the French music industry. The project's funding has come from additional taxes placed on Internet Service Providers (Pépin 2011). Frédéric Mitterand, the current minister of culture, spoke for twenty-five minutes to all those in attendance. The guests toured the Galerie des Batailles, a gallery glorifying French military history. Before the meal commenced, Google employees showed on flat screen televisions how digitization projects have expanded access to cultural resources throughout the world. According to Winkin, all Google's presenters were women. Beautiful, smart women.

This chapter examines the way Google persuaded libraries to join the Library Partners program, a program to scan and make searchable the collections of several major libraries throughout the world. In the United States, Google's mass scanning effort ignited a major legal battle. In 2005, the Authors Guild and Association of American Publishers filed a class action lawsuit against Google for massive copyright infringement, a problem created by scanning books in libraries. Approximately seventy-five per cent of a library's volumes are orphan works, works whose copyright status is not known. Some works could still be in copyright. Some may be in the public domain. Libraries, intending to open access to information through their partnerships with Google, were left in the middle.

In France, public intellectuals and culture ministers spoke out against Google's digitization partnerships. They made public vows to protect France's national treasures from the dominance of the United States-based technology company, even making claims for the need to protect European cultural patrimony from Anglo-Saxon dominance. Not all in France responded to Google as if the company was an American threat to French

and European culture. Patrick Bazin, the former head of the Municipal Library of Lyon (BML), partnered with Google to quickly scan the library's works. The BML is the second largest library in France, second only to the French National Library (BnF) in Paris. Using interview research, this chapter examines how libraries decided to join Google's project by focusing on three major locations: Harvard University, The University of Michigan, and the Municipal Library of Lyon. This chapter begins in France.

The Municipal Library of Lyon

Our story first begins on the 24th of January in 2005. The scene is Paris on the pages of *Le Monde*, where the current president of the BnF, Jean-Noël Jeanneney, has published the article, "Quand Google défie l'Europe" (When Google challenges Europe), his "cri d'alarme" concerning Google's project to scan knowledge found in books throughout the world to make it "universally accessible and useful" (Brin, 2009; Jeanneney, 2005). The month prior, Google had announced that it would scan and digitize books from the collections of Harvard, the University of Michigan, the New York Public Library, Oxford and Stanford. The combined collections at these libraries are estimated to exceed 15 million volumes.

Google's library program expanded Google Print™, a co-marketing effort with the publishing industries. Print™ made offline content available online, an attractive offer for publishing companies then struggling to understand how to sell books in a digital market. Google had the technology, an advertising platform, and a guaranteed audience. Publishers had the content. Google announced the project at the October 2004 Frankfurt Book Fair.

Frankfurt is the place where million-dollar book dreams come true. It remains a space where publishing executives run off to their hotel rooms, manically read through a manuscript, and run back to make a million-dollar bids on the next big book. The scene has changed in recent years. Most major publishing contracts are completed in New

York. Frankfurt is mainly the space where rights to translate and publish books are traded (Wyatt, 2005). Google was there to sell its new advertising and publicity program to the top publishing houses throughout the world. It would be a counterweight to Amazon's dominance in the market. Blackwell, Cambridge University Press, the University of Chicago Press, Houghton Mifflin, Hyperion, McGraw-Hill, Oxford University Press, Pearson, Penguin, Perseus, Princeton University Press, Springer, Taylor & Francis, Thomson Delmar and Warner Books all joined in to partner with Google. By December of 2004, Google announced an expansion of the "Print" project to include scans made from books in Google's Partner's libraries. At the next Frankfurt Book Fair, Google announced that it would accept partners in eight European countries: Austria, Belgium, France, Germany, Italy, the Netherlands, Spain and Switzerland.

Jeanneney labeled Google's project a threat to Francophone and European cultural resources. He was quick to claim that the archives and cultural resources tapped for the project were at the onset markedly Anglo-Saxon. By April of the same year he published his piece in *Le Monde*, Jeanneney published the polemic *Quand Google défie l'Europe: Plaidoyer pour un sursaut* (When Google challenges Europe: A wake-up call). Jeanneney wrote, "What is at stake is language, of course, and we can see how the use of English (in its American form) threatens to become ever more prevalent at the expense of other European languages – all of them" (2005: 7).

Jeanneney's critique relied heavily upon the cultural imperialism thesis, a belief that cultural products from other countries flood the local market and, in turn, crush local, indigenous cultural production (Tomlinson, 1991). The argument, when tested against evidence, does not hold. English is seen as the lingua franca of the information Age, the linguistic counterpart to the process of economic globalization (Dor 2004). However, the Internet has allowed a variety of languages to flourish, both new colloquial and old languages have been able to flourish and sustain markets on the web (Crystal 2001). Jeanneney's argument for protection of cultural resources conceals his position in intra-

European French library and media politics. As noted in Havens, Bottando, and Thatcher (2012), claims to protect European audio-visual resources often conceal a desire to protect the major media companies in developed areas of the European Union. The case is not much different for library politics.

Patrick Bazin's office is on the third floor of an old building near Georges Pompidou Center in Paris. The building and his office were under construction. An old elevator brought me to his floor where I waited in a traditional grey and beige office space. The filing cabinets and office furniture are of the standardized steel and color known to most administrative purchasers for large office spaces. Parts of the walls are crumbling outside of the office space. The first floor of the administrative building for France's Library of Public Information (BPI) has free pamphlets educating women on the importance of early breast cancer detection. Bazin came to his new position as head librarian of the BPI after Frédéric Mitterand announced his move on April 1st, 2010, April Fool's Day. After over thirty years of service at the BML, Bazin was moved to a new library. Mitterand's statement regarding the move mentioned nothing of Jeanneney and other French culture elites who publicly critiqued Bazin's decision to partner with Google. Instead, Mitterand's official statement only congratulated Bazin for his pioneering work in the world of digitization (Mazin 2010).

It is difficult to understand in the American context the high profile politics involved with Bazin's decision to partner with Google. University libraries and a few historic public libraries hold the vast amount of books and cultural resources in the United States. Google's partnerships gained steam through their early move to establish a relationship with Harvard Libraries. The Widener Library alone, only one library in the entire Harvard system, is the fifth largest library in the world (Battles 2003). In France, the history of the book's intersection with national politics determines library funding.

The long history of the BnF tells a tale of France's many transitions as a republic and empire. It began as the Library of King Charles V in 1368. Louis XIV expanded the

library, opening it to the public in 1692. During the French Revolution, the private libraries of aristocrats and clergy were seized and put into the stacks. France's national library, then known as the Bibliothèque du roi (king's library), swelled to amass 300,000 volumes. By 1792 the French Assembly declared that the library was no longer the property of the king, but the property of the people. By 1896, the library had become the largest repository of books in the world (Blasselle & Melet-Sanson 2006).

The deep history of royal dominance and French revolution at the BnF stands in contrast to the history and administration of the BML. Lyon traditionally has been a commercial center, connected to the spice and silk trades. It became an important European publishing center in 1472, housing many intellectual leaders like Erasmus and Rabelais as the city grew in cultural significance. As local industry shifted from the silk industry to metallurgy at the dawn of the Industrial era, Lyon became a seat for labor politics and general anti-nationalist sentiment. By World War II, Lyon was a seat of the French resistance (Mann 2010).

Lyon continues as the second city to Paris, which remains the seat of French government and culture. Lyon is fastly growing into a new role as the high technology center for France, attracting biotechnology, software development, game design, and other companies to the city. Interpol has an office in Lyon. The BML's funding mainly comes from taxes collected by the municipal government. The library must compete with other valuable city services like trash collection for funding. In contrast, the BnF in Paris receives funding via national mandate as it is the copyright deposit for all written documents and audiovisual files published in France (Lasfargues, Oury, & Wendland 2008). The two libraries stand in great contrast with one another, revealing tensions of French society.

Patrick Bazin began the interview with an introduction to French city politics and the situation of the Bibliothèque Municipale de Lyon. The BML contains the largest collection of ancient books outside of the BnF and is the main research location for

seventeenth century primers, elementary textbooks for young children. The BML has more than two thousand incunabulas, books printed prior to 1501. The word “incunabula” itself tells of the cultural significance of book history and the BML’s holdings. Incunabula first meant “cradle.” The word evolved to mean "place of birth" or "beginning." In the world of books, incunabulas refer to those books that used metal type until the arbitrary cutoff date of 1500 (Jensen 2003). The BML is filled with those singular works of mystery Walter Benjamin once hailed as having “aura.”

In “The Work of Art in the Mechanical Age of Reproduction,” Benjamin argued that the decline of the artistic work’s “aura” produced new political possibilities. Copies place into everyday life works of art formerly fenced off in museums or art galleries. The “aura” stems from its singular occurrence in time and place (Radway 1997). When copied, the original no longer needs supplication, positioning the work of art into the everyday domestic spaces of the consuming audience (Coombe 1998). The copy, once removed, becomes exposed to the sensuous world of everyday life. Incunabulas and other ancient texts are literally sacred texts. Illuminated works, texts that Bazin digitized early on, are those manuscripts created by the skilled pen of scribes. They are singular works crafted by multiple artists over time. Once the pages fade, as all books eventually die, these works of art fade into the ether. To extend their life, librarians carefully manage their care.

While efforts to digitize works at the BnF received immediate funding from the state, Bazin struggled for twenty years as the BML’s head librarian to receive support for digitization work. With only the funding he received from Lyon taxpayers and grants, Bazin and the librarians of the BML began scanning illuminated books, articles, and images. “This was the situation of the BML from 1992 – 2010” (Bazin 2011). While Benjamin helped scholars see the political potential of art removed from its sacred pedestal, the existence of old books in brittle forms remain. Bazin wanted to make these works more accessible through digitization. It was a task he felt a part of his job.

Librarians at the BML are tasked with caring for patrons and patrimony with ever-shrinking budgets. Digitization was a way to extend access and preserve materials.

“I had much interest in digitization. I was involved in a work group attempting to better understand new technology and the library. I was the only librarian in this group reflecting on the subjects of new technology and digitization” (Bazin 2011). Bazin characterized himself as an early pioneer in a state that rarely paid attention to the possibilities of making library contents available on the web. Jeanneney turned his arguments against Google’s library partnerships into a book read by many throughout the world. First published in France under the title *When Google Challenges Europe: A Wake-Up Call*, the University of Chicago Press published his work as *Google: The Myth of Universal Knowledge* for the English-speaking audience. The tenor of the argument in title alone changed dramatically as Jeanneney’s work crossed the Atlantic and the world. Good translation crafts new markets.

Instead of writing a book, Bazin preferred to blog. While director of the BML Bazin became a regular blogger for *LivresHebdo.fr*, a French website dedicated to European library news. When asked about Jeanneney’s critiques of the BML’s partnership with Google he replied, “In those years, I did not explain a lot to the newspapers or radio. I just wanted to do, not speak. I am a pragmatist. I am not one for the pleasure of speaking and making polemics” (Bazin 2011). While Yves Winkin agreed to be interviewed in English, a mandatory requirement for my interview with Bazin was that it be done completely in French. Like the interview, Bazin’s work is rarely translated.

Bazin’s posts on the importance of book digitization remain on the servers of *LivresHebdo.fr* for small but significant audience of librarians and book researchers. A skillful translator at the University of Chicago Press crafted a successful market for Jeanneney’s critiques. Bazin’s thoughts, without a publisher or a good translator, were only known to a small domestic market in France. Eva Hemmungs Wirtén has written of

the importance and artistry of translation. It is a point on the copyright continuum where the invention of the romantic, individual author falls apart. Translators, like myself in the Bazin interview, do not receive recognition for authoring works (Wirtén 2004).

Translation receives little review in critiques of international copyright, while remaining a key component in the international dissemination of literature. Victor Hugo, who once spoke out in defense of the individual author, owes the success of his literature both to the dominance of the French language as well as to the artful work of translators who expand markets for a writer's work. The translator, publisher, and writer construct the markets for a written work. The Berne Convention recognizes the importance of translation, protecting it as an "original work" while providing in Article 8 an exclusive right for an author to make and authorize translations (Wirtén 2004). The law of the Berne convention protects and subjugates translators, putting them into a secondary position under the review of the author. Unauthorized translations give room for the idea that translation creates a new narrative. *Harry Potter and Leopard Walk Up to Dragon* may have been a purposeful counterfeit of J.K. Rowling's *Harry Potter* series narrative. As an unauthorized translation and expansion upon Rowling's work, Inner Mongolia Printing House purposefully presented its 2002 *Harry Potter and Leopard Walk Up to Dragon* as a Rowling sequel. Any true fan of the series would recognize it as an unauthorized work, despite its legitimate ISBN (Striphas 2009). The copy is not the original, neither in the case of an authorized translation or an unauthorized translation. Each act of translation consists within a collaborative process, a "negotiation between languages" (Wirtén 2011: 11). These negotiations among translators, authorized or unauthorized, expand the public reach of the "original work." The art of the translator is not to build the narrative, is it to expand the market of a creative work. In the process, the work is transformed for the cultural tastes of a new audience.

When asked how the partnership with Google developed, Bazin gave the following response,

We began many digitization projects. We had a relationship with France Telecom to digitize books and relationships with two other companies in Europe to do “print on demand” projects. Actually, it was not France Telecom directly, but a subsidiary of France Telecom. This was well before Google in 2001 – 2002. I wanted a digitized library so that reprints [of books] could be easily made. Around 2005 to 2006 Google began making digitization offers. Microsoft was also involved in digitization efforts with British libraries. I had the idea to send out a work order, requesting offers for our digitization projects. This request was sent out internationally. We wanted the books to be digitized for free. We would let our digitization partner have a copy and they could do what they please with it. (Bazin, 2011).

Bazin’s request for proposal included two very strict stipulations. First, the scans needed to be made very close to Lyon, within three miles of the city limits. Second, the BML wanted forty thousand books scanned in ten years, and the library wanted it done for free. Google made an offer in July of 2008. The company would create their own digitization center within the spatial requirements of the BML’s proposal. Google assured the librarians that the books would be scanned in a controlled environment. “The policy makers of Lyon were in Agreement with Google’s offer,” stated Bazin (2011). Scanning commenced in 2009, and the company moved very fast. While the BML only requested a scanning deadline of ten years, Google delivered a scanning pipeline that projected completion of work within six to seven years. After twenty years attempting to get money for digitization projects from the French government, Bazin and the Municipality of Lyon Agreed to a public-private partnership with Google. “I think there is a place in this world for many [digitization] solutions,” stated Bazin. “Google, and others. I thought this was the best solution,” (Bazin 2011).

In the United States, Google commenced its Library Partners program with the security of a fair use defense. John Orwant, formerly the chief engineer in charge of digitization efforts in the Boston area, assured me that the company felt it had a solid reason to move forward digitizing works in libraries (Orwant 2010). In common law systems, Google played by their interpretation of fair use. This meant scanning books both in the public domain and books that may be orphaned or still under copyright. In France, a civil law system, the boundary line of what Google could and could not copy

was more complex. At the BML, Google only digitized ancient texts and other works definitely in the public domain.

Almost thirty minutes in to the interview, I asked a question that had been burning on the tongues of critics throughout the world, “Are we giving too much power to Google?” As a global brand, Google’s power has begun to frighten scholars in the United States and abroad. Siva Vaidhyanathan, well-known scholar of the cultural significance of American copyright laws, had just published *The Googlization of Everything: (and Why We Should Worry)* (2011). If not a polemic, the work was a warning regarding Google and other private industries’ replacement of public goods in the American cultural context. In terms of the company’s work with book digitization, Vaidhyanathan consistently voiced concern. Vaidhyanathan wrote,

Google Books has failed to live up to any of the exaggerated claims that its early proponents made for it. Not only has it failed to deliver on its promises, but along the way it has disrupted the copyright system and the economy of publishing (2011, 157).

In order to prepare for my trip abroad and do what I felt would be the research necessary to ask Bazin this question, I quickly tried to get access to Vaidhyanathan’s book. Thankfully, the University of Iowa main library had a copy on the shelves. I still had much to read before heading out to Europe. To keep access to the information in Siva’s book available as I traveled through time zones, I performed an illegal act. I pirated *The Googlization of Everything: (and Why We Should Worry)*. I became a book pirate. While not often discussed in public, graduate students often share together the work of making scholarly copies of books. It is a way to tactically use media to gain access to literature that may otherwise be out of bounds for students whose libraries are resource-poor. Services like eBrary allow students to create .pdf copies of a section of a book, a service the company finds within interpretations of fair use. Graduate students, short on time and resources, share scholarly copies on underground websites. Once the goal of sharing resources has been achieved, or if notice of a particular website is found

by administration, the website disappears. Another will surface within a few days (Garcia & Lovink 1997). Short on time I secured a full, digitized copy of Vaidhyathan's work through the online website, library.nu. This resource enabled me to quickly consume *The Googlization of Everything* while journeying to Europe. When I returned to the United States, I had time to purchase a copy from a local bookstore. For several months, I remained a pirate. By March 1st, 2012, Christopher Kelty reported in Aljazeera that library.nu had been shut down. A massive digital library of over 400,000 books, many including out of print and orphaned works, was shut down by a Munich judge after scholarly publishers accused the site of piracy (2012).

In response to my question Bazin replied, "But this is all public domain. The objects, the books themselves, stay in Lyon. It is the copy that is given to Google." I asked a follow-up, "Can you give these files [digital copies from Google] of public domain material to another place?" Bazin replied, "No, because this is a *partnership*. Another company could take this [these files] and it would hurt Google's business model." Toward the end of the interview, Bazin continued to explain the complexities of partnerships with Google, "Google digitizes for free but [in exchange] Google must receive retribution in its own way...it must recuperate its investment" (Bazin 2011, emphasis added by the writer).

"Advantage Google." This was the title of an essay Lewis Hyde published in the *New York Times* on October 4th, 2009, it would precede his next book, *Common As Air: Revolution, Art, and Ownership* (2010), a book that sought ways to understand what Hyde called the third enclosure of the cultural commons. In his essay, published just days before Sergey Brin's Op-Ed of Google Books, "A Library to Last Forever," Hyde critiqued the far-reaching consequences of Google's class action settlement with the Authors Guild and the American Association of Publishers. He wrote, "Thus does the settlement portend Google's unlimited dominion over electronic books" (2009).

“Advantage Google,” is a phrase ripe for appropriation beyond the borders of the United States. Bazin’s testimony bears witness to the complex life of the well-intentioned French bureaucrat. When funding for projects was low, Bazin did what he could to make Lyonnais’ physical intellectual property available beyond the realms of the library’s walls. Other regional companies like France Telecom, whose subsidiary had contracted with the BML for digitization work, could not compete Against the American company known as “le Google.” Le Google was faster, cheaper, and beyond reliable. As a corporate partner, Google exceeded expectations.

“Advantage Google,” has a double meaning in the French cultural context. Google’s ability to meet and exceed its library partner’s expectations outpaced the ability of other contractors seeking to do similar work. Some of these contractors who signed on to the competitive bidding process were French. “Advantage Google,” to these companies meant “Advantage American Technology Industry.” Jeanneney’s first published response acknowledges and extends the opinion that American companies are dominating the European audio-visual and now digital text markets (Havens, Bottando, and Thatcher, 2012). “Advantage Google,” also signals the sad fate of the scans of public domain works. Bazin claimed that Google is the owner of digitized public domain materials. The physical books, the books that will fade into oblivion by virtue of their physical existence, remain in the public domain. The “Library to Last Forever,” Sergey Brin wrote of in his *New York Times* Op-Ed, will be Google’s library. Digitized versions of illuminated texts, the sacred and profane works of the second largest library in France, are by contractual default owned by Google.

In Jeanneney’s defense, his polemic was not only against Google as an American company. His critique was against a mode of corporate, liberal thought, a mode of thought wherein trust is unequivocally bequeathed to a benign corporation to do benign works (Streeter 1996). His argument was against a particularly American way of seeing and doing that has been established practice in the history of United States

telecommunications legal and cultural practice (McChesney 1994). Jeanneney warned his public in *Google and the Myth of Universal Knowledge*, “Google is not immortal” (2007: 61). Translated beyond the boundaries of the Google Books project, Jeanneney’s critique reads as a statement with grander impact. The corporation is not immortal.

I asked Bazin to offer concluding thoughts at the end of our interview, summarizing his particular point of view.

For me, the digitization of our (cultural) heritage is essential for the democratization of access to our cultural heritage. Democratization, one would say, (increases) the enlargement of the uses of our cultural heritage. But *the true revolution of digitization is the revolution of democratization of access to information* – to knowledge [connaissance] and to cultural heritage. (Bazin 2011, emphasis added by the writer).

The University of Michigan

“Goddamn it, Brewster...” (Courant 2010).

Paul Courant is the antithesis of the staid university librarian stereotype. As the head librarian of the University of Michigan, Courant faced critique from Robert Darnton of Harvard and Brewster Kahle of the Internet Archive for partnering with Google while speaking out constantly on the importance for increasing access to works in digital form. Kahle had described Google as a “monopoly” in a 2009 interview on *Democracy Now!*, and the University of Michigan Library had been implied in actions that allowed Google to have such a monopoly. “One [argument] is that Google now has a monopoly over the digitized records of these works. That’s just flat wrong. Google has no exclusive rights whatsoever to our works. They have exclusive rights to their scans...and Goddamn it Brewster knows this...” (Courant 2010).

Courant’s office is much nicer than Bazin’s. Nancy North, Courant’s assistant, kindly helped secure my interview in mid-September. His office is on the eighth floor of the Hatcher Graduate Library, the site of Library Administration on the University of Michigan Campus. When lost on my way to Courant’s office, it became apparent that the Library Administration floor sits atop vast stacks of books tucked away in passages

where ceiling and wall sizes are matched to optimize books storage. These stacks are tucked away in cavernous rooms where steel girded bookshelves uphold tons of books, both in weight and amount.

At the University of Michigan, the person in charge of the library system is called the University Librarian and Dean of Libraries, Courant's official title (personal correspondence, 2010). Courant came to the role after writing for years on the economic value of public goods. Courant is not a career librarian. Courant is an economist who holds two prestigious chaired professorships at the University of Michigan, the Harold T. Shapiro Collegiate Professor of Public Policy and the Arthur F. Thurnau Professor of Economics and of Information. He had been throwing and receiving written jabs from Robert Darnton, director of Harvard's libraries, Siva Vaidhyanathan, and Brewster Kahle, head of the Internet Archive, for his outspoken support of the Google Books project. I was granted a thirty-minute interview after mentioning via email that I had interviewed Robert Darnton and would interview Brewster Kahle by November of that year.

"I got eight million books and every one of them has something in it that's wrong. And lots of them are wrong from cover to cover and that's good because it gives us something to fight about and argue about" (Courant 2010). Courant first became interested in libraries while acting as Provost, an academic office focused on managing the University's budget. "I was spending \$45 million dollars per year on the *library*. Gee. Is there a way to do that for less?" (Courant 2010). Candidly, Courant continued to speak of the budgetary costs for preserving vast amounts of books. "It costs, when I count space costs, about \$5 per year per book to store the stuff. Maybe not quite that high. Keeping things in the open stack library, it's about that." He continued, "Keeping things in a very efficient facility is maybe \$0.90 per book. Keeping things in an electronic file is maybe \$0.15 per book," (Courant 2010).

Courant spoke openly about library management at a major research university in the United States when libraries and higher education remains under intense budgetary

pressures. The University of Michigan is a member of the Big Ten, those universities throughout the Midwest who agreed to coordinate their football and other college sport schedules in the early fifties. As the Big Ten began to cooperate with sport, they forged a cooperative counsel for sharing institutional academic resources. In 1958, The Committee on Institutional Cooperation (CIC) became the established the academic counterpart to the Big Ten. Herman B. Wells , a former chancellor of Indiana University and a founder of the CIC wrote in his 1967 “A Case Study on Interinstitutional Cooperation,”

The day has long since passed when a college or university can consider itself a fort of knowledge in a hostile frontierland of ignorance, jealously guarding unto itself its hoard of facts and ideas. Academic isolation has long been impractical; in today's world, it is impossible. At a time when yesterday's bright new fact becomes today's doubt and tomorrow's myth, no single institution has the resources in faculty or facilities to go it alone. (1)

Beyond football, the voluntary association attempted to tackle the problem of “brain drain,” what Wells described as, “the flow of talented, creative people from the area [the Midwest] to the glamour industries of the two coasts” (9). While many from the East and West coasts of the United States came to be educated at the large universities of the Midwest, they returned to the coasts leaving the Midwest lagging “behind other regions of the country in any area of scientific and technological advance” (9).

Today, the CIC has evolved to include the University of Chicago, University of Illinois, Indiana University, University of Iowa, University of Michigan, Michigan State University, University of Minnesota, University of Nebraska-Lincoln, Northwestern University, Ohio State University, Pennsylvania State University, Purdue University, and the University of Wisconsin-Madison, all universities with large student populations and large libraries. Many of them contain some of the most important academic presses in the nation and world, not to mention massive stacks of books, articles, and other print materials.

Big libraries have big problems. While researching at the University of Michigan’s special collections and archives, I faced a dilemma. Some of the resources I

desired for the second chapter's history of microfilm were in offsite storage. In order to get Series J: University Microfilms, which contained histories of corporations involved with the early microfilm industry, a University of Michigan librarian would need to get in a car and drive miles outside of campus to retrieve this box. I would have needed to prepare Special Collections with many weeks notice and a commitment to sort through copies of at least one hundred pages. As a researcher, I had no idea whether the box would contain information helpful for my project. While Courant's words fail any semblance of bibliophilia, they speak to a truth of library administration. Big libraries are big business. Unlike Google in France, the relationship developed between Google and the University of Michigan Library happened under more mundane circumstances. No champagne. No secret party at Versailles. Just Larry Page, a University of Michigan alum and current CEO of Google.

Jack Bernard, Associate General Counsel at the University of Michigan, described how, in 2002, the University of Michigan Library and Page began the discussions that served as a catalyst for what would become "Google Book Search." Bernard, who describes himself as the "University's library lawyer", spoke about his hopes for "lawful access", especially for those who have "print disabilities", to information through digitization. The University of Michigan Library already had an active digitization program in place for preservation purposes before Page approached.

John Wilkin had held the position of Head of the Digital Library Production Service (DLPS) at the University of Michigan when it began in 1996. Bernard spoke of the University of Michigan's digitization efforts in terms of "book death," preservation, access to the public domain, and access for people who have print disabilities. Wilkin provided a lengthy explanation of the University of Michigan's early efforts to forge institutional collaboration and make public domain works available online. The DLPS was originally conceived as a federated organization, drawing on the University of Michigan's information and technology organizations resources, including the University

of Michigan Library. With a half of a million dollars from the Mellon and Carnegie foundations, Wilkin and colleagues digitized seven thousand volumes of text. “It seems so small now,” (Wilkin 2010).

Soon after their early success, Wilkin and the DPLS headed to Ithica, New York to share their work with others who were shaping the early digitization processes. Those working on the University of Michigan project had an interest in putting everything online from the start. Cornell only intended to use text digitization as a means to keep back catalogues of works in digital form until they needed to be put back into print. Wilkin and the DPLS worked completely with open-standards based technology, conforming to established, standardized practices of image rasterization, the process of taking an image from a vector graphics format and converting it into pixels. Cornell used Xerox technology (Wilkin, 2010).

“Could we digitize and put online the public domain?” This was the question posed again and again by Wilkin and other colleagues at conferences dedicated to the question and process of digitization. “And the institutions that were there, twenty-five or thirty major research libraries in the room, they all said, ‘No’” (Wilkin 2010). Wilkin’s office is just two doors down from Paul Courant. Down the hall is the University of Michigan Press. In the interview, Wilkin summarized how other librarians responded to the idea of digitizing and putting online public domain works. “Not important. No value for that. Beyond our means. Not interested in collaborating in that way,” (Wilkin 2010). In the years to follow, librarians would still struggle with the idea of digitizing print as the question continued to be posed.

By 2002, the University of Michigan already had in place a significant digitization and preservation pipeline. Bernard stated that the university began with old works not because of potential problems with copyright, but because of the material fact that books will dematerialize. “You know that wonderful smell of the library – you are smelling book death.” Bernard explained that ancient papyrus was a better preservation

medium than some twentieth century paper technologies. The University of Michigan was in a race against book mortality, “and losing”.

Enter Larry Page. Courant described how Page began showing interest in digitizing the libraries’ print materials. “Larry Page was an alum and he was here visiting the Engineering College. Google as a company was already well known. Google had already become a verb” (Courant 2010). At the time, Google was not one of the richest companies in the world, nor was it publicly traded. Google was a major source of pride for the University of Michigan’s College of Engineering, which could count the Google co-founder as one of their most famous alumni. After giving a talk at the college, Page asked if he could speak to the university librarian. “Sure.” Courant paused a bit. “The right answer to potential big donors is, ‘Yeah’” (Courant, 2010).

Bill Gosling was then head librarian of the University of Michigan libraries. Courant was still the Provost. A meeting was arranged between Page and Gosling. Page asked, “Would it be possible for us to scan everything in your library at our expense?” (Courant 2010). Gosling then conferred with John Wilkin, who changed positions to become Associate University Librarian and head of Library Information Technology. The three spoke together of Page’s plans. They needed to discuss issues of quality and digitization. Gosling then called Courant in the Provost’s office, “Larry Page was just here and wanted to know if he could scan all of our books” (Courant 2010). Provost Courant replied, “Ok. Talk to me some more.”

Bernard discussed the attraction of a Google partnership in other terms. The university was aggressively digitizing not only for preservation. Digitization opened up new possibilities for the blind reading public. Digitization meant that books could be read via the text-to-speech software, refreshable Braille technologies, and text enlargement functions featured on many computers. “From the most nascent stages of the project, the University has been committed to making an accessible library, so that our patrons who have print disabilities have a chance to participate fully” (Bernard 2010). The blind know

well the “complex couplings between organism and machine,” Donna Haraway once wrote of in the “Cyborg Manifesto” (1991: 150). The computer’s ability to transform the written word to the spoken word opened up the text to a reading public that must read without physical sight. The invention of print, a visual medium, forged the imagined community of the modern national state and excluded those members of the public who cannot see (Anderson 2006). At the University of Michigan, blind students have to wait seconds, not semesters, to access the vast works necessary to complete their studies.

The existence of the blind reader functionally complicates the requirements of the library to serve its reading public and the desires of publishing industries and authors to keep sacred their vision of copyright. When Amazon’s Kindle provided text-to-speech capabilities, the Authors Guild began a public campaign against the feature, claiming that it would violate copyright protections (Jones 2009). After denouncing the Authors Guild’s claims that Kindle’s text-to-speech feature violated copyright law, Amazon caved. The company shut off access to the feature.

The American Council of the Blind denounced the next eReader offered by Amazon after the Kindle 2, the Amazon Fire. Pratik Patel, Chairman of the American Council for the Blind’s Information Access Committee, stated, “Why did the company have the time to develop a new browser but not a magnifier or a screen reader? I am forced to conclude that Amazon simply does not care about the blind” (COAT 2011). The struggles between device design and copyright blindness continue to leave two groups excluded from the “right to read”: the blind, seeking inclusion, and librarians who seek to serve their reading public (Striphas 2010).

As Provost, Courant began working with basic agreements to meet the University of Michigan’s needs as they moved forward with a Google partnership. They agreed to a basic deal where Google would scan all of the books, pay for it, do what the company wanted with their copy, and the University of Michigan could do what they wanted with

their own copy. “We would be cross indemnified legally so we wouldn't be liable for what they did and they wouldn't be liable for what we did” (Courant, 2010).

Bernard framed the decision to partner in terms of a mutually beneficial relationship between the interests of the university library and the Page's desire to digitize their texts.

What made Google attractive to us is that they said they could do this a lot faster than we could. And it turns out that their process for digitizing the books was not only faster, it had less wear and tear on the books. (Bernard 2010).

University of Michigan made the deal and scanning began. According to Molly Kleinman, the actual experience of being in the center of the controversial Google Book Project was quite banal. Molly Kleinman was Special Assistant to the Dean of Libraries at the University of Michigan. Her previous title was Copyright Specialist. In this role she provided support for the Library's digital publishing initiatives after the University of Michigan decided to join Google's project as a Partner Library (About Molly 2009). For Molly and other staff librarians, Google was experienced as a giant Penske truck. At a set time and moment on a weekly schedule, the Penske truck would drive up, mounds of the University's books would be placed within it, the truck would drive away and return the books at a later time along with a copy of the digitized version of the books (Kleinman 2009).

It took a year to complete the negotiation process after Page's initial proposal. Digitizing had already begun by 2004. “But nobody knew what we were doing,” (Wilkin 2010). Wilkin's statement is not about knowledge in terms of enclosure or the legal requirements of Non Disclosure Agreements, agreements that university librarians signed as they contracted with Google (Vaidhyanathan 2011). Wilkin's discussion of knowledge is technical. The University of Michigan was an early pioneer of library digitization. Other libraries, like Cornell, developed an offline vision of digitization. The knowledge Wilkin spoke of was a knowledge of how to take resources and make them available online. Willkin continued,

The ARL [Association of Research Libraries] library directors met in Tempe or Phoenix to consider a business proposal and plan to use collective resources to digitize US federal documents, which is a pressing problem for us. There are probably a million documents we get as [federally mandated] depository libraries. It is a public good and yet the burden is great for materials that are little used. Sometimes heavily used, but all could be used if made available online. It would be a tremendous cost savings to us if use of these materials could be withdrawn [from our individual servers] and access put online. (Wilkin 2010)

“Essentially, it is all about money and power” (Darnton 2009, p.6). Robert

Darnton begins the first chapter of his *The Case for Books: Past, Present, and Future* with a vignette. The chapter is "Google and the Future of Books." He wrote of a woman, unnamed, but described as the quintessential “Marian the librarian” (6). At a party, she is asked, “What is it like to be a librarian?” She responds that the job is essentially about money and power. For Jack Bernard, the “library lawyer,” digitization and the Google partnership was about making “lawful uses” to address book death and patrons with print disabilities. Courant spoke to me as the University of Michigan librarian, but forged the decision to partner with Google as provost. As Provost, a Google partnership kept a good relationship with an important alum while hedging risks legally and advancing projects already in existence. For Wilkin, the partnership continued work pioneered years earlier with little support from other libraries. He helped advance the work necessary to make offline public domain books available online.

How and why did the University of Michigan partner with Google? The answer is not simple. It would be easy to write this chapter is an homage to C. Wright Mills’ *The Power Elite*, with a “2.0” appended to the end signifying politics as Internet companies grow to become publically traded corporations. Page proposed the partnership as an alum. Should the story be distilled to this point? The University of Michigan’s position in the world of library politics would be negated. The history of Wilkin and other’s work to make public domain works available online would be left to the margins. The artfulness of editing leaves off nuance, but it is nuance that helps explain the growth of this partnership. Larry Page was attracted to working with the University of Michigan not only because of his alumni status. The University of Michigan had the resources and

commitment to the vast sharing of public resources necessary to make an operation like this not only conceivable, but able to make a grand impact on the availability of untapped archives of books as a part of a large-scale effort.

Harvard University

“Google in those days was and still is very secretive in how it deals with things. In the beginning they wouldn't even tell us who else was involved” (Verba 2010). We were on the second floor of the Knafel Building, home of Harvard University's Department of Government inside the Center for Government and International Studies (CGIS), a center that unites Harvard's Department of Government, History department, and sixteen specialized research centers. Professor Emeritus and former director of Harvard Libraries Sidney Verba still has an office on campus. Verba was the first Harvard librarian to move forward with a Google partnership.

Verba in retirement remains a reknown political scientist. As a former director of Harvard's libraries he was applauded for his work to bring the forty to one hundred and four disparate libraries in communication with one another, a feat not surprising considering his publication history (Darnton, 2010; Walker, 2006), Verba has been author or coauthor to eighteen books covering the topic of citizen participation in civil society (Hafner, 2005). His engagement with the topic began after his senior professor and mentor invited him to join a major research project, resulting in the influential *The Civic Culture: Political Attitudes and Democracy in Five Nations* (1963). The study examined the political culture of democracy in a post World War II world, a world that had lived through the rise and fall of Fascism in Europe and what the pair termed an “explosion” of nations in Asia and Africa (Almond & Verba, 1963). Verba was the first library director at Harvard to join on in Google's project to scan information found in libraries.

Harvard was one of the original “G5,” libraries approached to pilot Google's project to digitize enormous amounts of information. Stanford, Oxford, The New York Public Library, and The University of Michigan were the original sites for Google's

library partner project. Google's partnership marked a major expansion of Google Print, the company's existing digital book program. In 2003 when Google first approached Verba and Harvard, it was a part of the company's secret effort then called "Project Ocean" (Markoff 2004). With the cooperation of Stanford University, the company planned to digitize the entire collection of Stanford Library's pre-1923 works, works definitely in the public domain. "Ocean" was, for a time, simply the company's internal secret code word for their project to digitize books and make them available exclusively via Google's book search page (Siegler 2009).

Sheryl Sandberg, then Google's Vice President of Global Online Sales and Operations, visited Harvard in 2003 to propose the idea. Sandberg had been Larry Summers's Chief of Staff when he was Secretary of the Treasury under the Clinton administration. More importantly, Summers was Sandberg's thesis advisor. She first came to Summers just two years into his new role as Harvard's twenty-seventh president to discuss Google's desire to digitize all of Harvard's books. Summers then sent her to talk with Sidney Verba, the library director. "And so she showed up in my office one day putting forth the idea of their coming in and digitizing the Harvard Collection, all of the books. My first reaction...I didn't say it out loud...was 'This is crazy.' It couldn't be done" (Verba, 2010).

Sandberg is the kind of woman featured in *Vogue* magazine. As a Harvard undergraduate she sported leg warmers, blue eye shadow, and founded and ran the Harvard aerobics club. According to *Vogue* she was Larry Summers' "star pupil" (Conley 2010). He advised her thesis on the statistical correlations between spousal abuse and women's access to independent financial sources. After graduating, Sandberg worked again with Summers at the World Bank. In 1991, a leaked memo detailed Summers' economic argument for increased environmental polluting of lesser developed countries (Summers 1991). At the time, Sandberg was busy working on health projects in India dealing with leprosy, AIDS, and blindness. In 2001, she and others working for the

Democratic administration had to leave their government positions. Under Secretary Summers, Sandberg had led the way for forgiving debt in Asian countries suffering under the East Asian financial crisis. As the Clinton administration left office in 2001, she consulted with Eric Schmidt of Google to decide her next career move. That year, she became a Google Vice President in charge of building advertising revenue (Conley 2010). At that time, the company's entire advertising revenue department consisted of four paid staff.

When Sandberg came to meet Verba in 2003, she and Google did not propose a set plan of action. Verba thanked her for her visit and sent her away.

I said when you've got a plan that can give me an idea how you're going to do it, when you're going to do it, how long it's going to take, and how much it's going to cost, I'd be delighted to talk to you. (Verba, 2010)

It would be a year before Sandberg's return. When she did, she returned with the design for a scanning process that would scan books much less expensively than Harvard's current processes.

On September 13, 2004, Google inventors Francois-Marie Lefevre and Marin Saric filed United States Patent 7,508,978 for the "Detection of grooves in scanned images" (Lefevre and Saric 2009). The patent described a process to project an infrared pattern onto an opened book. A pair of infrared cameras map a three-dimensional shape of the pages to detect distortions in the pattern, enabling the machine to determine the degree of correction needed to accurately determine text. Patent 7,508,978 is the patent for Google's proprietary book scanning technology (Clements, 2009). The United States Patent and Trademark Office would not grant the patent until March 24th, 2009, years after the project became a major controversy in the United States.

"They had worked out a very interesting way of digitizing the books that didn't damage the books" (Verba 2010). Verba detailed problems Harvard and other libraries had experienced with the process to digitize books. Books had to be flattened to avoid

taking a picture of a book with a valley in the middle. This involved “slamming a piece of glass on the book which often broke the spine” (Verba 2010). Google’s patented technology was able to detect the groove, the valley that occurs in the center of the book when it is scanned.

Character recognition software, the software used to turn scanned images of texts into machine-readable text, requires a clean 2D image of the book to convert text images into words that can be recognized by a machine. This technology is known as optical character recognition (OCR). The ability to digitize texts massively and catalogue them easily required a technology that would not destroy the structure of a book and also convert photographs of texts into digital print scans. Google had created a way to quickly do full-text search of old books.

Verba was impressed. After reviewing the plan presented, he began to negotiate with the disparate parts of Harvard’s library system. Harvard’s libraries are very decentralized. Each library is its own fiefdom. Unlike the University of Michigan where the library director’s office is housed inside one of the university libraries, the director of Harvard’s libraries works in a small canary yellow house purposely set aside from Harvard’s many libraries. The director is not to show favoritism to any particular library in the system (Battles, 2003). Verba’s task was to coordinate between the different libraries to achieve consensus. Everyone at Harvard had access to the libraries, but not all contents were catalogued in the same way. “Technology brought us together” (Verba, 2010).

Verba worked to convince the various subparts of Harvard’s libraries to join the project with Google. Librarians voiced concerns about any potential damage to the books. Some of Harvard’s librarians were very excited about the project. This was a chance to take what Verba called “dead books,” books that received very little readership, and open them up to a new public, potentially a global public. Some librarians were not impressed. Between Google, Verba, and other librarians in the Harvard system the quality of the

digitized scans was a concern. “They were pretty responsive to that. They were willing to redigitize if pages were skipped” (Verba, 2010). After much negotiation and support from Summers, Verba went to the faculty to make the announcement of the partnership with Google. The faculty members voiced the same concerns as the librarians. Verba had to negotiate again. “The faculty in the humanities and social sciences didn't want their access disrupted...Google wanted the books for two weeks. The faculty said that [Google] could have them for a half day. We settled on a week” (Verba, 2010).

At 9 am on December 14th, 2004 Harvard publicly released details on the Harvard pilot program with Google (Palfry, 2004). Verba knew from the beginning that there were complications with copyright that extended beyond his understanding.

I'm not a professional librarian nor a professional specialist in copyright law...We decided to go ahead and digitize the set of books that we knew didn't raise any copyright issues. Even that was slightly complicated because a lot of our books are from other countries that have different copyright laws. So it wasn't as straightforward and easy as it first appeared to me. (Verba 2010)

Harvard moved forward with the project despite the risks. Making Harvard's content available online was a great opportunity to extend the reach of the university's valuable resources. “Faculty are recruited because they want to come to the library” (Verba 2010). Even though access could cause Harvard to lose its unique position in the world, the faculty and the librarians were committed to opening access to the university's resources.

Harvard engaged in a project that fulfilled its mission while doing business with Google, a commercial entity with its own goals. “This is a very expansive corporation...they talked about it being relatively costless for Harvard. [They] wanted to do it to further their main goal, which was to bring people to Google and sell advertisements to make money that way” (Verba 2010). Under the proposed project, Google had the right to use Harvard's collection for commercial purposes subject to established terms. If Harvard was going to contribute their assets to a commercial partnership, a commensurate benefit needed to be delivered to the public.

For Verba, the decision to partner with Google came with a tremendous opportunity for public good. Verba began his career doing the kind of large-scale empirical studies pioneered during World War I with a goal to examine how different citizen groups gain voice in a democracy. “I was very interested in the fact that this would be available to folks in Oshkosh,” (Verba 2010). Verba saw a Google partnership as a way to bring Harvard to Oshkosh and Oshkosh to Harvard. “It was really a win-win situation for Google, Harvard and the public with some limitations” (Verba 2010).

Verba was not blind to the potential consequences. He was formerly chairman of the board for Harvard University Press. In that position, he witnessed anxiety about the future of publishing, especially the spread of digital texts. "Scanning the whole text makes publishers very nervous...They have to be assured there will be security, that no one will hack in and steal contents, or sell it to someone" (Verba as quoted in Hafner 2005). At their introduction, public debates over eBooks focused on the medium's ability to reproduce the form and feel of the book (Striphas 2009). Verba pointed to another industry fear – book pirates.

In 2005 the Authors Guild filed a class action lawsuit Against Google with the Association of American Publishers joining in a month later requesting injunctive relief. Their primary complaint was the “massive copyright infringement” that came from Google's library partnerships. The University of Michigan's relationship was cited in both the Authors Guild and American Association Of Publishers court documents as evidence of Google's neglect to abide by the rules of United States Copyright Law.

"I was surprised by the vehemence...It's become much more controversial than I would have expected," (Verba as quoted in Hafner, 2005). Verba saw potentials for controversy, but not the active response by the Authors Guild and American Association Of Publishers. Google claimed publicly that its project to scan in-copyright and public domain works was fair use. Harvard felt it was doing a tremendous public good by putting parts of its collection online. In 2006, Lawrence Lessig, a founder of the Free

Culture movement and member of Harvard's Berkman Center for Internet and Society, defended Google's project. "It is my view that Google is protected by fair use" (2006). Lessig cited *Kelly v. Arriba Soft* to defend Google's scan first and ask questions later practice. A search engine's display of thumbnail images of copyrighted works was a fair use in the ninth circuit's decision on *Arriba Soft* (Kelly 2003).

"Google Books, as a part of the Internet, is a way in which all sorts of interesting things can happen that one would hope make citizens more equal," (Verba 2010). Verba remained committed to the idea of widespread citizen participation. He knew that citizens vary tremendously in their access to information. In one of his most recently published papers "Who Speaks? Citizen Political Voice on the Internet Commons," (2011) Verba with Schlozman, and Brady found that politics online echo inequalities offline. The team and Verba held on to some hope that as the generation that has grown "Always On" matures, more savvy political actions will be available and effective (Chen 2011). The project to partner with Google was a way to contribute to a dream of expanding citizen access to information.

On September 21, 2006 the *Harvard University Gazette* announced Verba's retirement. He had been director since 1984, the second-longest running tenure of any one director at Harvard. Deanna Marcum, then the associate librarian of the Library of Congress, said, "I don't think the library world has ever had a better friend" (Walker, 2006). Verba oversaw Harvard Libraries' transition to digital access, putting into place a digitized Harvard Depository (HD). HD allowed browsing of remotely stored out-of-copyright books. The Open Collections Program digitized and made available resources online on specific topics like Women Working, 1800-1930, Immigration to the United States, 1789-1930, and Contagion: Historical Views of Diseases and Epidemic. Harvard Libraries' relationship with Google established the new digital catalogue system, HOLLIS (Harvard Online Library Information System), linking Google's search engine with Harvard's resources.

“I don't know if you know the work I've done called *The Case for Books*. I mean that basically says what I have to say about Google,” (Darnton, 2010). It was the first five seconds of my interview with Robert Darnton, the current director of Harvard University's libraries. Originally, I was only to serve as the American affiliate to the European grant entitled HERA (Humanities in the European Research Area). Helle Porsdam, author of *Copyright and Other Fairy Tales: Hans Christian Andersen and the Commodification of Creativity* (2006), and Professor Mia Rendix of the University of Copenhagen's SAXO Institute were to be the lead interviewers. Porsdam is the Primary Investigator for a European project known as CULTIVATE, a three-year research collaboration between the universities of Copenhagen, Uppsala, London, Utrecht and Iceland. Their project “Copyrighting Creativity: Creative values, Cultural Heritage Institutions and Systems of Intellectual Property,” investigates the relationship between creativity, intellectual property law, and cultural heritage from a European perspective (SAXO Institute 2012). Darnton and other's at Harvard wanted to forge relationships with European researchers to better understand the legal and cultural underpinnings for national digital public libraries, a project Darnton has helped exist in the United States. The original intent for the May 14th, 2010 interview was to continue a collaborative conversation between European and Harvard researchers seeking to make digital texts more available on the World Wide Web.

After remaining dormant for much of its life, Iceland's Eyjafjallajökull volcano erupted on March 20th, 2010. By April 14th, 2010 Eyjafjallajökull erupted again after a brief pause. Eight hundred people were evacuated from nearby locations. By April 15th the BBC reported cancelled flights from the UK, the Republic of Ireland, Denmark, Norway, Sweden, Finland and France (BBC 2010). Eyjafjallajökull wreaked havoc on the entirety of Europe in May of 2010 when its continued eruptions spewed an amount of ash deemed out of the range of tolerance for airplane engines by the European airline insurance industry. Moment by moment, Rendix and I tracked flight schedules. Each

cancellation signaled that an interview originally intended to connect Harvard to Europe would only connect Harvard to Iowa - me, University of Iowa Communication Studies Ph.D. Candidate and HERA's American Affiliate to the research grant, Evelyn Bottando.

“I am his [Verba's] successor and I did not know anything about Harvard's Agreement with Google when I accepted the job and arrived, but I found out very fast” (Darnton, 2010). In July of 2007, just after moving into his office, Darnton learned of what he called Harvard's “secret” talks with Google (Darnton, 2010b). Harvard had joined Google in an effort to digitize millions of books, a project that moved from a pilot program to full implementation by the time Darnton took over as director. “I thought it was an excellent idea. I am in favor of creating a great digital library that would be accessible to everyone... But, I was *not* in favor of digitizing copyrighted books” (Darnton 2010, emphasis added by the writer).

Robert Darnton was born on May 10, 1939. His father, Byron Darnton, was a famous American reporter and war correspondent for the *New York Times* during World War II. He was killed was killed off the coast of New Guinea in 1942 by a bomb dropped from an American B-25 Mitchell bomber. General Douglas MacArthur, personally reported on Byron Darnton's passing to the *New York Times* and to Byron's wife, Eleanor. “He served with gallantry and devotion at the front and fulfilled the important duties of war correspondent with distinction to himself and *The New York Times* and with value to his country,” wrote General MacArthur (Newseum, 2012). He was buried with full military honors. The military gave Byron Darnton's name to a 10,500-ton ship. At the christening the director of Harvard University's libraries once scrawled in crayon his name on the hull. Darnton's father passed when he was only three years old. Byron Darnton last wrote, “Jap or ours?” in his notebook before the bomb fell (Darnton, 2005). Robert Darnton was an orphaned work, a war orphan.

Like father, not like son. Darnton quickly graduated from Harvard in 1960, Magna cum laude and Phi Beta Kappa, completing his degree in only three years. He

went to Oxford on a Rhodes scholarship, finishing his PhD in 1964. After Oxford, Darnton like his father became a newspaper reporter for the *New York Times*. By 1968, Darnton would leave the newspaper business to move on to academic life, a professorship at Princeton University. His research centered on the history of the book as an object firmly embedded in the cultural, political, and economic circumstances of Enlightenment France. While never firmly embedded in the publishing industry, Darnton has written fifteen books on its history and culture. Some are in French.

“The other libraries that Google first approached in this country – Stanford, Michigan, and the University of California did agree to let Google digitize the copyrighted books, but we did not. Nor did the New York Public Library” (Darnton 2010). At the time of the interview, the Amended Settlement Agreement forged between the Authors Guild, American Association Of Publishers, and Google was still under review by Judge Denny Chin. The 2005 class action lawsuit was against Google, not the partner libraries. The focus of the lawsuit itself was a question of whether Google’s display of snippets of copyrighted works was fair use. Rather than litigate, Google, the Authors Guild, and the American Association Of Publishers settled on October 28, 2008. As the court weighed whether the Settlement was fair to all parties involved in the suit, it received over four hundred filings of those listed in the class action lawsuit and “amici,” friends of the court who wanted to voice their concern over the settlement. Of the objections to the settlement, two hundred and ninety-five objections came from foreign filers (Butler, 2009). With so many filings, Google was concerned that the settlement would be thrown out. The first settlement was withdrawn, rewritten, and resubmitted as the Amended Settlement Agreement. “When the settlement was announced in October 2008...Harvard said that we were not ready to sign on to the settlement, but that we would continue to study it. I'm glad we did that because the settlement has changed” (Darnton 2010). While Harvard had an established relationship in place with Google, it refrained from involvement in the settlement. Darnton noted that The University of

Michigan, Stanford, and the University of California libraries indicated that they were in favor of the settlement.

Harvard holds a peculiar stance in comparison to other Google library partners. Stanford had a relationship with Google at a very early age. Stanford owned the patent for the PageRank™ link analysis algorithm developed while Larry Page and Sergey Brin were still graduate students at Stanford, the algorithm that is fed by data gathered from the digitization of books from libraries throughout the world. Like Harvard, Stanford is a private university whose funding comes from their private endowment. The University of Michigan and the University of California are funded by tax revenues and serve an alternate mission, the public benefit. Harvard, one of the wealthiest universities in the United States, held a cautious position as the settlement moved forward. A cautious relationship with Google was necessary to help protect the university against liabilities.

On September 12th, 2011 the Authors Guild, the Australian Society of Authors, the Québec Union of Writers and individual authors Pat Cummings, Roxana Robinson and T. J. Stiles filed a lawsuit Against The Regents of the University of Michigan, The University of California, The Board of Regents of the University of Wisconsin System, The Trustees of Indiana University, Cornell University, and HathiTrust, the institutional repository created by a collaboration of CIC member institutions. Paul Aiken, executive director of Authors Guild, said of the lawsuit, “We’ve been greatly concerned about the seven million copyright-protected books that HathiTrust has on its servers for a while” (Bosman 2011). Harvard has reaped benefits from its relationship with Google. Harvard has not been sued. Advantage Darnton. Advantage Harvard Lawyers.

“On being in bed with Google”

Paul Courant, the University Librarian and Dean of Libraries at the University of Michigan, noted on his blog,

Google is on pace to scan over 7 million volumes from U-M libraries in six years at no cost to the University. As part of our arrangement with Google, they give us copies of all the digital files, and we can keep them forever. Our only financial

outlay is for storage and the cost of providing library services to our users.... We have a generation of students who will not find valuable scholarly works unless they can find them electronically. At the rate that OCA [Open Content Alliance] is digitizing things (and I say the more the merrier and the faster the better) that generation will be dandling great-grandchildren on its knees before these great collections can be found electronically. At Michigan, the entire collection of bound print will be searchable, by anyone in the world, about when children born today start kindergarten. (Courant, 2007)

Courant's post, "On being in bed with Google," inspired the title of this chapter.

The post was a response to the critiques launched Against The University of Michigan and other libraries that chose to partner with Google. The partnerships came with immense benefits. Google was faster and cheaper than the competition. The choice to get in bed with Google held for the same reason in France. Google was faster and cheaper than their French competitors. Harvard was more cautious. Fast and cheap is nice, but Harvard preferred to move slow. Harvard reaped the benefits of a relationship with Google, cheap and fast digitization of public domain works, while hedging against potential liabilities. Only a few years after Courant's post, The Regents of the University of Michigan and the members of HathiTrust have been sued.

This aim of this chapter has been simple: examine the way Google persuaded libraries to join the Library Partners program in France and in the United States. The two locations present peculiar allegiances for a company that has grown in power and influence throughout the globe. To the Parisian French, Google represented a threat to cultural hegemony and the fears of the dominance of American corporations. For Bazin, Google was a means to an end. After years of being ignored by the French government, Bazin and the Municipality of Lyon forged an alliance with Google to digitize their books.

In the United States the decision to partner with Google came with a different consequence, lawsuits. The University of Michigan and Harvard make excellent foils. Courant actively chose to get in bed with Google. It began as a great way to expand access to information while also keeping up relations with a famous alum. Darnton never meant to get in bed with Google. Harvard had already forged a partnership before he took

the position in 2007. Verba, Darnton's predecessor in the role, knew there were potential liabilities for the partnership. He felt that the commensurate benefit for expanding access to Harvard's resources outweighed potential consequences. Sidney Verba got in bed with Google, but Darnton never got out of bed with Google. Harvard remains a library partner.

Often forgotten in tales like these are those libraries that actively chose to abstain from a Google partnership. The Boston Public Library, one of the oldest and most revered libraries in the United States, chose to make a partnership with the Open Content Alliance (OCA). The OCA represented the combined efforts of Yahoo!, the Internet Archive, the University of California, and many others to digitize books and make them permanently available through the website of the non-profit headed by Brewster Kahle, the Internet Archive. The cost to scan with the OCA was about \$30 per book. Google presented a no-cost partnership to scan copyrighted and public domain books. The OCA, slow and costly, has resulted in digitized scans guaranteed in the public domain. The Google Library Partnerships have resulted in lawsuits.

“Goddamn it, Brewster...”

CHAPTER IV

ASSESSING THE SETTLEMENT: BEYOND GOOGLE BOOKS

Google is a company built by engineers. The initial reaction of engineers to regulation -- and I speak as someone who has had to explain legal rules to computer scientists many times -- is simply to reject large amounts of them as 'stupid' and thus obviously not real.

James Boyle, *Huffington Post*

...the Gordian knot of Poor-Laws not cut, but untied – all by a simple idea in architecture!

Jeremy Bentham, *Works*

Introduction

Bottando: So, if you feel you have such a good fair use defense, then what prompted the decision to not go for a fair use case?

It was eighteen minutes into what was scheduled to be only a thirty-minute interview with Jon Orwant, then the head engineer of Google's book scanning efforts at their Cambridge, MA office. Without prompting or request, Orwant expanded the interview to over fifty minutes. Before discussing the Google Books Settlement Agreement, Orwant walked me through much of the operation, a full three floors of Cambridge Center in Kendall Square right next to MIT. Upstairs was a book press purchased from Craig's List, for decoration not operation. A wall lined with the spines of books sent in by publishers were arranged to resemble a bookshelf. Part of this wall opened to a small boardroom, visible from a window next to a fake bookcase.

By our interview in May of 2010, much had been said about the Google Books Settlement, the Amended Settlement Agreement, and Google's early fair use defense for its work with libraries. The 2005 Authors Guild and American Association of Publishers lawsuit against Google was viewed as a tactical maneuver by the Authors Guild and publishing industries, an attempt to defend the "enclosed garden" view of culture. Arguments centered solely on fair use miss the grander vision of Google's digitization efforts throughout the world, and the significance of fair use as an economic tool for American corporations.

This chapter makes an intervention in public rhetoric surrounding the Amended Settlement Agreement by mapping the constitutive conditions of its creation, contrasting Google's role as a global corporate power with its embrace of the reform-based ethos of the open source coder community. By examining how a public rhetoric of reform masks self-interested behavior, this chapter examines both claims made in support of fair use and those in support of the Amended Settlement Agreement with the Authors Guild and American Association of Publishers, and it evaluates possible consequences for fair use and citizenship should the Amended Settlement Agreement be approved.

Fair Use in the United States

Remixers, mash-up artists, and cultural appropriators of all kinds have taken fair use as a sturdy legal defense for remix culture (Aufderheide & Jaszi 2011). Google's work to create a massive snippet-view online card catalogue for books appeared to be a strategic advance of fair use from many in the Copyleft movement, a term appropriated from Richard Stallman's *Free Software, Free Society*. "Proprietary software developers use copyright to take away the users' freedom," argued Stallman. "We use copyright to guarantee their freedom. That's why we reverse the name, changing 'copyright' into 'copyleft'" (2002: 91). Fred von Lohmann, then the Senior Intellectual Property Attorney for the Electronic Frontier Foundation and Lawrence Lessig, founder of Creative Commons, both members of the Copyleft movement, supported Google's legal defense of "snippet view."

The four factors of fair use, codified into United States copyright law in 1976, ensure that artists, writers, and corporate authors do not receive blanket monopoly protection for their works. Copyright in the United States developed with a limited scope to enable rights holders protections over the reproduction of works without shutting down incentives to create and critique. The history of Anglo-Saxon copyright, stemming back to the 1710 Statute of Anne, "An Act for the Encouragement of Learning," never held an unlimited right to control use of a work. While there is no one international copyright,

each nation has some provision for a use of copyrighted material beyond the control of the rights holder (Hemmungs Wirtén 2011). A copyright differs significantly from physical property in that rights holders are only granted a limited monopoly to regulate the reproduction, distribution, and authorization of a work (Lessig 2004). Fair use protects those who copy and distribute small portions of copyrighted works as long as the purpose enhances the public good (Vaidhyanathan 2001). The doctrine became a flashpoint for scholarship by the nineties when the recording industries began attacks against profitable rap artists. Rap music used the turntable and the sampler to enmesh snippets of works still under copyright without seeking permission from the rights holder or paying clearance costs. It was a form of remix that anticipated “remix culture” before the term’s birth (McLeod & DiCola 2011).

The distance between rap’s rhythms and rhymes and Google’s algorithm is not too far. Consider the case of 2 Live Crew. For those seeking to advocate for “thin” rather than “thick” copyright protections, Google was to books what 2 Live Crew was to Roy Orbison’s bass line. Acuff-Rose Music, publishers of Orbison’s hit, sued Luther Campbell of 2 Live Crew in 1991 for sampling the guitar, bass line, and the drumbeat of his work, “Oh, Pretty Woman,” without requesting permission. Originally, 2 Live Crew sold their work as a comedic satire. They offered to pay for the right to use Orbison’s song, requesting permission from Orbison’s management. 2 Live Crew released their song before Acuff-Rose gave its return response. They did not give permission for 2 Live Crew to sample the song (Demers 2006). The lawyers for 2 Live Crew claimed the work was a parody. The case went to litigation, as high as the Supreme Court. Though the record was sold commercially, the Court unanimously voted that the Crew had not infringed. The commercial parody qualified as fair use (McLeod 2007).

While significant for many reasons, the decision to defend the Crew’s “Pretty Woman” as a parody work and an example of fair use stands out because it was a commercial product that received a profit from the musical quotation of another’s work.

A fair use defense is supported by a case-by-case analysis of the facts and the summaries of previous cases (Lohmann 2005). Google, a private company scanning copyrighted works for display on the World Wide Web, could have pushed forth the next major case to help advance arguments for fair use. Even an unabashedly commercial use of a massive number of copyrighted works could be defended under the statute. Fair use is an affirmative defense, leaving the defendant with the burden of court costs and lawyer fees necessary for proving that a case was "fair" and not an infringement. Cases from private interests like 2 Live Crew and Google are a means to expand case law surrounding fair use. Yet, Google settled. The consequences of Google's settlement extend far beyond the Crew's defense of lyrics whose subject, a "hairy, bald, and unfaithful" woman, parodied Orbison's "alluring female" (Demers 2006). The settlement envisions a new licensing system for orphaned works called the Book Rights Registry.

Without pause, Orwant answered my question. Why did Google not move forward with a fair use case? "Because we realized we could cut the Gordian knot of rights clearance" (Orwant 2010). He continued,

[The Settlement] enables us to do all sorts of things that we couldn't do even if we went back to litigation and won the fair use case. With the settlement, and it is a complicated document, but the settlement allows us to do a whole lot of things. It allows us to create versions of these books that we've scanned for people with print disabilities. Think blind people or people who are paralyzed and unable to turn the page. It allows us to by default [show] not just snippets but 20 percent of the book. It allows us to put a public access terminal in every public library in the United States giving people full access to a huge swath of the books that we've scanned which would be fantastic for education. For...accessibility. It allows us to *pay* for a non-profit organization called the Book Rights Registry whose job it would be to track down rights holders. (Orwant 2010)

Michel Foucault was a keen critic of the reformist elite. Jeremy Bentham was an English philosopher, jurist, and social reformer. He championed the idea of animal rights, being called "the patron saint" of animal rights in recent anthropology scholarship (Benthall 2007). Bentham championed women's rights, rejecting their inferior status in English law (Williford 1975). His essay, "Offences Against One's Self," was the first known argument for the decriminalization of sodomy, a crime then punished by hanging

(Bentham & Crompton 1978). Foucault discovered Bentham's weakness and the weakness of an entire field of social reformers. As Peters mentions in *Courting the Abyss: Free Speech and the Liberal Tradition* (2005), Foucault chose not to critique the conservative Edmund Burke or the reactionary Joseph Marie de Maistre. He critiqued a radical social reformer whose politics resembled his own. Bentham's inventive design for prison reform, a new technology called the Panopticon, revealed that the will to power became embedded in the creation of well-intentioned reform technologies.

The Panopticon was a multifunctional machine of discipline designed to be a more efficient instrument of power and observation. The design enabled the control of prisoners, the observation of orphans in educational experiments, and could be used for quarantining. "Morals reformed," sells Bentham, "health preserved – industry invigorated – instruction diffused – public burdens lightened" (Bentham qtd. in Foucault 1977: 207). The instrument, a brilliant design of architecture, promised to untie the Gordian knot of Poor Laws, a facet of English common law that placed restrictions on the movement of laborers and the homeless. "Economy seated, as it were, upon a rock," continued Bentham. The design was intended to cheapen the expense of prisons by reducing the labor needed to oversee prison populations. The marriage of technology with reform created a cultural object that fed on prisoner paranoia.

The Amended Settlement Agreement is driven by similar reform-minded promises of Bentham's Panopticon. Both projects rely upon a faith in technology to enact social change. A rhetoric of reform masks self-interest. The Panopticon introduced surveillance as an efficient measure to manage prison populations. Google Books and the Amended Settlement Agreement use surveillance as a means to increase sales of published works. In legal cases with the Authors Guild and the American Association of Publishers, Google hedged. The company preferred the secured vision of the Amended Settlement Agreement to the potential losses of a fair use case. Despite hedging against fair use case in favor of a class-action settlement, fair use remains important to Google

and other computing industries in the United States as a means to secure their dominance in the technology industry.

Fair use, Global Power, and Global Google

Academics, teachers, documentary makers, remix artists, and technology companies rely on the fair use doctrine to create their works without paying clearance fees. The doctrine brings together strange bedfellows. The culture of remix artists uses fair use as an anti-corporate banner. To appropriate without permission is the remix culture's way of speaking out against corporate power (Aufderheide & Jaszi 2011). The remix culture's use of fair use contrasts with corporate development of fair use case law. *Campbell v. Acuff-Rose*, even with its associations to parody and rap, remained a case about business, profits, and property. Businesses, the remix culture, and critics all kinds benefit from the fair use doctrine. Google's business model depends on it.

Google, Inc. is a part of what the Computer and Communications Industry Association (CCIA) called the "fair use economy." Google is a member of the CCIA, which released in 2010 their report *Fair use in the U.S. Economy: Economic Contribution of Industries Relying on Fair use*. It was a report compiled by researchers from Capital Trade, Incorporated, a firm specializing in research for anti-dumping lawsuits. They have often written reports for the protection of domestic corporations from heavy European Union trade regulations. Patricia Aufderheide and Peter Jaszi published *Reclaiming Fair use: How to Put Balance Back in Copyright* (2011) to advocate for best practice fair use documents for artists and professional groups. Aufderheide and Jaszi aim to support those artists and producers who can least afford legal protection from expensive copyright litigation. Members of the CCIA have other concerns. The computing industries can handle major lawsuits from other large corporations. The CCIA report advances an argument for fair use as a means for the United States to remain competitive in a global economy.

For companies like Google, Apple, and Microsoft, fair use is not just that part of U.S. copyright law that enables a lively ecosystem of culture and critique. Fair use is big business. “We are only beginning to fully understand in the 21st century that what copyright leaves unregulated—the ‘fair use economy’ —is as economically significant as what it regulates,” wrote Ed Black, the current president and CEO of the CCIA. His preface made an important distinction. The “fair use economy,” is an unregulated economy. The report claimed this economy contributes \$4.6 trillion in revenues to the American economy, roughly one-sixth of total U.S. gross domestic product. (Shelton 2007).

The report was not created to speak an ultimate truth about the United States or the global economy. Its compilers hailed the term into existence by inventing the boundary lines for economic activities considered “fair use.” It was a persuasive document, intended to advance an argument to a particular audience for a specific purpose. In “I Collage, Therefore I Am,” the introduction to *Cutting Across Media: Appropriate Art, Interventionist Collage, and Copyright Law* (2011), editors McLeod and Kuenzli argue, “Google, is more concerned with its bottom line than anything else, whether we are talking about copyright censorship in the United States or state censorship in China” (18). In *The Googlization of Everything: (and Why We Should Worry)* (2011), Vaidhyanathan argued that Google is dangerous like the airplane or the automobile. The danger is an uncritical faith in the promise and possibilities afforded by this company’s work and new technology. He cautioned, “It’s a publicly traded, revenue-driven firm that offers us a set of tools we can use intelligently or dumbly” (4). Ken Hillis, Michael Petit, and Kylie Jarrett present a more nuanced vision of Google’s economics in *Google and the Culture of Search* (2012). “There is something beyond the purely economic or political that animates Google's success” (7). Google’s consecrated status as a trusted search engine feeds its corporate success.

Unlike Aufderheide, Jaszi, McLeod, Kuenzli, and Vaidhyanathan, Google and the CCIA speak a language of fair use that crosses the aisles of American politics in a way not possible for the lone artist, culture appropriator, academic researchers, or the Copyleft movement. Google and the computing industries speak with lobbyists. Both democrats and republicans, the two parties that argue the fate of copyright law in the United States, have been lobbied by Google, and other companies in the high tech industries. Unlike Aufderheide, Jaszi, McLeod, Kuenzli, or Vaidhyanathan, Google and other companies will contribute a portion of their revenues to finance particular political candidates. The future of fair use and libraries is about money and power.

Google, Apple, Microsoft, and companies represented in the CCIA do not only operate in the United States domestic market where the fair use doctrine has enabled their growth. These companies must negotiate with the complex provisions of copyright bound within state borders. Fair dealing, an enumerated set of possible defenses against an exclusive copyright found in other common law states, is more limited from a commercial perspective. Canada's fair dealing is a user-focused exception. "The fair dealing exception, like other exceptions in the Copyright Act, is a user's right," wrote the Canadian Supreme Court in *CCH Canadian Ltd. v. Law Society of Upper Canada* (Geist 2005). In contrast with the United States, fair dealing in the common wealth states rarely defends actions with a commercial character (D'Agostino 2008). Companies operating in Canada, Australia, New Zealand, Singapore, South Africa, and the United Kingdom all must abide by each country's particular fair dealing guidelines. While the rights provided under the guidelines are not as expansive for technology companies beyond the bounds of the United States, neither is litigation culture or the costs for infringement (Aufderheide & Jaszi 2011: 148).

Copyright remains national law, a powerful instrument for securing markets and global power. An even agreement of how that law should be reevaluated does not exist (Hemmungs Wirtén 2011). Many American industries compete for shaping the future of

copyright. The mere fact that the CCIA created a document to defend fair use as a viable and important contribution to the economy of the United States signals an important and urgent shift in corporate discourse. The future of copyright legislation and the future of fair use is being argued for and shaped right now. Google, a lobbying organization, argues for its preferred corporate vision of copyright at the national and international levels. The Google corporate vision of copyright, in contrast with other U.S.-based industries, includes fair use.

Ed Black continued in his Preface to *Fair use in the U.S. Economy*, “We must be careful that any attempt to alter our intellectual property laws not overlook any crucial sectors of the economy.” He argued that safeguarding the fair use economy, an economy invented by the industry report, will ensure that innovators in the technology industries “maximize their contribution to our nation’s economic health,” (2010: 4). Overbroad copyright regulation, he argues, will not. Google and other computing industries are not the only U.S.-based companies competing in a global market to shape intellectual property laws. They are not the only companies heavily lobbying the United States government. While the CCIA makes economic arguments for the importance of fair use, another national coalition of industries has successfully lobbied for its own vision of copyright – the Motion Picture Association. Hollywood is fighting too, but for a different purpose. Hollywood is on an international hunt for pirates.

Once called the Motion Picture Export Association of America, the group changed its name in 1994 to simply the Motion Picture Association (MPA). Deleting “America” from their title pointed to the association’s shift in goals and values. It moved the American movie industry away from seeing itself primarily as American. The MPA, consisting of Buena Vista International (Disney), Columbia TriStar Film Distributors, 20th Century-Fox International, MGM, Paramount Pictures, Universal International Films, and Warner Bros. International Theatrical Distribution, signified in their change of name a shift in priorities. Once local in focus, the motion picture industries shifted their

frame to the world. The change in name signaled the industry's priority for the international market (Miller et. al., 2005).

National differences in laws regulating reproductions determine where non-permitted copying may occur. "The Intellectual Property Defense Industry," a term Adrian Johns coined in *Piracy: The Intellectual Property Wars from Gutenberg to Gates* (2009), represents collaborative efforts between public institutions and private companies seeking to uphold and extend the scope of copyrights, patents, and trademarks. The MPA maintains "Film Security Offices" in Los Angeles, New York, and London, but also in Paris, Hong Kong, and South Africa. The MPA argues that the borderless flow of digits and bytes enabled by digitized properties endangers their revenue model. Vaidhyathan warned his public about the *Googlization of Everything*. He gave reasons for why we should worry about Google's expansive reach into the daily lives and legal regimes of citizens across the globe. Hollywoodization, the spread of Hollywood's values for intellectual property, is an older and more cemented form of cultural influence. Google and other computing industries benefiting from the American version of fair use are just beginning to forge alliances in areas where film and entertainment industries have existed for years.

The metaphors used now to discuss copyright create copyright's future. Global Hollywood and Global Google match wits in an international metaphor war, while making focused efforts in the domestic market to influence law, policy, and culture. Hollywood has been at the game much longer than Google. Successfully tapping into a rhetoric of moral righteousness, the MPA extends its worldvision into international markets by articulating non-permitted distribution of copyrighted goods to maritime piracy. Maritime piracy is the one crime warranting universal jurisdiction under international law (Bassiouni 2008). Exceeding national jurisdiction, the language of piracy unites national leaders and supra-national institutions. The "Film Security Offices" invented and funded by the MPA are coordinated by the Joint Anti-Piracy Intelligence

Group (JAPIG), the intellectual property counterpart to Interpol. JAPIG has the power to track cargo vessels across oceans and tap local customs agents to intercept counterfeited goods (Johns 2009). Google's renting of Versailles is embarrassingly meager in contrast with Hollywood's decades-long success to persuade states, corporations, multinationals, and world bodies of its global vision of the right to copy.

Fair use is determined at the stroke of a judge's pen, but that pen and the judge's judgment exist within culture. Case law language is determined by judges and lawyers, not artists and activists. Yet, this language creates the world citizens, artists, and activists must live within. In the United States, judges alone do not determine the future of fair use and copyright. Copyright legislation written by Congress negotiates the economic and cultural bargain of copyright, the balance between public benefit and private reward for published works. Some shifts in metaphor happen at the level of corporate lobbying. Others happen in the realm of everyday life. Hollywood distributes free antipiracy curricula to schools and local organizations. A 2006 Californian law mandated public schools to teach curricula centered on "the implications of illegal peer-to-peer file sharing" (Hyde 2010: 7). Adopting rhetoric from the student-centered paradigm of educational research, a pedagogical mode that encourages open inquiry among students, Hollywood offered L.A. Schools an exercise called "Living in a Fishbowl." Students are given roles to play. The "computer user" is headless and incoherent in comparison with his movie-producing counterparts. The movie workers all have jobs to do, and just want to get paid. The "computer user," who does not see piracy as a big deal, appears to be jobless" (Hyde 2010).

Everyday life is filled with daily "poaching," a tactic citizens use to operate inside systems of discipline. Everyday poaching, a moment on YouTube to view a copyrighted television program posted by an independent "computer user," becomes an everyday working citizens' way to "make do" with the travails of everyday life. Even more post images and video on Facebook to share small snippets of everyday life to a self-selected

public of “friends,” some involve bits and pieces of copyrighted works embedded in user-generated videos and photographs. These actions, supported on the servers of two major Silicon Valley corporations, forge a resistance to the controlling assumptions of industries claiming to be content creators. The resistance is closer to the term’s use in electronics, representing dissipation rather than opposition to the dominant flow of content. Those posting the minutia of everyday life to YouTube and Facebook make no necessary claims to counter-hegemonic projects (Hall 1973). They represent instead the power potential of inertia and inventive appropriation. The action of what de Certeau called *la perruque* (“the wig”) involves the moment where the worker uses company time to conduct personal business, revealing that complete control over time, space, and the mind as found in the Benthamite Panopticon is not possible. James Carey proposed that the mind is a poaching mechanism itself, “associative, cooperative,” the mind produced and reproduces a sustained reality (1989: 74). *La perruque* enables management of an environment filled with the “detritus of commercial culture” on a moment-by-moment basis (Coombe 1998: 2).

Computing industries seek to secure advantage in the marketplace by creating new distribution devices for these modes of daily consumption. Both Facebook and Google make strategic maneuvers to remain relevant to their public of consumers who simultaneously fulfill the role of citizen, consumer, and producer. Google and the computing industries lobby to preserve their vision of fair use as a tool of economic power while also working at the market level to become entrenched in the daily lives of United States’ citizens, the imagined voting public. Two competing industries seek to create the metaphors for how citizens’ in everyday life imagine the world of digital property, those claiming to be content-producing industries like the RIAA, Authors Guild, and the MPA, and computing industries creating devices and software to manage digital distribution. “People don’t obey laws that they don’t believe in,” claimed Litman in *Digital Copyright* (2006: 112). She continued to explain that her claim was not about

an a priori desire for lawlessness or protest in the minds of the populace. Laws like copyright hold a symbolic power while remaining the realm of specialists (Coombe 1998). Copyright law, a dense aggregation of specific statutory provisions, represents years of ongoing battles between industries, lobbying organizations, and elected representatives. It is not the realm of everyday talk. I taught the Rhetoric of Intellectual property at the University of Iowa for four semesters, a specialized introductory course to college writing and speech within the realm of a major contemporary controversy. Undergraduate students rarely related to specific segments of the copyright code. Students did relate to YouTube.

Paper after paper written in a class introducing students to Lawrence Lessig's *Free Culture* (2004) and Kembrew McLeod's *Freedom of Expression* (2007) defended YouTube's inventive relationship between the pop music industry and Google, seeking to be a new distribution mechanism for cultural products. Google as YouTube created the metaphor for how these students, the current and future voting public, viewed the function of copyright. Google as YouTube was seen as a market innovator. "If you're dissatisfied with the way the spoils [of copyright] are divided, one approach is to change the rhetoric" (Litman 2006: 79). Google is changing rhetoric as a corporate actor within the daily lives of a YouTube-using populace.

The arguments hanging in the balance around the Google Books project metaphorically align to a similar narrative. Google casts itself as an altruistic market innovator, both its scanning method and distribution mechanism are innovations for publishers. Citing fair use, the company crafted a simple rhetoric surrounding technological innovation. The Authors Guild and American Association of Publishers held a different vision. Copyright owners, be they the publishers of books or publishers of beats, want to get paid. The tale of Google Books is not as simple as innovation versus authorship. The artist and publisher have long lived in a relationship involving particular methods of payment. Each desire a just division of financial rewards derived from the

creation of works. At the micro-level, a copyright holder represented by an individual writer has a legitimate interest for compensation. Once associations and corporations claiming to represent all authors and publishers take on this metaphor, the scope of control widens. Copyright owners, both individual writers and corporate authors, want control over their works. Anglo-Saxon copyright has not allowed for exclusive ownership rights as found in the French *droit d'auteur*. In the United States, even with multiple extensions of the copyright term limit, a tense vision of public benefit remains. Yet, extending the term limits for copyright has created a confusing cultural standard. Even as the Copyleft mounts to defend fair use, generations have grown up with a Mickey Mouse that has never entered the public domain (Lessig 2008).

Much hangs on the future of fair use. Anglo-American copyright balances the public benefit of published works against the private incentive to create, a much different interpretation than that of French moral rights giving authors perpetual protection against defamation of works (Hemmungs Wirtén 2004). The open-ended nature of the Anglo-American fair use doctrine has enabled a creative culture to flourish on the World Wide Web. Not all uses of copyrighted works require permission. In common law systems, the flexible ability to create new works from portions of old are of benefit to both artists and Google. Fan fiction, mash-ups, memes – the entire world of Internet nerd culture depends on a reasonable flexibility to use copyrighted works without seeking permission or paying clearance costs. Google feeds on and is fed by this culture. The corporation's self-interest in maintaining a strong fair use standard aligns with the values present in the open source community's culture, of which many of Google's employees are significant members including Jon Orwant. Though it is not possible to thoroughly understand each individual narrative of those workers involved in Google's book digitization project, an analysis of a particular employee's role within the company may tease out significant themes that help establish a particular kind of Google culture. While not isolated to the cultural mores of the open source coder community, open source coder culture

contributes greatly to Google's discursive practices as a company performing in the public sphere. Orwant is not identified as a sole unitary agent, but an epistemic individual representative of the kinds of discursive practices that build Google culture and shape Google's corporate practices.

Google Culture

Jon Orwant was an Engineering Manager for Google books when I interviewed him in May of 2010. He is not a lawyer. The finer details of copyright law and fair use are not his specialty, while these state legal regimes have a great impact on his work. He understands the process of processing books as both data and the creative construction of knowledge. For this reason, Orwant and many others in the coding community are alert to changes and problems of copyright law in the United States. Orwant's position in the controversial settlement is complicated by an additional role he holds outside of his position as an Engineering Manager. Orwant has written and contributed to several books. He is a published author. During hearings for the Amended Settlement Agreement, he spoke for Google as corporate representative and for himself as a writer whose work had been scanned without his permission. He is the third author of *Programming Perl, 3rd Edition* (2000), an O'Reilly bestseller. He belongs to the world of coders and computer programmers Kelly referred to as "geeks" in his 2008 *Two Bits: The Cultural Significance of Free Software*.

Kelly approached the work of free software programmers as an anthropologist, examining their work from a cultural perspective, moving beyond viewing programmers by their "exotic" behavior and "sartorial traits." Free software was a movement that astonished the business elite. The entire infrastructure of email and Web communication seemed built on practices of workers who shunned copyright's proprietary individual authorship model in favor of collaborative work. It was mischaracterized as a kind of "free" labor. Benkler clarified this misunderstanding in *Wealth of Networks*,

More than half of all back-office e-mail functions are run by one free software program or another. Google, Amazon, and CNN.com, for example, run their Web servers on the GNU/Linux operating system. They do this, presumably, because they believe this peer-produced operating system is more reliable than the alternatives, not because the system is “free.” (2006: 64)

If Orwant is to be spoken of as a geek, it is important to define what kind of geek he is. Orwant is a Perl geek. Perl is both a coding method and a culture. Perl is a computer programming code designed for systems administration by Larry Wall in 1987. Wall was a systems administrator at the time of the code’s birth, developing it to work within a UNIX™ environment. Wall, a linguist in training and a devout Christian in faith, was the son of a fundamentalist Mennonite preacher (Silberman 2000). He began his research in natural and artificial languages with a particular goal. He and his wife wanted to find an unwritten language, perhaps a previously unknown African language, and make it written. The idea was to bring diversity to translations of the Bible. Instead of a New American English bible, the bible would receive another translation in the language he and his wife scripted. Health issues complicated the endeavor. Wall first moved to NASA. He then became an important figure developing the Linux coding system (Richardson 1999).

NASA has long been a home to keepers of Christian faith. Werner von Braun, the “father of the U.S. space program, was both an ex-Nazi rocket scientist and born-again Christian” (Dinerstein 2006: 579). James C. Fletcher, one of NASA’s most influential administrators in the early years of space flight, held a western American and Mormon conception of the world that influenced his administration of the program. Roger D. Launius noted Fletcher’s goal “to seek out extraterrestrial intelligence, in part because of his Mormon belief in many worlds with many peoples” (1995: 218). The white and dominantly male world of NASA attracts the programmer classes whose pimples and pasty complexions are redeemed by their esoteric knowledge of computation. Shelly Turkle wrote of MIT hackers as “defenders of the purity of computation seen not as a means to an end but as an artist’s material whose internal aesthetic must be protected”

(1984: 207). The practice and culture of programmers reflect a particularly European and American faith in technological superiority. With programmers the “German romance of the engineer” and American romance of technology interconnect on the body of the open source programmer. Friedrich Kittler’s contribution to media theory espouses the Lutheran gesture of critiquing the “stupefying windows” of Microsoft’s Windows, desiring no intermediaries between the Code and its user (Peters 2009; Winthrop-Young 2009).

Perl was named to resonate with a particular set of literatures, fantasy fiction and the Christian Bible. A fan of Tolkien’s *Lord of the Rings* trilogy, Wall incorporated quotes from the trilogy into each section of the source code. He wanted to craft a code that would be treasured. The purposeful resonances with the thirteenth book of Matthew allude to a desire to articulate Wall’s code with a special kind of treasure. In the parable, Jesus tells of a merchant who sought “goodly pearls.” When the merchant found “a pearl of great price” he “sold all that he had, and bought it.” Preceded by the parable of the hidden treasure, the parable of the pearl values diligent search for great reward. (Silberman 2000).

Geek programmer culture often appropriates Christian and, specifically, Reformation-era rhetoric for its narratives. The appeal of the rhetoric is not for Christian proselytizing of the programmer class. The global culture of programmers spans a wide variety of backgrounds and faiths, with no particular interest in Christianity qua Christianity. Wall’s writings are purposely irreverent and playful with religious themes. Richard Stallman, head of the Free Software Foundation and leader of the free software movement, similarly is playful with references to faith. His alter-ego, St. GNUcius, is the patron saint of the church of EMACS—a church with no god, just “an intense devotion to a baroque text-processing program of undeniable, nigh-miraculous power” (Kelty 2008: 70).

Wall, a Perl “guru,” developed a tripartite virtue system for the coder community that appropriates and mocks the Catholic virtues. Wall, with coauthors Randal L. Schwartz and Tom Christiansen, introduced the “Three Virtues of a Programmer” in the second edition of *Programming Perl*. The first is laziness. Laziness is not about whether or not the work gets done. The virtue assumes work completion. Laziness refers to the method of work completion, with a focus on efficiency and labor-saving programming. Impatience, the second virtue, is anger expressed when “the computer is being lazy” (Wall et. al., 2000: 991). Wall imparts that impatience toward the computer encourages better coding. “Hubris,” extensive pride in one’s work, is a virtue in the Perl coding community. For all the irreverent references to faith, and the invented faith of Perl programmers, Perl was named “Perl” for a very simple reason. Someone else already named a programming language “Perl.” Not to be held back, Wall applied his personal mantra to the scenario. "There's more than one way to do it." This mantra became the mantra for the entire Perl community. A combined ethos of playfulness, irreverence, and pragmatism make up the work ethic of the Perl community.

Programming Perl imparts wisdom beyond coding instruction. The texts of the Perl community are documents building a culture. Kelty described this culture as “an ongoing experimental system, a space of modification and modulation, of figuring out and testing” (2008: 2). Orwant’s work in the coding community contributes to the building of free software’s “recursive public,”

...a public that is vitally concerned with the material and practical maintenance and modification of the technical, legal, practical, and conceptual means of its own existence as a public; it is a collective independent of other forms of constituted power and is capable of speaking to existing forms of power through the production of actually existing alternatives. (Kelty 2008: 3)

In the third edition of *Programming Perl*, Wall, Christiansen, and Orwant again praise laziness, impatience, and hubris as the “basis of good software design.” The book reads as a manual for living. It is a kind of coding bible. "If you're going to pour your creative energies into a lump of code,” advise Wall, Christiansen, and Orwant, “why not

make the world a better place while you're at it?" The rest of the chapter continues to mix programming instruction with a particular world vision. Perl coders are to play well with others. "Don't litter in the park," advise the writers. It is better to create "ecologically sustainable programming," than build computer languages that "enforce a state of paranoia" (2000: 28). Orwant was not just the Engineering Manager for Google's book digitization projects at their Cambridge, MA office, he is a significant contributor to the recursive public of Perl coders.

On May 7th, David Weinberger, senior researcher at Harvard's Berkman Center and author of *Everything Is Miscellaneous: The Power of the New Digital Disorder* (2007), advised me to connect with Jon Orwant, the engineer in charge of digitization efforts at Google's Cambridge office. I knew nothing of Orwant and had no way to contact him. For a company that embraces open modes of communication and online sharing via company created platforms, emails of Google managers are not publicly published. University professors and librarians' lives demand a minimum level of publicity. Weinberger, Hyde, Lewis, Darnton, and Verba all have public profile pages with links to their university contact information. Contact information for individual Google employees must be retrieved through investigative processes. My investigative process was a Google search.

Orwant's MIT email address was listed on his 1994 publication "Privacy and User Models: Threats, Caveats, and Safeguards," a work written while still a student at MIT's Media Lab. The Media Lab, co-founded by Nicholas Negroponte, MIT Professor and founder of One Laptop per Child (OLPC), and former MIT President Jerome Wiesner. The Media Lab Receives almost one-hundred percent of its funding from corporate sponsorship. Additional funding comes from the National Institutes of Health (NIH), the National Science Foundation (NSF), and the Defense Advanced Research Projects Agency (DARPA). Corporations that become Consortium-level sponsors gain access to

all research conducted at the Lab, “and full intellectual property rights” (MIT Media Lab, 2012). Orwant, and many students like him, are funded through private sponsorship.

On May 9th, 2010 at 8:09 PM Central Time, I emailed Jon Orwant at his MIT address. His MIT email address still forwarded to his corporate Google email account. I attempted to quickly find information about Orwant’s background, seeking his significance in the programming community, what led him to Google, and why he became the engineering manager for the Google Books project. Specifics were sparse. Robert Darnton and Jean-Noël Jeanneney wrote books about the project and maintained their role as public critics. Darnton published his critiques in the *New York Review of Books*. Jeanneney published critiques in *Le Monde*. Brewster Kahle and Siva Vaidhyanathan, also public critics of Google’s project, published opinion pieces in the *Washington Post*. Little was written publicly about Jon Orwant’s part in the Google Books project or about Orwant himself, save one anecdote involving coffee mugs.

It was the 5th annual O’Reilly Open Source conference. Larry Wall and others were chatting about the mundane political and organizational issues concerning the development of Perl in a conference room. Jon Orwant walked in and stood for a few minutes, listening to the talk. He walked calmly to the coffee service table in the conference room. About twenty people were present. He picked up a coffee mug and threw it against a wall. He picked up another, and another, smashing them against a wall across the room.

We are *fucked* unless we can come up with something that will excite the community, because everyone's getting bored and going off and doing other things...I don't care what you do, but you gotta do something big. (Cash, 2001, emphasis added by the writer)

He then left the room.

In the interview, Orwant discussed the project from his perspective. “The obstacles are laws and copyright.” Orwant was speaking about the kinds of research enabled by the massive collection of data aggregated from Google’s book digitization

efforts, research that could track changes for the use of specific words over time. “From an engineer's perspective, not really speaking for Google, it would just be grand if we could make all of this information accessible to everyone.”

Bottando: How about from an author's perspective?

Orwant: ...I actually placed my books under the founder's copyright... Meaning originally copyright in the US lasted 14 years and you could renew it for a time period after that... I've told my publisher... I've signed a release saying I'm ok with the founder's copyright for my book. I don't actually know if my book is under the founder's copyright because there were co-authors and they had to agree and I don't know if they did... I want my ideas to get out there.

Orwant's testimony reveals a particular faith in Google's ability to make positive change through the Amended Settlement Agreement in a time where copyright term limit extensions created a large class of works called, “orphans.” Extending the copyright term limits from fourteen years with the possibility of one renewal for another fourteen to the current life of the author plus seventy years lessened incentives for maintaining paperwork on a book's legal ownership. As royalties dwindle, copyright holders lose incentive to manage and maintain their copyrights, leaving a whole class of works orphaned. In fact, because of extensions to the term limit of copyright, Boyle notes “most of twentieth-century culture is still under copyright” (2008: 9). Orwant and others in his situation find valuable a strong ability for their work to circulate among many publics even after their work has value for commercial circulation. The Settlement offered the promise that, in the wake of expansions to the copyright term limit, a negotiated agreement with the Authors Guild and the American Association of Publishers could construct a beneficial outcome for the circulation of out of print and orphaned texts.

Libraries and archives become caught in the midst of a daunting situation. Without permission of the copyright holder, massive archives owned by places like The United States Holocaust Museum remain offline and only available to those who travel to them (Hyde 2009). The extension of the copyright term created a new economy for copyrighted works from books to blues music, copyright aggregators. Copyright

aggregators collect copyrights, making profit through clearance costs to use works not yet released into the public domain (McLeod & DiCola 2011). Fearful of lawsuits, archives remain offline. Some writers, like those represented by the Authors Guild, want to get paid. Others, like Orwant, want their “ideas to get out there.”

At the time of the interview, Orwant and others at Google were attempting to find a method to algorithmically determine when particular works would enter the public domain, a possibility created by the large database amassed from scanning works in libraries. The project could give libraries and archives a more secure ground for digitizing and publishing online texts not yet in the public domain. For Orwant and others like him, the problem is copyright. Google, a large corporation with enough incentive to move forward with the case, used the device of a class action lawsuit to cut through what Orwant described as the Gordian knots of rights clearance. The Amended Settlement Agreement with the Authors Guild and American Association of Publishers presented the possibility of doing something more than post snippets of books online, it would create a new right’s clearinghouse for books.

Entwined together in one class action lawsuit, it is difficult to balance the potential benefits of Google’s actions when weighed against the negative consequences for the future of reading and research. Orwant spoke as only one representative, expressing a belief that Google could make changes benefiting the public domain. It is indicative of an intertwined faith that at once stems from the recursive public of the open source coder programming community and the Burning Man faith of Google that Fred Turner critiqued in “Burning Man at Google: a cultural infrastructure for new media production” (2009). The non-commercial utopian principles shared by “Burners,” those attending the annual Burning Man art festival held in the Black Rock Desert of Nevada, becomes a cultural infrastructure for Google engineers suggesting that their secular work as engineers contributes to a semi-religious belief in making “the world a better place” (91). Many Google employees attend including Brin, Page, and former CEO Eric

Schmidt. The shared faith of Google, a faith that attempts to move beyond bottom-line corporate politics, is refashioned in both the open source coder community through Burning Man culture to mask the banal bottom-line politics of Google as corporation. The next section embeds the settlement within the brief history of the eBook to reveal a continuity to create a new enclosure of the digitized commons and to uncover Google's role in the development of the eBook marketplace.

The eBook, the Settlement, and the Book Rights Registry

...in a 2001 article on electronic publishing, e-book publisher Matt Moynahan commented on how the lending of library books “add[s] up to approximately 1.7 billion royalty-free reads each year.” He went on to estimate that as many as a billion more “royalty-free reads” resulted yearly from the pass-along and used-book trades. (Striphas 2009: 41)

Printed books are physical properties whose lives move beyond the complete control of the publishing industry. Once sold, the book may be given to a friend, sold at a yard sale, given to charity, and donated to a library with no need to seek permission from a publisher. It is a benefit established through case law. Libraries, funded publicly or privately, become spaces where physical books purchased once are shared among many readers. As physical properties, these books hold value. They can be sold and re-sold because of the first-sale doctrine, a doctrine that allows the purchaser to lend, transfer, or sell legal copies of copyrighted work without seeking permission from a copyright holder. The first-sale doctrine is the foundational law that enables libraries to loan books. It makes the entire system of libraries, video rental stores, and art galleries possible (Litman 2001).

In Ted Striphas' *The Late Age of Print* (2009) the quote from Moynahan reveals how the first-sale doctrine and the mere existence of libraries threaten publisher profits. In the eighties, publishers feared the Xerox machine and began exploring the “pass along book trade” (Striphas 2009: 37). Sharing books posed a significant problem from the standpoint of publishers seeking to maximize profits. Changes to the 1976 Copyright Act codified both fair use and rights of first sale, enabling properties to circulate without

publisher control through the marketplace. For publishing representatives like Moynahan, students and citizens reading at libraries represent lost sales. The early years of the eBook's creation as now taken-for-granted object reveal purposeful attempts to manipulate and control access to published works as the development of the World Wide Web and the cell phone popularized digital reading and information access. The early history of the Google Books project and the Amended Settlement Agreement begins when books became software, a purposeful marketing success between device manufacturers and publishing industries to spread the use of Digital Rights Management.

If the "pass along book trade" enabled by fair use was a threat to publisher profitability, digital distribution posed a greater threat. Publishers partnered with software companies to create digitally locked modes of texts. A RosettaBooks release of Agatha Christie's *And Then There Were None* introduced a "time-limit license" granting users ten hours of access to the e-book for one dollar. After the ten hours ended, rights management software kicked in making the text unreadable unless the user renewed the license for an additional fee (Striphas 2009). When the publishing industry attempted to match its interests with the capabilities of computer programmers, the result was not an immediate marketing success for authors. When in March of 2000 Stephen King's first eBook *Riding the Bullet* released to the web, it received over a million downloads. Downloads spread the distribution of King's work. By December of that same year King decided to discontinue writing *The Plant*, his next eBook. King felt that the number of readers reading his work without paying had grown too high.

The roots of the legal and technical capability for books to shut down at the end of an arbitrarily defined time limit are found in the computer software industry's early attempts to evade the first-sale doctrine. Software, by virtue of being an adaptable series of codes, requires minimal material cost to modify. To place protections on work that could be modified with specialized labor and a few low-cost computing tools, software industries sought to protect their immaterial goods by arguing software distribution

involved licenses not sales (Litman 2001). Software is a computer program, “more or less a recipe with commands to tell the computer what to do in order to carry out certain tasks” (Stallman 2002: 3). Microsoft and other companies creating proprietary software dependent upon pay-per-use licensing structures early supported an argument that the company should have complete right to control access to its source code (Lessig 2001).

The courts first rejected this mode of reasoning. The Fifth circuit in *Vault Corp. v. Quaid Software, Ltd.* ruled that shrink-wrap licenses, end user license agreements that could not be read until after purchasing and opening software, were inconsistent with federal copyright law. The Fifth circuit’s ruling invalidated a Louisiana statute that made such license Agreements enforceable. Louisiana law prohibited decompilation or disassembly of the licensed software. The Fifth circuit ruled that the Louisiana statute prevented the software owner rights granted under the fair use doctrine, rights to make program adaptations.

By 1998, ten years after the Fifth circuit’s rejection of Louisiana’s software licensing statute, the United States Congress passed the Digital Millennium Copyright Act (DMCA). The DMCA was sold as an update to copyright law, considered outdated as computers, software, and the Internet enabled new modes of content creation and distribution. Couching the law as an update attempted to side-step consequences of the law’s creation. It was a clever bypass of fair use. Richard Stallman wrote that the acronym should stand for “Domination by Media Corporations Act.” The DMCA gave publishers stronger abilities to impose restrictions on the use of a work, with criminal enforcement for those who circumvented device security provisions. “Tethered devices” like the Amazon Kindle or Apple iPad automatically restricted readers uses of texts to the demands of Digital Rights Management encryption, restricting sharing and uses of the digital text within the device itself (Zittrain 2008). The DMCA made it illegal to create technology that could circumvent copyprotection or *access* protection. By October 2000, it became illegal for an individual to enable unauthorized access to a work (Litman

2001). The adoption of the DMCA represented a dramatic loss for fair use modes of accessing digital literature and built cultural values crafting an expectation for protective measures on devices. Publishers, anxious about the shift to digital technology, sported stronger digital protection as

Look Inside™ the eBook

The lore reads like a modern Horatio Alger novel. Bezos, the famed CEO of Amazon.com, was once a lowly hedge fund analyst for Manhattan-based D. E. Shaw & Co. While hedge fund operators of the nineties spent their time riding high on NASDAQ profits, Bezos left to create new markets. Adapting the working modes of the technology industry with the book publishing industries, Bezos launched Amazon.com, the “Earth’s biggest bookstore,” in July of 1995. The decision to launch an online bookstore was not made because of secret bibliophilic tendencies of Amazon’s founder. Bezos analyzed the publishing industries’ early decision to adopt an international standardized code structure to organize published books and saw books as an adaptable commodity for the growing online marketplace. Known as the international standard book number (ISBN), the ten- or thirteen-digit number assigned to every book before publication was birthed as publishing companies adopted computer organization technologies in the sixties (Striphos 2009). The use of a standardized numbering system enabled Bezos to quickly create an online market whose original warehouse began in his Bellevue, Washington garage. Speed is imperative for garage-based online sales. From Bellevue to fulfillment centers throughout the world, the ISBN serves as an efficient computerized means to organize and track book shipment from an online retail purchasing point. As the company grew, the ISBN enabled both small indie publishing houses and large publishing companies to use Amazon’s growing online bookstore.

By October 12, 2001, Bezos introduced the next innovation for the online book marketplace. The Look Inside the Book™ feature enabled Amazon.com book browsers to view selected pages from inside featured books. Not all publishers were enthused by the

feature, fearing online book piracy would hurt sales. HarperCollins, John Wiley & Sons, McGraw-Hill, Pearson Education, Random House, Scholastic, and several other major publishers joined the venture. Tiger Wood's *How I Play Golf* (2001) was one of the first titles offered with the feature. Simon & Schuster's COO Jack Romanos publicly praised the program. "Simon & Schuster is excited to participate in the Look Inside the Book program at Amazon.com. Helping their customers crack the spine is simply smart marketing that will allow readers to make even more informed choices"(Amazon.com 2001). By October of 2004, Look Inside the Book™ became Search Inside the Book™ as Amazon used Google's style of search engine technology to operate a full-text search program for books. Over 120,000 printed books from almost two hundred major publishers became fully browseable within Amazon's program (Price 2003). Just over a year later, Google's public relations department published the following release,

As part of its effort to make offline information searchable online, Google Inc. (NASDAQ: GOOG) today announced that it is working with the libraries of Harvard, Stanford, the University of Michigan, and the University of Oxford as well as The New York Public Library to digitally scan books from their collections so that users worldwide can search them in Google. (Google 2004)

The announcement came four months after Google made its initial public offering, when Google became GOOG.

The rest of the tale has been told and retold. The Authors Guild and American Association Of Publishers sued Google in 2005 for violating copyright law. Early published arguments surrounding the suit involved Google's fair use claim for the ability to scan copyrighted works, but the foundation of the Authors Guild and American Association Of Publishers' lawsuit rested on the company's scanning of orphaned works. Google's swift digitization program involved checking out massive numbers of books from library partners, as many as its partner libraries would allow. While the numbers checked out involved negotiations between Google and each library, the decision to scan massive numbers of books always held the risk that most of these books could still be under copyright protection.

The vast majority of books, maps, scholarly articles, recordings, microfilm, and other materials found in libraries fall under the category of orphaned works, works whose authors are difficult to find. Google and libraries claimed that the owners to the rights of nearly seventy-five percent of a library's contents could not be found. The Authors Guild and American Association Of Publishers claimed otherwise. They saw Google and libraries as not practicing due diligence in finding the rights holders of orphaned works. The lawsuit and the subsequent settlement between the Authors Guild, American Association Of Publishers, and Google were not about fair use. It was the touchstone moment in what James Grimmelmann, Associate Professor of Internet Law and Intellectual Property at New York Law School, named the "Orphan Wars" (2012).

Orphan Works Legislation

On May 22, 2006 Lamar Smith of Texas, then the House Judiciary Committee Intellectual Property Subcommittee Chairman, introduced H.R. 5439, the Orphan Works Act of 2006. H.R. 5439 was based on recommended language of the United States Copyright Office, which had, at the request of Republican Senator Orrin Hatch and Democratic Senator Patrick Leahy, studied issues raised by orphan works since 2005. The Copyright Office issued a Federal Register Notice summarizing issues raised by orphan works, soliciting written comments from all interested parties. Of particular interest to the office were the effects of orphans on discouraging new creative efforts. A few years later the office echoed concerns introduced earlier by Lawrence Lessig and the Free Culture movement. In a post called, "On the Importance of Orphan Works Legislation," Marybeth Peters, the current Register of Copyrights, wrote,

In many respects, these orphans are a by-product of three decades of change that has slowly but surely relaxed the obligations of copyright owners to assert and manage their rights. Protection has become automatic. The term of copyright, once tied to the affirmative act (and dates) of publication, registration and renewal, has been extended twice, in 1978 and 1998, and was prospectively reconfigured to track the less obvious period of life-of-the-author-plus-70-years. (2008)

Orphan works became a problem when Congress created them.

In *Publisher's Weekly*, the book industry's trade magazine, Lessig stated, "The core problem here is not one of Google's creation" (Albanese 2010). Lessig referred to changes that occurred to United States copyright law, both extensions of term limits and relaxed registration standards. Lax registration requirements discouraged subsequent creators and users from incorporating works, possibly orphaned, into new creative efforts. The 1976 Copyright Act eliminated formal registration requirements for all copyrighted works, seen as a benefit to small rock bands wanting to quickly claim ownership and defend against corporate appropriations of their music. Copyright protection was received the moment a work was fixed into a tangible medium, no registration fee or wait time required. This language dramatically overhauled language of the 1909 Copyright Act requiring compositions to be published on paper and distributed before receiving copyright protection (Demers 2006). The Berne Convention also abolished the formal registration requirements to reduce burdens on copyright owners (Hall & Zibluk 2010). By 2006 the US Copyright Office recommended legislation allowing unlicensed reuses of in-copyright works whose rights holders could not be located through a reasonable search that included minimal requirements for formal registration.

In 2008 The United States Senate again attempted to enact orphan works legislation, The Shawn Bentley Orphan Works Act. Bentley's interest in intellectual property grew from his days as a Provo, Utah rock and roller. A student at Brigham Young University in the eighties, Bentley was the gifted guitarist behind "Bentley," a five-man rock and roll band playing gigs from 1979 – 1982 in the Provo scene. Leaving behind his rock and roll lifestyle, Shawn Bentley graduated from Brigham Young University in 1987 with a degree in English, cum laude. He then went on to receive a law degree from the University of Chicago Law School in 1990 (UtahValleyRockers.com 2012; *Daily Herald* 2005). After graduating, Bentley became the Chief Intellectual Property Counsel on the Senate Judiciary Committee under Republican Senator Orrin

Hatch of Utah. While serving under Hatch, Bentley contributed to the Technology, Education, and Copyright Harmonization (TEACH) Act of 2001, an act that expanded the right to use copyright-protected materials in distance education. The TEACH Act enabled educators to embed video and audio into distance education courses, an extension of educational provisions guaranteed by the 1976 Copyright Act (Gasaway 2001). Bentley left Capitol Hill in 2002 to become corporate counsel for Time Warner/AOL, serving as the company's Vice President of Intellectual Property and Global Public Policy until his death in 2005 (Davidson 2008).

Bentley began working on a bill to allow for the use of works whose copyright owners could not be found. Beyond rock and roll, Bentley appreciated fine literature, wanting to expand access to works in libraries, museums, and archives while limiting liabilities for copyright infringement. Due to copyright term limit extensions, libraries and archives faced lawsuits for displaying works not yet in the public domain. Legislation developed by Bentley reduced liability for statutory damages, costs ranging up to \$150,000 per work infringed. Noncommercial users who stopped non-permitted use as of a work after receiving notice from the owner would face no damages (Library Copyright Alliance 2007). The legislation would expand the general public's access to orphan works from historical archives while attempting to balance the interests of copyright holders. Commercial users were required to pay "reasonable" compensation for all past and future permitted uses. This included the amount that should have been paid if early searches for the copyright owner had been successful. Owners set the fees for compensation. Though Bentley passed on in 2005, Hatch's office continued to move forward with the bill (Davidson 2008).

In order to address arguments that "insufficient searches would permit the use of works that were not truly orphaned," the bill set out the steps users would have to take to find the original copyright holder (Rangnath 2008). The bill required that, in order to use an orphan work, a user would have to search the relevant Copyright Office records,

search for the owner in reasonably available sources of copyright authorship and ownership information, use the best technological tools available, search printed publications, seek expert assistance, and search databases, including those available through the Internet. The bill called for a “reasonable” search for the copyright owner. An improvement over complete lack of protection, orphan works legislation of 2008 left those seeking to use them with a “reasonable” weight on their shoulders (Lessig 2008a). The Act provided no funding for staff, software, hardware, or other provisions necessary to manage databases necessary for both users and copyright holders to review (Hall & Zibluk 2012).

Libraries and publishers supported orphan works reform, but the bills were not without detractors. Prior to reaching the house, photographers and other visual artists voiced concern. Ambiguous language in both registry and fee requirements prompted The American Society of Picture Professionals (ASPP) to quickly post a best practices statement for its vision of “reasonable” search guidelines (Hall & Zibluk 2012). The Copyright Office, stating a lack of funding, encouraged users of orphan works to review best practice statements written by publishers, the recording industries, and professional associations as a part of their reasonable search (Peters 2008a). The Copyright Office passed the burden of drafting these best practices onto industry associations, guaranteeing only those with time or funding to develop a best practice statement would have a voice in setting the standards for compliance. Organizations favoring the Orphan Works legislation of 2008 included the American Association of Museums, the American Library Association, and the Motion Picture Association of America. The Association of Independent Music Publishers (AIMP) voiced concern. Had they been enacted, Senate bill S. 2913 and House bill H.R. 5889 would have been the most significant rewrite of copyright legislation since the 1976 Copyright Act. Together, they would have dramatically expanding the public domain by making extensive amounts of literature and archived materials available for use (Hall & Zibluk 2010).

On April 24, 2008 the House and Senate introduced orphan works legislation. H.R. 5889 and S. 2913. In May of that year, the House Judiciary Committee's Subcommittee on Courts, the Internet, and Intellectual Property unanimously agreed to pass H.R. 5889 to full committee review. Public Knowledge, an advocacy group for an open Internet, urged its members to write letters to their representatives in support of the legislation (Public Knowledge 2008). By May 15th The Senate Judiciary Committee passed The Shawn Bentley Orphan Works Act by a unanimous "voice vote," sending the legislation forward for a Senate vote. Congress was in the midst of managing the global financial crisis. Chairman of the Senate Banking Committee Christopher Dodd proposed a bailout in June to assist troubled subprime mortgage lender Countrywide Bank. Senator Dodd received loans through Countrywide's "V.I.P" program, a program waiving points, lender fees, and company borrowing rules for select prominent people (Golden 2008). In early September the Federal government took over Fannie Mae and Freddie Mac, sending more concern through the market. On September 17th credit markets stopped working normally. Global investors frantically moved money into Treasury bills and other low-risk investment vehicles while corporate borrowing costs soared (Bajaj 2008). In the midst of the crisis, orphan works legislation moved forward. On September 26, 2008, the Senate unanimously passed The Shawn Bentley Orphan Works Act. No single member of the senate opposed the legislation. Sent to the House, the Orphan Works Act was lost in the push to pass \$700 billion bailout legislation. In Congress, orphan works legislation died a "quiet death" (Kravets 2008).

By October 28, 2008 the Authors Guild, the Association of American Publishers and Google announced the first class-action settlement. The terms of the settlement proposed a way to provide greater access to orphaned works. The Settlement gave Google the ability to commercialize out of print books in the Google Book corpus, including orphans, as long as it provided sixty-three per cent of the revenues to a new collecting society whose job would be to track down rights holders to collect money for

Google's uses of their books. In a decision made by a judge, a few elite publishing institutions, the Authors Guild, and lawyers, the Settlement laid out the creation for a new blanket license created for digital books known as the Book Rights Registry (Darnton 2010). The settlement allowed for an opt-out measure for authors and copyright holders who did not want their work featured in Google's digital book projects. If the author never claimed royalties, the Book Rights Registry would first distribute money to charitable organizations. Remaining profits of the settlement were to be used to support the operations of the Book Rights Registry first. Google would gather remaining revenues to recoup their digitization costs.

Without legislative scrutiny, the class action settlement gave to Google the sole ability to forge the circulation and distribution of digitized orphaned works. It was a way for Google to engineer its own orphan works solution within a class action settlement. Only Google had the resources available to digitize books and other archival information on such a massive scale, quickly, and for what seemed a low cost. The settlement gave Google alone a protective legal barrier to exploit orphans. Being first to settle with two groups claiming to represent all authors and publishers ensured that no new entrepreneurs could digitize books without having to renew Google's legal process. Of it the United States Department of Justice wrote,

...the Proposed Settlement would establish a marketplace in which only one competitor would have authority to use a vast array of works – especially so-called “orphan” works – that may provide significant value both to Google and to the Registry, a collective which would control exploitation of those works. (Department of Justice 2009)

If the settlement were upheld, only Google would be protected from copyright liability for the use of orphaned works (Samuelson 2011).

But Google would not be alone in reaping the benefits established by class action litigation. One of the less discussed innovations of the settlement was the creation of the Book Rights Registry as a new licensing avenue for digitized books. The Book Rights Registry is a creation meant to handle negotiations between content creators, distributors,

and Google as a new online book distribution market. While the Book Rights Registry could, if created, make significant decisions to impact the future of libraries and the reading public, neither have representation on its board. The settlement, if approved, created a new copyright collective similar to the American Society of Composers, Authors and Publishers (ASCAP), Broadcast Music, Inc. (BMI), and Society of European Stage Authors & Composers (SESAC) for books. These three organizations collect licensing fees for the public performance of music, a market established by the 1909 copyright act's demand of payment for paid public performances of compositions. These performance rights organizations redistribute royalties to members through a proprietary statistical formula paying performers according to an approximate, but not actual, number of performances for a work (Merges 1994; Streeter 1996). Similarly, the Book Rights Registry would have been tasked with gathering revenues from Google to dispense to rights holders. If the copyright holder cannot be found within a certain period of time, the funds would go to various not-for-profit projects as determined by this new collective rights organization.

With a settlement not yet approved, the Book Rights Registry drafted its first executive director, Michael Healy, a former president of the Authors Guild. "My job, when I'm running the registry, is to make sure that the maximum number of rights holders who are entitled to benefit under the terms of the settlement, do benefit" (Fletcher 2009). It is not a surprise that Healy should hold this point of view. Healy was appointed because of his background as a former president of Authors Guild. Before Healy was chosen, another former president of the Authors Guild spoke with high favor for the establishment of the Book Rights Registry within the settlement. In a 2008 open letter to members, Roy Blount Jr. wrote

...the Book Rights Registry [will be] a new independent entity that can be thought of as the writers' equivalent of ASCAP. Much as ASCAP tracks the uses of songs and collects royalties for songwriters and musicians, the Registry will serve the interests of authors and others who own the rights to books appearing online as a result of this settlement. (2008)

The Department of Justice Memorandum cited Google's default status as the only corporation able to distribute orphaned works. The Justice Department also cited concerns over the membership of the classes claiming representation in the case. Neither the Authors Guild nor the American Association of Publishers represent all authors or publishers. These groups, by virtue of settling in a class-action lawsuit, do become the voice for publishing industries and authors in the proposed new rights licensing agency for digitized books. Healy, scheduled to be the Book Rights Registry's first director, is what Pamela Samuelson, Director of the Berkeley Center for Law & Technology, describes as a "copyright maximalist" (2009). The first leader of the Book Rights Registry, if it were to exist, would set the precedent for how this new collective rights organization will operate.

The Book Rights Registry

The Google Books Settlement and the Amended Settlement Agreement are artifacts, legal fictions developed by Google's lawyers in negotiation with lawyers from the Authors Guild and the American Association Of Publishers. The settlement remains under review and its provisions may never come to fruition. Echoing concerns raised by the Justice Department, Judge Denny Chin rejected the settlement on March 22nd, 2011,

While the digitization of books and the creation of a universal digital library would benefit many, the ASA would simply go too far. It would permit this class action - - which was brought against defendant Google Inc. ("Google") to challenge its scanning of books and display of "snippets" for on-line searching - - to implement a forward-looking business arrangement that would grant Google significant rights to exploit entire books, without permission of the copyright owners... the motion for final approval of the ASA is denied. (United States District Court Southern District Of New York 2011)

This decision does not mean an end for Google's efforts to obtain the legal right to create digital copies of orphan works. Chin's decision leaves open the possibility for another settlement revision, continuing a game of strategic legal maneuvers between Google, the Authors Guild, the American Association Of Publishers, the Justice Department, and Judge Chin. What remains, even after a court rejection, is a willingness through a class

action settlement procedure to construct a vision of books where “control can be exercised at the level of a page, and maybe even a quote. It is a world in which every bit, every published word, could be licensed” (Lessig 2010). Lessig warned,

Books could have been created differently: with each quotation licensed by the original author, with the promise to use the quote only according to the terms of a license. All books could thus be today as documentary films are today-- inaccessible. Or all documentary films today could be as almost all books are today—accessible. (Lessig 2010)

“Documentaries in particular are property of a special kind,” wrote Lessig in his 2010 article for *The New Republic* Combining music, video, and audio into one rhetorical whole, documentaries construct their meaning through a collage of quotations and everyday experiences. A George Strait song played in the background of a scene that Gordon Quinn’s had filmed for *New Americans*, a 2001 film about the lives of immigrants just arriving to the United States. Quinn, co-founder of Kartemquin Films that produced the award-winning film *Hoop Dreams*, was once involved in a licensing dispute over the use of “Happy Birthday.” He paid \$5,000 dollars to TimeWarner for the right to clear the song. The scene was telling. A Nigerian immigrant and a chemical engineer, Israel Nwidor listened to the George Strait song play as he lived his new life as a cab driver in the United States. A white man on a motorcycle pulled alongside as the song played, giving Nwidor the “evil eye.” Rather than clearing the fees, Quinn cut the scene from the film (Aufderheide & Jaszi 2011). To contribute to a lively public domain filled with critique and counter-critique, documentarians face paying licensing fees or preparing for an expensive fair use defense. Books have not traditionally had this fate. All forms of writing – research, fiction, creative non-fiction – benefit from the ability to quote. But even that right is under question by individual rights holders claiming control over works.

The publishing world has become a “chilling atmosphere” for academic writers who must make fragmentary appropriations of copyrighted works to publish arguments or new discoveries. In 2004 Indiana University Press withdrew Liane Curtis’ *A Rebecca*

Clarke Reader when the copyright holders of Clarke's compositions intimidated the press (Striphas & McLeod 2006). Clarke was a violist and the first female musician to work in a fully professional ensemble, the Queen's Hall orchestra (Curtis 2004). Curtis's book expanded literature on struggles made by early female classical composers and musicians. Her use of copyrighted materials only accounted for 94 lines of a 241-page book, what she considered a standard fair use of another's scholarly materials. Oxford University Press's United States music division director, Mr. Johnson, claimed otherwise. He was "merely enforcing the copyright that he holds for Clarke's unpublished writings" (Byrne 2004). By 2005, a press release "Hot Off the Press and Silenced No More!" announced the book's latest incarnation. Sold as a paperback, the book may be purchased online using a PayPal account or a check sent directly to the Rebecca Clarke Society (Rebecca Clarke Society 2012).

What did Lessig mean when he wrote that Google's settlement with the Authors Guild and American Association Of Publishers extended control over published works to "the level of a page," and even the quote? The answer is to be found in the way the settlement and the creation of the Book Rights Registry affects the fourth balancing factor of a fair use defense. Factor four in the four-part balancing test examines the effect of a use of a work on the potential market for that work. Before the Book Rights Registry existed, pages of books were not licensed. In the Harkness Commons cafeteria, I asked Lewis Hyde for his thoughts on the possible effects of the Book Rights Registry for a more open intellectual commons. "It's a royalty collecting society, which we've [writers] never had. I think it could be very useful." I pressed, "[What about] the fourth part of the balancing test [of fair use]?" In response, Hyde offered a story.

This is a built in puzzle about the fair use test...let's say I want to use a short excerpt from a book, and I have a clear fair use case to use it. However, I'm a cautious guy and I write to the publisher to ask him permission and he says, "Well, send me fifty dollars." And I'm a cautious guy and, even though I know I have a clear fair use right, I send him fifty bucks. Now what's happened is, he has established a market and he (the publisher) can say, "Now I know there is a commercial value to this work even at the level of a hundred words" And the

fourth factor is supposed to say “Is there commercial value?” By being cautious, I helped establish the market... Yeah, it's probably true. If the Book Rights Registry sets up a simple way for people to make micro-payments then they complicate the fourth factor of the statute. (Hyde, 2010)

The settlement created a new product for libraries, an institutional subscription database (ISD) for out-of-print books. Including millions of books, the ISD had the potential to be a “must have” resource for libraries. It was a way for Google to recoup its investment through licensing fees, while providing authors and publishers “a new revenue stream for out-of-print books that have not been generating revenues for rights holders” (Samuelson 2011). In consultation with Book Rights Registry, the settlement would give Google the power to set the prices of the ISD at rates to maximize revenues for rights holders. The parties involved in the Book Rights Registry are not those whose interests are aligned to promoting what Weinberger defined as the public interest, “to achieve the Constitutional desire 'to promote the progress of science and useful arts' and to achieve the Internet’s desire to provide maximal access to the works of culture” (Weinberger 2009). Libraries and the reading public are not represented on this new copyright collective for books.

The existence of the Book Rights Registry may make it more difficult for publishers to rely on a fair use defense for uses of copyrighted material. Economic interests of copyright owners tend to carry the most weight of the four factors when courts make decisions. The “market failure” interpretation of the fair use’s fourth factor “suggests that works that can be reasonably purchased or licensed cannot be reproduced without permission or payment” (Hilderbrand 2009: 85). When courts examine the putative effect on the market, they first look for the existence of a royalty collecting society. The Book Rights Registry helps create that market for discrete excerpts from books.

The history of copyright is full of attempts to capture and create markets that ultimately failed. In *Inherent Vice: Bootleg Histories of Videotape and Copyright* Lucas Hilderbrand relates these attempts to the history of failed technologies, technologies that

“never made it so market” or failed to be adopted by a consumer audience (2009: 82). Perhaps the Book Rights Registry and the Amended Settlement Agreement may have that same fate. Should the Settlement never be approved, the thinking behind its creation still matters for those who value a lively public domain and scholarly freedom. In an effort to cut the “Gordian knot of rights clearance,” the legal fiction of the Amended Settlement Agreement attempted to create a new rights clearance house with unknown potential effects. Google alone is not responsible for this settlement or the possibilities it creates. It brought to the public a radically reformist option for books in an age of digital reading. The settlement was the result of negotiations with two organizations claiming to represent all authors and publishers.

On February 13th, 2012, Pamela Samuelson sent the following letter to Judge Chin on behalf of over fifty major academic writers from universities across the United States,

Re: Academic Author Objections to Plaintiff’s Motion for Class Certification
Case No. 05 CV 8136 (DC)

Dear Judge Chin:

The signatories to this letter are academic authors whose works of authorship are typical of the books and other works found in the collections of major research libraries such as those of the University of Michigan and others of Google’s library partners. We write scholarly works on a regular basis. Our primary motivation in preparing these works is to share the knowledge we have cultivated with other scholars and interested members of the public. Although we are not indifferent to revenue streams we receive from books that we publish, the main reward we wish to attain from our intellectual labors is the satisfaction of contributing to the ongoing dialogue about issues of concern to us and, perhaps as an added bonus, a reputation for excellence in scholarship among our peers. A number of us have made some or all of our academic work available on an open access basis through Creative Commons licenses and the like.

Virtually all of us use Google Book Search (GBS) on a regular basis to get tips about what books or other texts contain information relevant to our research projects. Many of our works have been scanned by Google as part of its Library Project. Those of us whose works are part of the GBS corpus are pleased at the prospect that our works, particularly those that are out-of-print, are now more accessible to other scholars and members of the public through the “snippets” that Google serves up in response to search queries seeking information that can be found in our works. We believe that our works will be more widely read because of their accessibility through GBS, either through greater utilization of books

through lending from library collections or new sales of our works because of links that Google provides to sources from which our works are available.

Signatories to this letter included Patricia Aufderheide, Peter Jaszi, Siva Vaidhyanathan, Jessica Litman, Lawrence Lessig, Martha Woodmansee, Madhavi Sunder, Douglas Jones, Robert Darnton, and many other writers and researchers who work to defend fair use and open access to scholarly resources in the digital age. The results of this chapter's analysis do not bode well for all members of the class action settlement to be champions for orphaned works or a lively digital public domain. The response of academic writers to the settlement poses some hope for Google Book Search's positive future.

The idea of the Book Rights Registry was not only crafted with this potential to limit future arguments for fair use. In the provisions of the settlement, authors and publishers were enabled to choose to distribute their work at a price of zero or with a Creative Commons license. Google's partnership with publishers offered an efficient means to expand use of Creative Commons licenses (Xian Ke 2009). Creative Commons, a non-profit organization that allows creators to choose levels of licensing for copyrighted works, has been seen as a way to intervene in copyright's all rights reserved automatic term and use limits. The Creative Commons website argues the point for the use of its licenses,

The default setting of copyright law requires all of these actions to have explicit permission, granted in advance, whether you're an artist, teacher, scientist, librarian, policymaker, or just a regular user. To achieve the vision of universal access, someone needed to provide a free, public, and standardized infrastructure that creates a balance between the reality of the Internet and the reality of copyright laws. That someone is Creative Commons. (Creative Commons, 2012)

Expanding the exposure of Creative Commons' voluntary licensing structures to publishers and authors participating in the settlement is a benefit for expanding open exchange of resources. Creative Commons began in 2002 by offering licenses that allow creators to keep the copyright of their work, but expand choice as to how others could be allowed to use the work. Creative Commons inputs choice for the creator to declare

whether they intend to allow commercial uses of their work, whether the work may be modified, or if the creator chooses to place the work in the public domain (Creative Commons 2012). Without waiting for the settlement to be approved, Google announced in August of 2009 the option for authors and publishers to choose the Creative Commons license. However, the option was only available to publishers who joined Google's partner program (Suber 2009).

Creative Commons (CC) licenses in themselves are no panacea, but they are a benefit for academic authors who seek broader distribution of their works. Advancing the CC option was one benefit of Google's work, but CC licenses make no guarantees as to what kinds of licenses will be put on works. CC licenses only give the option of choice. A non-profit organization seeking to expand choice for how a work is licensed, Creative Commons cannot help content creators when they feel their rights have been violated. Their licenses are not an attractive option for those writers who focus less on exposure and more on receiving royalties from their work (McLeod & DiCola 2011).

The Authors Guild filed suit against HathiTrust for the mere existence of digital copies in its repository. Google's scanning project has slowed, but digital copies made without expressed permission of rights holders remain in their servers. Underground websites like library.nu offered hundreds of thousands of digitized scholarly books, many out-of-print and some orphaned works. The website was shut down by a judge in Munich after scholarly publishers pressed for management of this massive "pirate" website (Kelty 2012). Partner libraries that allowed Google to scan orphaned works are bound to contracts requiring that information pertaining to their partnerships, information that could dramatically change the way these partnerships are viewed, remain undisclosed. What is to be done?

CHAPTER V

BEYOND GOOGLE'S BOOKS: THE DIGITAL PUBLIC LIBRARY OF AMERICA

The Library exists ab aeterno.

Jose Luis Borges, *The Library of Babel*

You know, Google was created in 1998. The Harvard University Library was created in 1638. We have been collecting for generations, for centuries, at enormous cost and also with enormous expertise. *We* are here forever and *you* are here forever. So, we don't have to do it tomorrow, but we have to get started today.

Robert Darnton, June 14, 2011, *A Digital Republic of Letters*

Introduction

We will allow a couple of extra questions because we have some leeway time, and this is very interesting so, Evelyn...

June 14, 2011. It was the last five minutes of Robert Darnton's talk at

CULTIVATE's Seminar on the Digitization of Cultural Heritage, "A New Digital Republic of Letters?" sponsored by the University of Copenhagen's SAXO Institute, Denmark's Royal Library, and the European Research in the Humanities Area (HERA) grant. Paul Ayris, the President of LIBER, the Association of European Research Libraries, Jill Cousins, the Program Director of Europeana, an Internet portal aggregating access to archived resources in more than two thousand institutions across Europe, and Erland Kolding, Nielsen Director General of the Danish Royal Library and Copenhagen University Library were featured speakers. Helle Porsdam, the Project Leader for CULTIVATE called on me from the audience.

Robert Darnton was the featured guest. In Europe, libraries struggle to find funding for digitization initiatives. Patrick Bazin partnered with Google after numerous requests for public funds were denied or ignored. In England, Paul Ayris forged strategic public-private partnerships as government support for digitization projects waned. Robert Darnton's talk introduced his European audience to efforts in the United States. Unlike Europeana and digitization efforts throughout Europe, Darnton assembled support from a

wide array of philanthropic agencies for a project called the Digital Public Library of America (DPLA).

Erland Kolding: Is it your intention to have this funding be realized by private foundations without them asking anything in return?

Robert Darnton: Yes.

On October 1st, 2010, Robert Darnton invited the heads of several major foundations, the Library of Congress, the National Archives, the Smithsonian Institution, the National Endowment for the Humanities, and computer scientists to discuss the idea of a national digital library. Paul Courant, Pamela Samuelson, Jane Ginsburg, and Doron Weber of the Sloan Foundation were in attendance (Courant 2010; Palfrey 2011). Forty people in a closed, informal session discussed the future of a broad-based coordinated effort to aggregate access to digitized collections throughout the United States. Darnton sent the foundations a two-page description of the project. “In the correspondence with all of these great foundations they all answered saying, ‘*This is such a good idea we want to support it.*’” After thirty minutes of general discussion, the foundations said, “We’ll come up with the money.” With a small grant from the Arthur P. Sloan foundation, Harvard created a secretariat to handle the day-to-day affairs of the project. “We have six working groups that are studying various aspects of the problem: the technological aspects, the legal aspects, the governance problems, the problems of scope and content...” (Darnton 2011).

Besides Darnton, I was the only American in the room. All attendees had knowledge of Google’s project to digitize millions of books in libraries across the world. Beyond Lyon, the Austrian National Library, the Bavarian State Library, the National Library of Catalonia, Oxford University, and many other libraries throughout Europe joined in partnerships with Google to digitize and scan books. Many knew of the controversies surrounding the Amended Settlement Agreement, but few knew of HathiTrust. HathiTrust evolved from the collaborative efforts of thirteen universities in

the Committee on Institutional Cooperation (CIC) and the University of California. Universities partnering with Google had to quickly manage an immense amount of data. Rather than work individually, CIC and the University of California formed a shared digital repository with seven major working groups dedicated to both digital preservation and full-text search of digitized books. As the project evolved, the partnership grew to include over fifty research libraries from across the United States and Europe. John Wilkin, involved in the University of Michigan's early negotiations with Larry Page, is HathiTrust's executive director. In contrast with Google, whose corporate mission is to "organize the world's information and make it universally accessible and useful," HathiTrust's mission is dedicated to the "common good by collecting, organizing, preserving, communicating, and sharing the record of human knowledge" (HathiTrust 2012).

Bottando: How do you envision bringing in some of the other collective agencies like HathiTrust?...Is there a way to bring these societies that already exist into the DPLA [Digital Public Library of America]?

Darnton: Right. I don't know if you are familiar with HathiTrust. The word "Hathi" means Elephant in Hindi, so it's big and has a long memory. Its headquarters are in Michigan. It's wonderful. I'm totally in favor of HathiTrust. Harvard University Library has joined HathiTrust. But your question is right on target because the HathiTrust now has a huge digital database. I think they are up to twelve million books. So they are almost as big as Google. And, in fact, the books come from Google's scanning. How is that? Well, Google signs a contract with a research library in which the research library gives its books to Google for "free" and Google digitizes them. When I say, "free," um...not exactly.

Google digitized 850,000 books from the Harvard Library, all in the public domain. It cost us \$1.9 million dollars for this (air quotes) "free" service. Why? Because the handling, the transaction costs, the logging in, the logging out, we had to hire extra staff. It's very expensive this "free" service. So, Google digitizes the books and then gives back to the library a so-called library digital copy, a digital file of all the books they scanned. However, Google does so according to the terms of a contract, which is *secret*.

So, I can't tell you what the contracts are with Google, but without running in danger of being *thrown into jail*, I would say imagine for example that you can't read any of the books in your digital copy. They're not available for reading. They're available in case a book is lost and needs to be replaced and can't be found on the book market. We're happy to have a library digital copy, but we can't use it really for most purposes.

Now there are about thirty research libraries in the United States that have received these copies and they have put them together in the HathiTrust. So the HathiTrust's mission is not to make these available for reading because that would violate the contracts [with Google]. So, Hathi is a wonderful gigantic databank committed to preserving digital copies. But could we convert this preservation function to a distribution function? That's what I hope will happen. And I hope it will happen if we can persuade Google. (2011, emphasis added by the writer)

That day in Europe Darnton publicly broke his interpretation of non-disclosure agreements signed with Google. In the interview with Jon Orwant, I voiced Vaidhyanathan's critique that librarians, those information workers tasked with serving the public and preserving knowledge, were required to sign non-disclosure agreements as a part of their partnerships with Google. After continuing a series of questions about user confidentiality and technology standards, Vaidhyanathan wrote in an online blog exchange with Paul Courant,

I look forward to responses from Paul and others. I have been waiting two years for them, of course. And all I get is the silence created by non-disclosure Agreements. BTW, should public university librarians be signing non-disclosure Agreements about their core services? (2007)

Vaidhyanathan's concerns were political, a desire for librarians to speak without restriction. Orwant was concerned with specifics. In response to my question he asked, "I mean do you know what Siva was asking Paul?" Darnton's testimony fills in the gaps. Whether or not Darnton actually fears being "thrown into jail" for publicly discussing the results of Harvard's partnership with Google is of no matter. Initial restrictions of Google's scanning technology, non-disclosure agreements, and the fact that the digital copy given to librarians began with immediate restrictions designed by the engineers at Google need to be a part of public conversations examining Google's partnerships with libraries.

Important points are missing from Darnton's speech. The "library digital copy" is readable. Machine-readable. Google and library partners were cautious about copyright from the beginning of the project. Google's ability to quickly digitize books in a partnership agreement enabled librarians at partner institutions to have on file digital copies of books available for full text search. Not all agreements were the same with

Google. The University of Michigan received a digital copy from Google with Optical Character Recognition (OCR). OCR digital documents enable both a machine reading function and keyword text search, a feature libraries like the University of Michigan attempted to offer with onsite digitization projects. Partnering with Google expanded the University of Michigan's ability to offer key word search for books that would otherwise go unnoticed by patrons. To University of Michigan legal counsel Jack Bernard, Google Books Search meant the "end of obscurity" for those books (Bernard 2010). The expansion of keyword search extends to all members of the HathiTrust consortium, and to those that access HathiTrust's public domain resources via the World Wide Web (Courant 2007; Soderdahl 2010; University of Michigan News Service 2010). Like an online bookstore without the bookstore, search terms allow users to "look inside the book," without Amazon or Google. The user need only sit at the computer at a HathiTrust institution to find pages within a book that match their needs. In order to see the context for the key words searched for works under copyright, students must go to the stacks.

This may be true for the University of Michigan and HathiTrust partners, but not for Harvard. The quality of the digital copy, what Google gave to libraries as a result of the partnership, involved varying negotiations and contracts. The University of Michigan posted its contract with Google online after a Freedom of Information Act (FOIA) request required them to do so (Band 2006). Javier Ruiz of the British Open Rights Group filed a FOIA request to obtain access to the 2011 contract between Google and The British Library (Weinberger 2011). Google gave the University of Michigan OCR'd texts, books able to be read by machines. "They're not available for reading. They're available in case a book is lost and needs to be replaced and can't be found on the book market." Harvard libraries received digital preservation-only scans.

What does it mean to be a Google Library Partner? Contracts. Negotiations. Avoiding the standard library-vendor relationship. Libraries seek outside vendors to work on complex projects like digitization, projects where a private company or non-profit has

a technological advantage at producing work the library would perform at a higher cost. An outsourcing agreement outlines the relationship between the vendor and customer, a contract that clearly explains expectations for goods and services. The standard outsourcing contract requires vendors to be in compliance with federal, state, local and foreign laws and governmental regulations when providing services. If Google were a library vendor, like the Internet Archive, the company would charge a standard fee for its work. Libraries would have expected goals and outcomes that Google would need to meet. If Google were a library vendor, and not a library partner, Google would have been required at the onset of the contract to abide by existing copyright laws. In choosing to be legal partners and not vendors, libraries not only got in bed with Google. They got married.

We were approached singly, charmed in confidence, the stranger was beguiling, and we embraced. For the love of selfish confidence, we spoke neither our fortune nor our misgivings with our neighbors or our friends. We felt special...

Can we say it? The deals are not fair. We were taken advantage of. We are asked to be grateful for something wondrous where we could have achieved more for ourselves and demanded more from others. We let this happen and we should not have. Now we must count on the beneficence of others. (Kaufman & Ubois 2007)

Peter Brantley wrote these words in 2007 when he was the director of strategic technology for academic information systems in the University of California's Office of the President. He was also the co-founder of the Open Book Alliance, whose members opposed the Google Books settlement. He is now the Director of the Internet Archive's Bookserver Project. When Google executives initially approached the "G-5," Oxford, The University of Michigan, the New York Public Library, Harvard University, and Stanford University, all involved themselves in a gold rush to digitize resources. Peter Kaufman and Jeff Ubois of Intelligent Television, an independent organization producing films, television, online video and research on the future of media, included Brantley's quote in their report "Good Terms - Improving Commercial-Noncommercial Partnerships

for Mass Digitization.” The report revealed that libraries, in a “hurried and competitive context,” quickly signed deals with Google they would later regret.

...at first many staff reacted to their offer with disbelief. One librarian reportedly wondered what they [Google] were smoking. In the weeks and months that followed, as it became clear that Google was serious and that other institutions were being courted, a sense of urgency set in. In retrospect, many decisions may have been made in that hurried and competitive context without sufficient attention to the mission of each institution and to the overall welfare of the research community. (Kaufman & Ubois 2007)

Google’s “moon shot” in 2005 offered great promise, the promise for libraries involved to be great. By 2007, the library community realized the need to enter partnerships carefully.

Why a Digital Public Library of America?

Maybe it is time for an amicable Google divorce, a time for libraries to work together to share digitization efforts and a time for Google to renegotiate its public role as a company by expressing its support for a new non-commercial endeavor. Problems posed by the Google Books settlement cannot be solved simply. Renegotiating contracts and converting digital files from preservation to a distribution function takes time, resources, financial capital, and assurances of lessened risk for Google. The long-lasting benefits of this partnership will be of great benefit to the public domain and Google itself. The Digital Public Library of America is a proposal beyond Google’s Books, beyond the confines of the Amended Settlement Agreement with the Authors Guild and American Association of Publishers, and beyond HathiTrust. As a meta-library in its nascent period, this endeavor creates a space of possibility, the possibility that a digital institution could speak for the rights of readers, librarians, and the public domain. Funded outside of the government, the Digital Public Library of America creates an extra-governmental legal institution able to speak for the rights of libraries and the reading public.

In “The Abuses of Literacy: Amazon Kindle and the Right to Read,” Striplas (2010) argued for a right to read that would complement free expression. In 2005, Kembrew McLeod published *Freedom of Expression*® to speak out against “brand

bullies and other enemies of creativity” (330). Five years later, Striplhas’ call for a right to read quoted Julie Cohen’s legal advocacy, “Freedom of speech is an empty guarantee unless one has something, *anything* to say...[T]he content of one’s speech is shaped by one’s response to all prior speech, both oral and written, to which one has been exposed” (2010: 311). Freedom of Expression relies on a society that maintains values for the freedom to read and read anonymously. A national digital public library can strongly advocate for the rights of readers.

Tattered Cover Bookstore in downtown Denver, Colorado once fought a battle in defense of readers’ right to privacy. City of Thornton police officers demanded to search the purchase records of a suspected drug manufacturer who purchased books from the store. In 2002, the Colorado ACLU joined to support Tattered Cover’s defense of the right to read. The Colorado Supreme Court supported Tattered Cover against the City of Thornton’s police department. Justice Michael Bender stated in his decision,

...had it not been for the Tattered Cover's steadfast stance, the zealotry of the City would have led to the disclosure of information that we ultimately conclude is constitutionally protected...Anonymity is a shield from the tyranny of the majority. It thus exemplifies the purpose behind the Bill of Rights, and of the First Amendment in particular: to protect unpopular individuals from retaliation - and their ideas from suppression - at the hand of an intolerant society. (ACLU 2002)

Tattered Cover, an independent bookstore, defended the right to read in an age of overzealous policing. What of Amazon? Or Google? In the face of police and censors, libraries are tasked to serve the public benefit by securing a reasonable right to privacy for patrons to access knowledge. Google, evil or not, cannot make these guarantees. Yet, even libraries and librarians remain on unsettled ground when defending the right to read.

Eleven years after its passing, the *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot) Act of 2001*, challenges libraries and librarians seeking to protect patron privacy. On May 27th, 2011, Congress forwarded and the President approved a four-year extension for expiring provisions of the Patriot Act (Mascaro 2011). Section 215, the

“library provision,” allows law enforcement the ability to demand reader records from libraries or booksellers (Vaidhyanathan 2004). Libraries voiced opposition in 2005, successfully leading to an amendment of the provision. The government may still request library circulation records, library patron lists, book sales records, and book customer lists, but these requests must be first approved by the FBI Director, the Deputy Director, or the head of the FBI’s National Security Division. By March 11, 2011 the Senate Judiciary Committee added more safeguards for library and bookseller records. Before gaining access to library records, law enforcement must “prove a terrorist or espionage connection” (ACRL 2011). Not set to expire until June 1, 2015, the extension of the library provision keeps libraries seeking to secure expectations to read privately and anonymously in conflict with the state. Libraries, assumed spaces of free inquiry, remain bound by demands of the Patriot Act until this provision expires. Even with this current legal regime in place, the history of libraries as public institutions serving the common good presents an option better than the one created through Google’s class action settlement with the Authors Guild and American Association of Publishers. Rooted in early attempts to insert benefits for the public domain in the class action settlement, the Digital Public Library of America has a better foundation for moving forward efforts to expand access to orphaned works.

The Open Access Trust

On April 13, 2009, the law office of Camara & Sibley LLP filed to request a pre-motion conference in the *Authors Guild v. Google* class-action settlement. “We seek to file a motion for leave to intervene on behalf of Lewis Hyde, Harry Lewis, and Open Access Trust Inc., a Massachusetts nonprofit corporation dedicated to promoting access to knowledge, worldwide,” (Camara & Sibley 2009). That spring Charles Nesson, Weld Professor of Law and Founder of Harvard’s Berkman Center for Internet and Society, convened a meeting with Robert Darnton, Lewis Hyde, Harry Lewis, and others from the Berkman Center. Nesson’s goal was to find a way to intervene in the Google Books

proposed settlement. The deadline for objections and opt-outs was set at Jan. 29, 2010. Those intending to intervene had little time, but much incentive. If a party objected to the settlement, that party had standing to appeal. In a class action lawsuit, those organizations with an interest not named in the suit may ask the judge for a formal intervention. Once in the suit, parties must answer concerns raised by objectors before the settlement can be approved. Book readers, libraries, and scholarly writers were not classes of the settlement. Unlike the Authors Guild and the American Association of Publishers, the main concern for the Open Access Trust was to maintain a healthy ecology of knowledge (Hyde 2010).

“Google knows everything and governments know second to Google.

Commercialized restriction of information may make it harder in the long run for people to get access to things that they used to get access to relatively easily” (Lewis 2010).

Harry Lewis and I spoke in his second floor office in Harvard’s Maxwell Dworkin Hall, the building that houses the School of Engineering and Applied Sciences. Harry Lewis, Gordon McKay Professor of Computer Science, expressed a “love/hate” relationship with Google. “The [Google] CTO was a student of mine” (Lewis 2010). Lewis joined Nesson’s efforts for reasons other than copyright and scholarly publishing. He expressed concern for privacy.

Right now I'm worried more about privacy than anything else. That is to say I don't know and I am uncomfortable about how much information is being collected about the reading habits of those that are reading Google Books... But the general concern is that as reading goes online as a service model, there is the capacity to gather incredibly fine-grained information It's never before been that possible to gather information on one's reading... If not exploited commercially, it will be exploited for security...Once the information is there it is just too tempting...(Lewis, 2010)

In an effort to intervene on behalf of the public domain, Harry Lewis and Lewis Hyde became named representatives of the Open Access Trust. The trust’s goal was to be a recipient of money collected from the sale and licensing of orphan works to guarantee that money would be fed to open access movements.

If there was money to be made from orphan works it shouldn't go to the author's and publishers it should go in some way to the public domain...It was a way to translate this privatized litigation into something that had a public benefit. (Hyde 2010)

Hyde described himself as merely an onlooker in the first meeting. As the effort moved forward, Nesson, Hyde, and Lewis became trustees. In order to distance themselves from Harvard's publicly voiced concerns for the proposed settlement, Nesson, Hyde, and Lewis worked only as representatives of the Open Access Trust and not as representatives of Harvard.

The Open Access Trust's letter to Judge Chin cited that Google would become the only company in the world with a license to exploit orphaned works. "No other company will be able to buy a similar license because, outside the context of the proposed class-action settlement in this case, there is no one from whom to buy such a license" (Camara & Sibley 2009). They claimed the Authors Guild and the American Association of Publishers joined with Google in hopes of gaining future revenue generated from the sale of orphaned works, plotting "a cartel". The Open Access Trust claimed a need to intervene on behalf of the public domain.

We seek intervention to defend our interest in orphaned works — to *defend the public domain's claim to free, fair use*...This mechanism breaks down in the case of orphaned works because, with respect to these works, there is no one from whom to buy a license. The public can buy no license; the author can reap no reward. Because exclusive rights in orphaned works do not serve the ultimate purpose of copyright, the public domain has a claim to free, fair use of orphaned works. (Camara & Sibley 2009, emphasis added by the writer)

"Judge Chin summarily denied...He said I deny your petition." Hyde discussed the results of this early intervention to defend against Google, the Authors Guild, and the American Association of Publishers creation of a de facto compulsory licensing structure for orphaned works. I asked Hyde why Judge Chin denied the request of the Open Access Trust to intervene.

I don't remember. Basically he said, you know, that if we didn't like the settlement we should come in as objectors...It was very short, dismissive...Part of this was *we didn't have anybody*. Some pro-bono law firm has to do the complicated legwork of this and we didn't have anybody to do it. So we never produced a

petition to intervene that I thought had enough *clout* to make it go forward. (Hyde 2010, emphasis added by the writer)

Nesson, Hyde, and Lewis had crafted a quick and clever maneuver to swiftly intervene in the settlement. “We think that this case and the constitutional issues of the national moment that it presents will be better resolved if the public domain has a seat at the table.” (Camara & Sibley 2009). A public domain that sits at a table? A public domain that claims free and fair use of orphaned works?

Defending the Public Domain

Discussions of the public domain center on metaphors of space (Lange 2003). Progressive intellectual property scholars reclaim the public domain as a “lawyer-free zone,” that space where all may reap “the riches found in the commons” (Lessig 2004; Chander & Sunder 2004: 1331). For a “lawyer-free zone” scholarship on the public domain is dramatically full of lawyers (Hemmungs Wirtén 2008). In part, the ghost of Garrett Hardin haunts legal scholarship dedicated to “property’s outside,” the point in time when the balance of public benefit and private reward tilts firmly toward the benefit of the public (Boyle 2008). Hardin’s “Tragedy of the Commons” is central for justification of private property. An ecologist concerned with human population growth and natural resource depletion, Hardin invited his readers to meditate on the consequences of shared resources - to “picture a pasture open to all,” (Hardin 1968 qtd. in Hyde 2010: 33). Hardin’s tragedy of common space imagined a rational herdsman who would overuse an open commons for private benefit. Law and economics scholars used Hardin’s rationale to expose the “evils” of not propertizing, a defense used for strong intellectual property rights (Chander & Sunder 2004). Hardin’s words presumed that no boundaries limited historical use of the commons. Archival research tells another tale. Common spaces were never “open to all.” Bound by restraints, the commons had rules. The furze, a thorny evergreen shrub, could be cut and removed from the commons, but only for heating a house and only as much as could be carried on the back of the commoner (Hyde 2010). This “stinted” vision of the commons, as open for use but not

use of all kinds, gains circulation among progressive legal scholars seeking to counter intellectual property expansionism. In the process, the defense of the commons becomes a romance to itself. Celebrating the commons and the public domain as free speech zones that facilitate innovation, progressive scholars turn a blind eye to the exploitation of the global commons for private benefit.

Hemmungs Wirtén characterized the public domain as a jungle, a space ungoverned yet ripe for appropriation (2008). The rare orchid, once discovered, brought to the lab, isolated for a particular gene sequence, and turned into a pill becomes innovative patentable property. The public domain is a rich space for borrowing, appropriation, and creative endeavors that benefit private corporations and individual artists. “Now, corporations declare the trees and the shaman’s lore to be the public domain, while indigenous peoples demand property rights in these resources” (Chander & Sunder 2004: 1335). A simplistic vision of the public domain as a space to protect against corporate expansion of intellectual property risks ignoring cultural violence waged against Indian nations through the “expropriation of ceremonial objects for museum collections” and “unauthorized excavation of indigenous graves” (Coombe 1998: 232).

Not ignorant of the public domain as a space for appropriation of all kinds, the Open Access Trust became an institution invested in supporting a healthy public domain for those not represented in the settlement. Class action settlements enable plaintiffs and the defendant to negotiate outside of the courtroom, waiving the right to sue in favor of an offer of compensation for their complaint. No parties within the case spoke directly for the public benefit of works entering the public domain, or for uses of orphaned works beyond the compromise crafted by Google with the Authors Guild and the American Association of Publishers. Hyde, Lewis, and the Open Access Trust wrote to represent “readers, scholars, and teachers who use orphaned works” (Camara & Sibley 2009). While dramatically affected by the results of the settlement, the public of readers,

scholars, and teachers were addressed only through friend of court briefs submitted to Judge Chin. Though rejected, the Open Access Trust inserted into dialogues primarily centered on the rights of authors, publishers, and Google the need to focus on readers and libraries.

Could the Digital Public Library of America fill the same legal vision as the Open Access Trust? Hyde remarked that the Open Access Trust's intervention lacked clout. It needed more legal support and, perhaps, more time. A Digital Public Library of America could continue those efforts raised by Hyde and others to craft an entity to speak on behalf of the public domain. Litman (2001) noted the historic failures of Congress to produce legislation aligned to the public benefit of copyright's bargain in the United States. In the years leading to the 1976 revision, Congress relied upon negotiated bargains crafted by industry representatives to produce legislation. Congress consistently failed to write revised copyright statutes focusing on the general principles of copyright found within the constitution. Most recent revisions are cast as necessary to handle the latest technological device or artifact causing friction among major corporate interests in the United States. If Congress fails to represent the interests of readers, a Digital Public Library of America could.

In 2009 the Open Access Trust did not have the legal clout to move forward. It was a swift ad hoc production to insert in a commercially focused class action lawsuit the importance of the public domain. It was a legal maneuver not featured in the interests of the class action litigants, nor as an independent entity in existence. Perhaps it seems unnecessary to have an institution outside of the government exist for the benefit of speaking out for common access of resources to benefit the public domain. Yet, with lack of Congressional action, the Open Access Trust presented an immensely important potential to represent a commons-based vision of access to resources. If not yet an entity that can "sit at a table," the Open Access Trust was a legal entity representing rights to use and re-use works without requesting permission from a rights holder. "This has since,

I presume, died because I don't know if you can kill a trusteeship but we never did anything with it” (Hyde 2010). Hyde noted that their effort did not have enough “clout” to move forward. If the trusteeship died for lack of clout, could the germ of these efforts be renewed as the Digital Public Library of America?

Law and the Digital Public Library of America

There aren't vested interests of lobbies against orphan books legislation. I hope that we can deal with this difficult problem by creating...some kind of extended collective licensing agreement, which could have legislation passed by Congress. Now if the publishers and enough authors back this there could be [an optimal legal regime in place] when we launch things [for the Digital Public Library of America].

Now there will be a huge meeting next November or October that we will get backing from the White House. So if Obama backs this legislation [which] won't cost Congress a penny, then it will work. (Darnton 2011)

On April 1st, 2011, within a week of Judge Chin’s rejection of the pending settlement of *Authors Guild et al. v. Google, Inc.*, James H. Billington, the Librarian of Congress, and Maria A. Pallante, Acting Register of Copyrights, sent to Senators Patrick Leahy and Charles Grassley an analysis of the legal framework behind digitization for Congressional review. This letter outlined concerns reflected in Judge Chin’s rejection of the settlement, concerns expressed by the Authors Guild and publishers, in addition to legal scholarship by Pamela Samuelson at Berkeley and John Palfrey of Harvard.

The settlement proposed by the Authors Guild, book publishers and Google would have operated on an extended collective licensing (or opt-out) basis, but it would have done so only for one user (Google) and without the benefit of Congressional oversight as to goals, terms, and conditions. (Billington & Pallante 2011)

The letter signaled the office’s support for a Congressional response to issues that arose within Google settlement hearings. Parroting Judge Chin regarding the benefits of “the digitization of books and creation of a universal digital library,” Billington and Pallante supported “a more strategic and comprehensive effort” that included managing licenses with copyright owners. The Library of Congress discussed the issue with leading public collecting institutions in the United States. Named were the National Archives, the

Smithsonian Institution, and the Digital Public Library of America. With minimal funding and a short amount of time, the Digital Public Library of America appeared in a report supporting legislative reform.

Collective Rights Management and the Public Benefit

Chapter four charted the history of Congress's attempt to pass orphan works legislation. In 2008, the Senate unanimously passed The Shawn Bentley Orphan Works Act. Support for orphan works legislation died when the global financial crisis shifted House priorities toward management of the subprime mortgage crisis in the United States. If enacted, the legislation would have given the public similar protections Google sought in its settlement with the Authors Guild and the American Association of Publishers, allowing digitization of orphan works without fear of copyright infringement lawsuits. Orphan works legislation is the greatest concern for those attempting to build the Digital Public Library of America. This new institution would include books out of print yet covered by copyright. Books published between 1923 and 1964 contribute to the proliferation of orphaned works. Any use of them requires permission from copyright holders that cannot be found. In order for the Digital Public Library of America to expand access to orphaned works, it needs Congress to pass legislation to protect it from litigation.

A mention from the Librarian of Congress does not, by itself, represent automatic support for the Digital Public Library of America or other mass digitization efforts throughout the United States. Billington and Pallante's letter to Leahy and Grassley highlighted the Library of Congress's efforts to digitize materials and make them more accessible to the public. The Digital Public Library was featured in a footnote.

Norwegian and Japanese parliaments have passed legislation allowing their national libraries to digitize books in their collections, creating their own national digital public libraries. Support for a mass digitization project stemming from the collection of the Library of Congress would require Congressional financial support, support that

Congress is unlikely to grant. Digitization efforts outside of Google cost ten cents to ten dollars per page depending upon the quality demanded (Darnton 2010; Samuelson 2011). The Librarian of Congress did not directly support the Digital Public Library of America as a sole option. It has long-standing digitization efforts needing financial support. Mention of the Digital Public Library of America as an option gives hope that Congress will consider the efforts of this new institution to expand access to information.

While orphan works legislation may have strong support, increased financial support for the Library of Congress as a central digitization node is unlikely. Congress passes the burden of most copyright legislation on to private parties and provides the United States Copyright Office with little staff and funding. In return, Marybeth Peters and the copyright office depend upon interest groups to draft best practice statements to guide future revisions to copyright law. Legislative action to enable broad-based access to archived materials through an extended collective licensing regime could gain more support. It would be a benefit not only to libraries and archives. It would benefit Google.

“I start with the general posture that it is a good thing for us to try to make more information, especially that which is published in books, available broadly to many people” (Palfrey 2011: 837). After a symposium “Collective Management of Copyright: Solution or Sacrifice?” held at Columbia Law School, Palfrey of Harvard’s Berkman Center published “A Digital Public Library of America?: Collective Management’s Implications for Privacy, Private Use and Fair use,” in the *Columbia Journal Of Law & The Arts* in December of 2011, exploring the consequences for the development of collective management organizations. The symposium brought together John Palfrey, Pamela Samuelson, Jonathan Band, and other established legal scholars who have spoken publicly about intellectual property expansionism. Collective rights management has long been a part of the United States legal context. Since the 1909 Copyright Act created the first compulsory mechanical license, United States copyright has allowed for mechanical reproduction of musical compositions without consent of the copyright owner, weakening

strong copyright. Cover songs only require an artist to pay a royalty fee, not seek permission. BMI, ASCAP, and SESAC weaken the strong copyright of individual rights holders in favor of a single license distributed by a professional rights organization. Royalties are redistributed via a proprietary statistical model. Beyond music, the not-for-profit Copyright Clearance Center (CCC) provides collective copyright licensing services for corporate and academic users of copyrighted materials.

As writers, sample-based artists, and scholars publish creative works, collective management organizations remove the requirements for other creators to ask each individual or corporate rights holder permission. Without requesting permission, those creating new works from old risk the costs of a fair use defense. In many cases, publishers simply will not publish research that involves extensive rights clearances. The Book Rights Registry would have created a kind of collective management organization for books bound within the strictures of the Google Books settlement. A legislative solution would sidestep concerns raised by Judge Chin and the Justice Department regarding Google's settlement and refocuses conversations framing Google as a monopoly toward public discussion of the benefit for broader use of materials deemed "orphans." Laws enabling a collective management organization for books mitigate the concern that only Google would be able to exploit orphan works through distribution of an institutional subscription for libraries with no guarantee for the future cost of this subscription. Developed outside of the settlement and supported legally by Congress, the benefit of massive book digitization would move beyond private initiatives toward an initiative aligned with the public benefit.

The advance of an extended collective licensing regime for books would expand the goals of the Amended Settlement Agreement between Google, the Authors Guild, and the American Association of Publishers. The Authors Guild and American Association of Publishers, attempting to represent all authors and publishers as a class, would have given Google a license to commercialize out-of-print and orphan books. In the amended

settlement, Google was allowed both the creation of an institutional subscription database that it would sell to libraries and other higher education institutions and the sale of individual books. Sixty-three percent of the revenue gained from Google's work would be given to the Book Rights Registry and funds were to be put in escrow to pay unregistered rights holders should they come forward. Some unclaimed funds would be used to search for unregistered rights holders.

A legislative solution could achieve similar ends with results that would not threaten authors and publishers who felt unrepresented in the class action settlement. The settlement proposed collective licensing on an opt-out basis. Congressional legislation could be based on an opt-in measure. By passing legislation in support of an extended collective license for out-of-print books, Congress could open up the possibility that unclaimed orphan works could become available on an open access basis. "If a book rights holder later came forward, he or she should be able to change the open access designation for such works" (Samuelson 2011: 720). Google's book digitization efforts were an affront to writers anxious about their rights in a time of increased digital publishing. A Congressional solution giving writers the choice to opt-in may not be as expansive or fast as Google's efforts. In contrast, it would signal a commitment to a healthy information ecosystem in the United States.

The difficulty of this proposal is the need for Congress to support a new national entity to administer the system. By repurposing work done by Google, the Digital Public Library of America could fulfill this role as an independent public service corporation. Beyond the private interests of the Book Rights Registry, this new entity could subvert private benefit for the public good. Funded by private foundations, Congress would not need to appropriate funds for the Digital Public Library of America and this new entity would have no necessary ties to the state. The Library of Congress could serve as an alternative means to expand broad access to works, but the financial support necessary for this undertaking inhibits likelihood of Congressional support.

Forming Coalitions

In the United States...we distrust the state. We don't think the state is really going to come to our aid if we want to create something new of this sort... We don't envision it [the Digital Public Library of America] as part of the government. We envision it as an independent public service corporation. (Darnton 2011)

In Copenhagen, Robert Darnton explained the political processes behind his work to convince foundations to support the project. Foundation support would enable the Digital Public Library to become an independent digital library focused on the public interest that could serve as a centralized coalition and portal for libraries across the United States analogous to the European effort Europeana. Europeana is not a separate library entity, but one that aggregates access to library collections throughout Europe. It is an "Aggregation of aggregations." Beyond its role as a portal, Europeana advocates for digital library collaboration. "Interoperability. This is one concrete thing that openness must mean" (Cousins 2011). Jill Cousins, Program Director of Europeana, spoke just a few hours after Robert Darnton's address. In order to aggregate access to digitized resources across Europe, Europeana united individual libraries to work within open, interoperable platforms. While Google's project builds from open source technology, their system remains proprietary in that the algorithm for search remains a trade secret. Google's focus is not to enable the creation of a broad-based digital library initiative. The company's main focus was to forge digitization partnerships with major libraries, offering a swift digitization option but not a broad-based effort to organize this data. Europeana encourages open sharing through a distributed and decentralized platform based on open standards technology. As a non-commercial European venture, no aspect of their technological work needs to be held in secret, trademarked, or restricted. With or without Congressional legislation, the Digital Public Library of America as an independent entity with foundation support has set interoperability of metadata between libraries as a goal. This is a great advance for libraries, for research, and for the concept of openness. By forging coalitions with library partners throughout the United States, the

Digital Public Library of America has the power potential to produce an open book data system. Libraries work to create systems that last throughout time. Google's system crafted on an ad hoc basis to construct its retail digital books platform, created problems libraries had to resolve.

Books digitized swiftly went to Google's book search web portal with little corrections. As the search portal evolved, Google encouraged users to notify the company of corrections. Even this feature began as a question mark, as users questioned where to find the link to post corrections. Small, but not entirely hidden away, the link to a feedback form appeared in the upper right hand corner of the screen. Feedback from users was necessary at the beginning of Google's project. Pervasive errors in metadata led Geoffrey Nunberg, linguist and professor at the UC Berkeley School of Information, to call Google's project a "train wreck" (2009). In 2009, Google Book search listed Tom Wolfe's *The Bonfire of the Vanities* with an 1888 publication date. *Virtual Community: Homesteading on the Electronic Frontier* by Howard Rheingold was listed with an 1899 publishing date. *Hamlet* was listed in the category of "Antiques and Collectibles." *The Merchant of Venice* was classified as a "foreign language study." Dan Clancy, the former Chief Engineer for the Google Books project, claimed the errors came from libraries. Nunberg attributed misdatings as the likely result of the OCR scanning process. "For example the 1604 date from a 1901 auction catalogue is drawn from a bookmark reproduced in the early pages" (2009).

A quick search through Google Books today reveals Rheingold's *Virtual Community* with a publishing date of 2000. Category classifications have disappeared. *The Merchant of Venice* and *Hamlet* now only list the books' writer, translators, page numbers, publication date, and the availability of a preview. Rheingold's *Virtual Community* rests embedded in a preview frame. A red box to the left entreats the reader to "BUY EBOOK - \$18.70." Clicking the red box leads to Google Play™, Google's new online store for music, movies, books, and apps for its Android cell phone platform. It

resembles a low-cost replica of the Amazon.com and iTunes online retail platforms. Within nanoseconds the screen uses lightbox effect to highlight the next choice – Google checkout. All other screen information becomes unavailable. In two clicks Rheingold’s book exploring the history of virtual communities on the World Wide Web can be downloaded to an iPad, eReader, or Smartphone.

To find *Virtual Communities* in a library, users may click on “Get this book in print,” highlighted in blue and less apparent on the page. Underneath Amazon.com, Barnes & Noble, Books-A-Million, and IndieBound is the link “Find in a library.” Clicking the link leads to WorldCat®, the online combined library catalog itemizing the collections of libraries participating in the Online Computer Library Center (OCLC) global cooperative. Entering a zip code leads the user to the nearest place to find the book. The changes in the Google Books platform from 2009 to 2012 reveal an unsurprising aspect of the project that librarians and libraries understood in some way as they partnered with Google. Google’s desires to massively digitize books attempted to create competition for Amazon.com and Apple’s iTunes as a central purchase point for digitized books. This did not remove benefits for libraries seeking to digitize quickly, but it did reveal Google’s role within the partnership.

Paul Soderdahl, Associate University Librarian for Information Technology at the University of Iowa libraries, was a member of HathiTrust’s Strategic Advisory Board.

The Strategic Advisory Board,

- Reviews the HathiTrust development agenda and considers the implications of that Agenda for the future of academic libraries.

- Reports to the Executive Committee recommended alterations in the development Agenda based on such reviews.

- Based on its reviews, develops position papers for the academic library community to encourage debate or mobilize bias with regard to particular issues.

- Works with the Executive Committee to develop policies for HathiTrust and its partners. (HathiTrust 2012)

Appointed by John Wilkin, Soderdahl advances HathiTrust functionality for users with print disabilities. Each October Soderdahl, Wilkin, and Google Library Partners met at the Googleplex for the Google Partners Summit, a space where statistics of works scanned, improvements to the delivery of library digital copies, detection of duplicate copies, and discussions of Amended Settlement Agreement hearings are shared with library partners (Eaton 2009). Not open to the public, these summits served as a space for library partners to share feedback with Google regarding issues of quality improvement. Soderdahl, along with Paul Fogel of the California Digital Library and Bryan Skib, worked together on HathiTrust's Quality, Ingest, and Error Rate Working Group. "The ongoing issue was not the error rate itself, but *how* Google calculated error rates" (Soderdahl 2010). Soderdahl and members of the Error Rate Working Group worked on "continuous quality improvement." of Google's error rate, checking it against their own data. The error rate was a metric, the way Google estimated the number of errors found per page. According to Soderdahl, it was a "valid metric but not a reliable metric over time." A metric is valid when it measures what it's supposed to measure – errors. A metric is reliable when it yields consistent results. Soderdahl and members of the Error Rate Working Group served as a check for Google's work. Data, digitized books, ingested in HathiTrust's servers were sent via Google's own special delivery pipeline called the "GRIN," the Google Return Interface. Soderdahl and other members had to inform Google when digitized books as data were given with too many errors.

Siva Vaidhyanathan and Pamela Samuelson publicly critiqued Sergey Brin and other's references to Google as the Library of Alexandria 2.0. In Brin's 2009 *New York Times* op-ed, "A Library to Last Forever," Brin never referred directly in the text to Google's project as a new library, a searchable Alexandria for the dot-com age. Larry Page proposed to digitize all books when Google was just a "fledgling startup." In his op-ed, Brin referred only to Google Books as a "searchable repository" for "millions of books." As Google's Book Search page evolved, it enabled users to create their own "My

Library,” links to books users have read, will read, or want to read. The title, a key feature of rhetorical address, sold Brin’s words as a part of a grander project. Samuelson struck,

If Google Books was just a library, as Brin claims, library associations would not have submitted briefs expressing reservations about the GBS settlement to the federal judge who will be deciding whether to approve the deal. Libraries everywhere are terrified that Google will engage in price gouging when setting prices for institutional subscriptions to GBS contents. (2009)

Vaidhyanathan critiqued Brin’s op-ed noting, “More interesting, though, is Brin’s failure to mention the fact that Google Books is a revenue-generating project for the company. It is not a public service. And Google is not a library” (2011: 157). Brin may have never directly sold Google as a library, but the company did sign on to be a library partner and a repository of knowledge.

Google, while reaping the benefits created through the conditions set for a partner contract rather than a vendor contract, at least fulfilled one goal laid out in Brin’s 2009 op-ed. “If Google Books is successful, others will follow.” Others have followed. Libraries. Libraries can now do the work necessary to aggregate digitized access to materials in the public domain. They do not need Google alone to do it and do not pose a threat to Google’s commercial model. They may benefit from a renewed Google partnership under different terms.

HathiTrust and the Digital Public Library of America

Google is not a library. HathiTrust is. HathiTrust, a partnership of research institutions and libraries, claims itself as both a digital repository and a digital library. HathiTrust began in October 2008 as aggregating the immense amount of digitized collections from both Google and the Internet Archive became an attractive idea. From lack of cooperation to aggregation, John Wilkin witnessed an immense shift in American research library interest toward shared resource management and making the cultural heritage – archives, maps, books, marginalia – accessible to all via the World Wide Web. As of April 2, 2012 HathiTrust had 10,111,502 total volumes, 5,373,800 book titles,

266,595 serial titles, 3,539,025,700 pages, 453 terabytes, 120 miles, 8,216 tons, and 2,804,659 volumes of public domain material (HathiTrust 2012). In 2010, HathiTrust added its first international partner, the University of Madrid (Karels 2010). Beginning with only fifteen institutional partners in 2008, HathiTrust has grown to sixty-seven partners. Since 2008, John Wilkin and members of the HathiTrust global cooperative have attempted aggregate library resources focusing on the public benefit, an ideal worth pursuing. In the process, HathiTrust, the University of Michigan, and Anne Karle Zenith expanded the number of works determined to be in the public domain.

Karle-Zenith's work to expand the public domain began with her earlier role licensing music for television broadcast. Her role was in risk management. "When I was doing that...our clients were commercial companies and we had to be much more careful about what we were doing." Karle-Zenith described the life of those working in New York City licensing life. Corporate television broadcasts involve layers of copyright licensing. All licenses must be meticulously cleared or lawsuits will ensue. Karle-Zenith was equally meticulous with her new role at the University of Michigan and HathiTrust. In 2008, the University of Michigan Library was awarded a National Leadership Grant from the Institute of Museum and Library Services to create a Copyright Review Management System (CRMS). Anne Karle-Zenith crafted the method for copyright review. The project's purpose was

...to increase the reliability of copyright status determinations of books published in the United States from 1923 to 1963 in the HathiTrust Digital Library, and to help create a point of collaboration with other institutions. (MLibrary 2011)

The goal of the CRMS was to manually check copyright status to determine whether or not the work had entered the public domain. During the years of 1923 and 1963, if a copyright holder failed to renew registration of their copyright, the work went into the public domain. Determining public domain status enables the University of Michigan and HathiTrust to make the work available online. Karle-Zenith was the project manager for a project seeking to dramatically increase the number of books determined to have entered

the public domain as well as increase access to these books. Once determined public domain, HathiTrust made the work available online to the general public.

Karle-Zenith created the method for the review process, a multi-layered tree that members of the CRMS copyright review team followed. From a cubicle in a grey office space tucked in the vast expanse of the University of Michigan's Hatcher Graduate Library, Karle-Zenith coordinated the efforts of nineteen copyright reviewers working at the University of Michigan, Indiana University, the University of Minnesota, Columbia University, and the University of Wisconsin. Spread throughout the country, determining the copyright status of works within the years of 1923 and 1963 depended upon copyright reviewers that meticulously followed the standardized "tree" pattern devised by Karle-Zenith. The results of CRMS work made 87,000 volumes available via full text viewing in HathiTrust. 170,174 volumes were reviewed. Over fifty percent of the reviewed works were determined to be in the public domain.

HathiTrust is already a globally-focused digital library working to both expand the number of works in the public domain while also expanding access to cultural resources within the boundary limits established by Anglo-American copyright law. According to the University of Michigan's 2009 Agreement with Google, HathiTrust already has the ability to circulate digitized copies of Google scans with other libraries. Without request, the Internet Archive posted to its servers copies of Google-digitized public domain books. Both of these efforts successfully expand open access to digitized works beyond Google's servers and the company's Book Search portal. But political upheavals caused by the Settlement remain. In a final effort to publicly raise awareness for their vision of author's rights, the Authors Guild filed a lawsuit against HathiTrust and member institutions on September 12th, 2011.

Joined by the Union des Écrivaines et des Écrivains Québécois (UNEQ), and eight individual authors, the Authors Guild filed a lawsuit against HathiTrust, the University of Michigan, the University of California, the University of Wisconsin,

Indiana University, and Cornell University for copyright infringement from Google's "unauthorized scans of an estimated seven million copyright-protected books, the rights to which are held by authors in dozens of countries," (Authors Guild 2011). Judge Chin rejected the latest version of the Amended Settlement Agreement just months before the Authors Guild filed suit against HathiTrust. The suit against library preservation of Google's digitized scans was the Guild's attempt to assert its point of view. In particular, the Authors Guild questioned the security of digitized copies made by Google and held within HathiTrust servers, fearing piracy.

Authors Guild president Scott Turow claimed, "These books, because of the universities' and Google's unlawful actions, are now at needless, intolerable digital risk." Paul Aiken, executive director of the Author's Guild added, "everybody involved has a financial stake in making sure that these things are secured" (Howard 2011). The results of the lawsuit are yet to be known, but the social consequences reveal the long road ahead for understanding the weight of Anglo-American copyright's public versus private benefit. Libraries sit in the center, constantly mediating the need to serve their public and the need to serve within the limits of copyright law. Paul Courant wrote simply that the lawsuit was "misguided" and "unnecessary" (Courant 2011).

If the lawsuit is misguided, it cannot sidestep the infrastructural liabilities of a digital library affiliated with several major university libraries throughout the United States. The Authors Guild's lawsuit against HathiTrust is another attempt to stem against legal defenses for fair uses of works guaranteed by copyright law. It is a right that university lawyers interpret conservatively to minimize risk of lawsuits. These interpretations unnecessarily limit scholars' rights to free expression. In their introduction to the 2006 *Cultural Studies* special issue "Strategic Improprieties: Cultural Studies, The Everyday, And The Politics Of Intellectual Properties" Striplhas and McLeod note

...many academic publishers, unfortunately have rather poor records when it comes to fair use. Rather than face a lawsuit, or even the threat of one, it is not uncommon for academic publishers to insist that uses of copyrighted material that

are clearly fair still should be authorized by a copyright holder...Indeed universities, of all institutions, should be the ones to confidently invoke fair use, but their lawyers often are of a different mind. Quite simply, many schools don't want to risk a costly lawsuit, even if it's clear the university will prevail especially in times of budget cuts. This inaction doubtless results in innumerable private acts of self-censorship by authors and sometimes even outright censorship by presses when they cave in to legal threats. (123 – 124)

The creation of a Digital Public Library of America is appealing in light of the Authors Guild et. al's lawsuit against HathiTrust. The lawsuit contributes to a climate of conflict, enforcing conservative interpretations of resource access for fears of revenue loss through piracy. A new independent institution claiming library status could serve as an aggregation node for library collections throughout the United States and legal scholarship defending library rights. An entity beyond HathiTrust, existing outside of any arrangements with Google, becomes a new institution outside of the academic university library environment to defend fair use and readers' rights. The need for this institution is even more urgent in light of the Supreme Court's recent decision to remove from the public domain works of foreign authorship.

On January 18, 2012, the Supreme Court upheld Congress's right to extend copyright protection to works by foreign artists once considered in the public domain. It was an effort to harmonize United States law with the Berne Convention and the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS mandates implementation of the first twenty-one articles of the Berne convention, with enforcement backed by the World Trade Organization. Article 18 of Berne requires protection of works unless the works' copyright term has expired in the country where protection is claimed. In a 6-2 decision, Justice Ginsburg wrote "Members of the Berne Union agree to treat authors from other member countries as well as they treat their own" (2012). Lawrence Golan, a University of Denver music professor and conductor, challenged the law. The American Library Association and Google supported Golan's case. Prokofiev's *Peter and the Wolf*, a work whose copyright term limit had ended in the United States, was once available for one hundred dollars for an orchestra

copy. Delightful to audiences' young and old, the work links musical instruments and their sounds to animals. The bassoon plays the wolf. The oboe plays the duck. After the Supreme Court's decision, small community orchestras must rent the work. Each performance will cost over one hundred dollars (Barnes 2012; Kravets 2012).

CHAPTER VI CONCLUSION

... who speaks for the public? Not the legislators of the Mickey Mouse Protection Act.

Robert Darnton, *The Case For Books*

Where Napster was the great Internet threat of the nineties, books and book publishing have become the arena for the great copyright in the late age of print (Striphas 2009). The means by which access to resources will be opened after the Google Books Settlement (“Settlement”) and the Authors Guild’s lawsuit against HathiTrust is clear. A coalition of library partners working beyond the scope of the Settlement will endeavor to establish long-term support for the open circulation of knowledge in the public domain. The Supreme Court’s decision to require U.S. copyright law to conform to the Berne convention and TRIPS will, however, make that coalition’s task more difficult since, as a result of that decision, citizens will no longer be able to rely on a consistent standard by which to determine what publications are or are not in the public domain. Google carved out an option within the Settlement that allows it to digitize orphan works. But Google is not the only means by which access to orphan works may be expanded. The birth of a new digital library to support legislation to resolve the status of orphan works promises access beyond the limits of Google Books.

The consequences of the Settlement for access to research and the work of the library extend far beyond *Peter and the Wolf*. All libraries depend upon rich public domain resources. The library, centered in between private production and common sharing of knowledge, is a valuable part of social life. Google may offer quick digitization and promises of access, but these promises have been hedged by the actions of Google with library partners, and Google’s promises of openness were hedged with unnecessary controls placed on public domain materials. From Lyon to Michigan to Harvard, the story remained the same. For that reason, this dissertation proposes that the promises of Google’s program to digitize access should be realized through a partnership with the Digital Public Library of America.

The Digital Public Library of America cannot solve the problems of the chilling climate of academic publishing, nor can it be the only agent to defend fair use, but Google should not be left to do this alone. Aufderheide and Jaszi argue that in order for the culture to reclaim its knowledge of the proper meaning of freedom of expression and fair use, it must challenge the “culture of fear and doubt” that has arisen in the United States (2011: 5). The RIAA, MPA, and publishing companies contribute to a culture of fear and doubt through free literature teaching students “theft is theft.” The response to that assertion should be to point out that the term “the public sphere” recognizes that works can be owned by the public (Hyde 2010: 251). Universities, spaces entrusted with ensuring academic freedom, have had mixed responses to the expansion of intellectual property rights. Scholars, university presses, teachers, students, and artists must stand their ground to defend the right to critique and appropriate works in the public domain, a domain whose very existence has come to be questioned.

While in the everyday world, educators and scholars need to stand against pervasive copy-fear, a coalition of libraries acting in the interests of writers and readers puts into the public sphere an organization whose purpose is “to defend the public domain’s claim to free, fair use” (Camara & Sibley 2009). Google is a part of an ecosystem of institutions concerned with expanding digital access to information, but under terms with unintended consequences for the public sphere. Google’s strong brand identity has enabled the company to take advantage of the myths concerning its ability to make positive contributions as a corporate actor in the public sphere. Faith in Google becomes less necessary when another ubiquitous institution, the library, has the power to take actions in the public sphere which serve to uphold the circulation of common resources along with the idea of the commons itself.

Hannah Arendt, Google Books, and the Library

For Hannah Arendt, the public sphere was a space of appearances, a space for action and heroism. For her, grand gestures, even those that constitute forms of elitism,

guarantee that those who make them will have made a contribution beyond that of the *animal laborans*, whose only function is to reproduce life. The Google Books project and the library partners program aroused in its participants the desire to undertake great acts and make grand gestures in the public sphere. To digitize all the world's books and make them universally accessible was a dream shared by the "G5," Harvard, Stanford, the University of Michigan, the New York Public Libraries and Oxford's Bodleian libraries – all libraries of great prestige. As noted in chapter five, it was a dream libraries would later come to regret. In their rush to achieve greatness, both the libraries and Google became entangled in a class action lawsuit with far reaching consequences. Unlike Google, however, libraries have no voice in the results of the lawsuit, though they will be greatly impacted by its results.

Arendt believed that freedom derived from the ability to act which springs up when collective action bears it into being. Arendt's vision placed an emphasis on agonistic forms of collective power. In Arendt's vision of the public, plurality is the basis for power and action (Honig 1995). A plurality that forms a web of intersecting actions enables freedom. Arendt envisions this power as one whose development and use brings with it no guarantees. *Natality*, the paramount political ability to bring something radically new into being, is contingent upon power, which arises when actions are taken in concert and vanishes "the moment they disperse" (Arendt 1958: 200).

The dreams of access to information reviewed in this dissertation have appeared and vanished throughout the years, from Power's microfilm to Google's digitization. The efforts to realize these dreams have challenged both libraries and the laws meant to regulate what is now called intellectual property. At this current juncture, Google's digitization efforts with libraries have created the potential for a new institution to arise for the benefit of readers and in support of the open circulation of knowledge.

The Digital Public Library of America is that new birth brought into the public sphere through actions taken in concert by libraries, librarians, and scholars faced with

the consequences of Google's massive digitization project. The concerns raised by "Google's Books" and the wavering faith in Google's abilities to aid in the expansion of digital access to resources have not been the only impetus for its development. It has also come into existence in response to the promise of broad-based access to information enabled by the Internet and Google's scanning technology. It revealed libraries' strong desires to circulate more knowledge in the public sphere in spite of Congress's failure to enact copyright legislation which strikes a balance between maintaining private incentives to create new works and protecting the public's ability to benefit from published works. The Digital Public Library of America is a "to be determined" entity with tremendous potential to support readers' rights in a digital age (Carr 2012). It is at once an entity in existence, and one that serves as the embodiment of an as yet unrealized ideal. The birth of this new institution in the midst of broad-based efforts by libraries throughout the world to massively digitize materials shows promise to promote a spectrum of options for opening access to materials in copyright and in the public domain.

Arendtian power, that which supports natality, is "independent of material factors" but depends upon both word and deed, "where words are not empty and deeds not brutal, where words are not used to veil intentions but to disclose realities, and deeds are not used to violate and destroy but to establish relations and create new realities" (1958: 200). Paul Courant and Robert Darnton publicly disagreed in regards to Google's role in advancing the benefit of Google's digitization partnerships with libraries, but their disagreement illustrates the potential for the Digital Public Library of America to "create new realities" by creating the conditions for institutional renovation in the public sphere. While Global Hollywood and Global Google successfully wield powerful tools like intellectual property law on behalf of their competing interests, The Digital Public Library of America stands both outside of and within traditional constellations of power. Rather than wait for elected officials to change copyright and intellectual property laws in

favor of the public interest, the Digital Public Library of America and similar institutions combine to create a permanent legal entity aligned toward the interests of the public domain.

Institutional renovation in the form of library renewal is better for public, open access to knowledge than reliance upon the options devised by Google's lawyers in concert with the Authors Guild and the American Association of Publishers to expand access to information on their terms. Multiple library publics acting in relation to one another have created the conditions for this renewal in which institutional public spheres operate as arenas for opinion formation, decision-making, and open discovery (Fraser 1990: 76). The Digital Public Library of America is an institution dedicated to fair use and the rights of the reading public. The development of a digital library is a strategic means to grow within the current political ecology an institution firmly rooted in a vision of knowledge as a shared cultural good. This institution can expand this vision's reach of by collaborating with digital library efforts throughout the world.

The Settlement and its results have revealed the existence of a complex tug-of-war. The Authors Guild and the American Association of Publishers sought to strengthen their vision of copyright protection in a time of increasing digital access to texts. Digital access, whether through Google Books or a Kindle device, has generated immense anxiety within the publishing industries. Anxieties over digital access will remain as publishers continue to negotiate a shifting field of knowledge production. On the other side of that rope, Google and libraries each have their own reasons for wanting to expand both the access to and the circulation of texts, especially orphaned works. Google attempted to negotiate between different interests by taking a technocratic approach that would override the state's traditional function of managing changes to copyright law. This attempt resulted in a process and a legal document that at once left libraries to contribute on the sidelines while simultaneously enabling the conditions for libraries to develop their own coalitions and visions for access. Google's particular ethic led it to

negotiate and reach beyond the boundaries of state law. The document produced from this negotiation hedged legal doctrine in favor of speed.

While publishers, Google, and the Authors Guild have attempted to actively re-manage and rearrange copyright to fulfill their interests, these interests will ultimately be renegotiated by the state and will not produce lasting results for changes to copyright that will fully take into account the desires of content users for the expanded circulation of works that remain out of print, orphaned, unrecognized and underutilized. The libraries that partnered with Google forged a strategic alliance with a company interested primarily in the mass digitization of texts and secondarily in their continued circulation. Attempting to pull culture toward their interests, libraries forged coalitions to create potential for legal change that would exist beyond the boundaries of the Settlement.

Libraries and librarians stand at the fault line of Anglo-American copyright law, at the tense point of balance between private reward and public benefit. While even libraries are hedged by the PATRIOT Act, libraries' responses to *Eldred v. Ashcroft* revealed the power potential of libraries to argue on behalf of a public's right to read anonymously, support the Anglo-American vision of fair use, and advocate for an enriched public domain. The arguments for the extension of copyright's term limit, which ultimately prevailed in *Eldred v. Ashcroft*, weighted toward extending copyright's term as an incentive to create. The Internet Archive, Prelinger Archives, Project Gutenberg, The American Library Association, National Initiative for a Networked Cultural Heritage, and American Association of Law Libraries all filed amicus briefs seeking to defend the right to preserve and disseminate cultural heritage. Many of these institutions are currently involved in making the Digital Public Library of America a reality.

The introductory chapter asked to what extent Google's project opened access to resources from its library partners. Though the company's goals and ideals overlapped with international efforts to expand access to resources and propose alternatives to the current scholarly publishing model, the primary goal of its project never was open access.

It is true that the Settlement extended to publishers and writers the option to choose Creative Commons licensing, an option which advances the interests of those writers who support the choice to enrich the public domain and reduce limits for the reuse of their material in the face of extensions to copyright's term limits, both in the United States and throughout the world. But, as described in chapter four, this advance is hedged by a settlement that puts fair use and the fate of orphaned works at risk.

Google's role in expanding access to resources has not been insignificant. As the academic authors who petitioned Judge Chin in chapter four show, Google Book Search has helped a considerable number of academic writers discover new research. It is not necessary to ignore the benefits of Google's Book Search platform to herald the possibility that an alternative measure, one more firmly aligned with the public benefit, will prove to be better at improving broad-based public access to knowledge in digital form.

The Digital Public Library of America remains under construction; it is not set to be fully operational until 2013. As an organization, it is also still in development. It holds out the promise that, in copyright battles yet unwaged, it will serve as an advocate for the right to use, read, and distribute texts and will promote common access to resources. While it will not become the public's "copyright lawyer," it holds out the promise that it will serve as a legal entity able to speak on behalf of readers in a time of tethered devices, ambient tracking of reader habits, and minimized reader privacy (Cohen 1996: 1037 & Litman 1994: 53 as qtd. in Striplhas 2010: 311).

Google must attend to its role as a technology company competing in the fast-paced world of information technology. The Digital Public Library of America, on the other hand, will be able to operate on a long-term basis to work towards the goal of providing access to information for citizens in the United States and throughout the world. It will, perhaps, evolve into what Vaidhyathan called for at the end of *The Googlization of Everything* (2011) – a "Human Knowledge Project."

A “Human Knowledge Project,” inspired by the public sharing and non-privatized model of the Human Genome Project, would organize the world’s information to make it universally accessible through an alternate portal dedicated to open, public, and global sharing of knowledge. Google’s *superbia*, what Vaidhyanathan defined as the pride energizing the company, could be better put to use in support of an interconnected, dispersed, and networked group of librarians and technologists dedicated to the circulation of knowledge through an organization aligned with the common good. Google’s capabilities in search technology have transformed information access in the twenty-first century, but its early beginning as a search engine may bear no relation to its future behavior or its fate in a competitive industry.

Relying upon Google to advance the ideals of a healthy information ecosystem will produce what the Google Library Partners program has wrought - access to information mired under non-disclosure agreements, secret contracts, lawsuits, uncertain futures, a lack of commitment to privacy, and hidden labor politics. “Googlization,” what Siva Vaidhyanathan described as Google’s ubiquity and faith in the company’s benevolence, has long been a part of an American romance with computing and the computing industries as a part of its social and political imagination (Streeter 2011). It is a faith in corporate, liberal thought where trust is given to a benign corporation in anticipation of its ability to perform benign works (Streeter 1996).

This faith blinds us to Google’s role as a point of access as well as a filter for the World Wide Web. The company’s corporate mission to “organize the world’s information and make it universally accessible and useful” ignores that a Google “search” is a filtered search responding to local laws and regulations (Vaidhyanathan 2011). “To filter the world’s information and make what we can legally display available and useful to you based on your recorded search history” more adequately describes what it is that Google does.

Faith in Google's benevolence has masked an obvious question not explored in this dissertation – the labor of googlizing the book. This dissertation has focused on the future of fair use, libraries, and digital access. It has drawn upon interviews with head librarians to uncover how and why major libraries chose to partner with Google to digitize books. Cheaper and faster was a regular refrain from librarians who chose to partner with Google to massively digitize stacks of books. The costs of these partnerships move far beyond the courtroom and into labor conditions at the Googleplex.

In 2007, Andrew Norman Wilson discovered a group of yellow-badged laborers who were denied most perks of Google life. Wilson worked as a video contractor for Google. He received a red-badge and had access to many of the perks of Googleplex life. The yellow-badged laborers, also employed through an outside contract, digitized for Google Book Search. Working in building 3.14159~, digitizers worked from four in the morning until 2:15 p.m., but were denied participation in the usual perks of Google work life, including the dining hall meals. Wilson took a camera to document what he discovered and began to speak with the workers to better understand their point of view. Wilson's curiosity would lead to his termination. One of the yellow-badged employees, following the instructions on the back of her badge, alerted management. Wilson became involved in a long exchange between Google security, his manager, the head of his company, and Google legal. Google demanded Wilson's tapes. The entire episode, what caught Wilson's curiosity, was the separation of Google Books workers from other contracted workers. No Googlers, contracted or full time, would know of them. Most of the employees leaving and entering building 3.14159~ were people of color (Wilson 2011). Despite fears of violating Google's non-disclosure agreement, Wilson posted his story online.

In the midst of Google's ubiquity it is hard to believe in its vulnerability. Google can fail. It has failed small; it might yet fail big. In 2009, Google launched "Wave," its interactive communication platform that was "part email, part Twitter and part instant

messaging” (Arrington 2010). Google’s Vice President of Engineering Vic Gundotra called Wave Google’s next “magical” product (Google I/O 9 2009). By August of 2010, Google announced the end of the service due to low user adoption. Google CEO Eric Schmidt kept a positive focus. “We try things...we celebrate our failures” (Siegler 2010). Google’s attempt to compete with Facebook, Google Plus, faces low use and bad publicity. The company shared user numbers for Google Plus, citing it to be the fastest growing product the company has ever built. In a thirty-day period Google Plus gained 100 million users. The company failed to share that those users are spread throughout its enhanced products like YouTube, the Android Marketplace and Google.com, all of which already had high user adoption (Bilton 2012). After revealing its new privacy policy that collapsed collected user data across its many websites in order to further tailor advertising, critics cried out against the search company’s practice, calling it “frightening.” Like the writers involved in Book Search, users were denied the ability to opt-out (Kang 2012).

As digital technologies advance, the state, technology corporations, educators, libraries, and writers are all attempting to reformulate their positions in light of digitization. Digitization consists both of a threat and a set of actions with great possibilities. The collisions between these forces in the digital moment produce the potential for a networked politics with the interests of readers in mind. A new digital library can reap the benefits of acting within the more open legal regime provided by the United States’ fair use doctrine, and it can serve as an additional entity acting in support of long-term citizen access to resources. Google’s corporate interests overlapped with those of libraries, at least in their desires to quickly craft digitized preservation of resources. Yet, Google is not a library and must attend to its role as a corporation serving multiple publics throughout the world. Like any other company, it can fail. It could merge with another corporation. Its values have and will continue to change. It benefits now from its mythology as an innovative global corporation seeking to strategically

support Anglo-American fair use. This support has been a benefit to artists, documentarians, and collage artists seeking to support a culture of fair use in the United States and beyond. With the creation of a Digital Public Library of America, a new institution will exist to continue to support citizens' rights to use and re-use works, even orphaned works that remain under copyright. Specifically focused on digital library initiatives, the Digital Public Library of America has the potential to adopt more broadly-focused goals –offering for future generations access to resources and the space to read, research, and write anonymously.

The Digital Public Library of America offers the promise to develop a politics dedicated to promoting “the progress of Science and the useful arts.” Science and art both benefit from the open circulation of research enabled by libraries. A digital library, working within the confines of copyright law, expands the scope of the library's purpose in the public sphere. It can advocate for readers in the digital age as the public domain is further enclosed through alignment to some vision of a cosmopolitan copyright enabled by Berne, TRIPS, and international treaties negotiated to stem against “piracy”. It presents the hope that a new entity can uphold the importance of research and the rights of readers, and that global digital library initiatives can promote open platforms to access digital information beyond the constraints of a cosmopolitan copyright regime and beyond the dreams of Google as a universal index.

BIBLIOGRAPHY

- Abbott, Jacob. *The Harper Establishment; or, How the Story Books Are Made*. Internet Archive eBook. 1855. Online.
- Albanese, Richard. "Deal or No Deal: Part II: If the Google Settlement fails, what's next?" *Publishers Weekly*. 1 February, 2010. Online.
- Albert, Karen M. "Open Access: Implications for Scholarly Publishing and Medical Libraries." *Journal of the Medical Library Association*. 94.3 (2006): 253-62. Print.
- Almond, Gabriel A, and Sidney Verba. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton, N.J: Princeton University Press, 1963. Print.
- Amazon.com "Amazon.com Works with Publishers to Make Millions of Book Pages Available for Customers to Flip Through, with Millions More to Follow." *News Releases*. 10 October, 2001. Online.
- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso Press. 2006. Print.
- Andrejevic, Mark. "Exploiting YouTube: the contradictions of user-generated labor." In: P Snikars and P Vonderau (eds) *The YouTube Reader*. Stockholm: National Library of Sweden, 406–423. 2009. Print.
- . *ISpy: Surveillance and Power in the Interactive Era*. Lawrence, Kan: University Press of Kansas, 2007. Print.
- Ang, Ien. *Watching Dallas: Soap Opera and the Melodramatic Imagination*. New York: Methuen. 1985. Print.
- . *Desperately Seeking the Audience*. New York: Methuen. 1991. Print.
- Ardern, Lawrence L. *John Benjamin Dancer: Instrument Maker, Optician and the Originator of Microphotography*. London: Library Association, North Western Group. 1960. Print.
- Arendt, Hannah. *On Violence*. New York: Harcourt, Brace, Jovanovich, 1970. Print.
- . *The Human Condition*. Chicago: University of Chicago Press, 1958. Print.
- . *The Promise of Politics*. New York: Schocken Books, 2005. Print.
- Arnold, Matthew. *Culture and Anarchy*. London: Cambridge University Press, 1960. Print.
- Arrington, Michael. "Wave Goodbye To Google Wave." *TechCrunch*. 4 August, 2010. Online.
- Association of College and Research Libraries. "ACRL Legislative Agenda 2011." *American Library Association*. Accessed March 26, 2012.
<http://www.ala.org/acrl/issues/washingtonwatch/11agenda#Section%20215>
- Aufderheide, Patricia, and Peter Jaszi. *Reclaiming Fair Use: How to Put Balance Back in Copyright*. Chicago: The University of Chicago Press, 2011. Print.

- Auletta, Ken. *Googled: The End of the World As We Know It*. New York: Penguin. 2010.
- Authors Guild et. al. v. Google Inc. 1:2005cv08136. New York Southern District Court. 20 September 2005.
- Authors Guild. *Authors Guild, Australian Society of Authors, Quebec Writers Union Sue Five U.S. Universities*. New York: Authors Guild. 12 September 2011. Online.
- Baetens, Jan. "Cultural Studies After the Cultural Studies Paradigm." *Cultural Studies*. 19.1 (2005): 1-13. Print.
- Bailey, Charles W. *Open Access Bibliography: Liberating Scholarly Literature with E-Prints and Open Access Journals*. Washington, DC: Association of Research Libraries, 2005. Print.
- Ballou, Hubbard W. *Photography and the Library*. Urbana, Ill: University of Illinois Press, 1956. Print.
- Band, Jonathan. "A Guide for the Perplexed Part IV: The Rejection of the Google Books Settlement." *Association or Research Libraries*. 31 March, 2011. PDF file.
- . *The Google Library Project: Both Sides of the Story*. Ann Arbor, MI: MPublishing, University of Michigan Library. 2006. Online.
- Barnes, Robert. "Supreme Court: Copyright can be extended to foreign works once in public domain" 18 January, 2012. *Washingtonpost.com*. Online.
- Barthes, Roland. "The Death of the Author" in Roland Barthes and Stephen Heath *Image, Music, Text*. London: Fontana, 1990. Print. 142-148.
- Battles, Matthew. *Library: An Unquiet History*. New York: W. W. Norton & Company. 2003.
- . "Terms of Service: THE BOOK." *Matthew Battles: Vimeo.com*. 2010. Online. <http://vimeo.com/10167779>.
- Bajaj, Vikas. "Financial Crisis Enters New Phase." *The New York Times*. 17 September, 2008. Online.
- Bassiouni, M C. "Universal Jurisdiction for International Crimes: Historical Perspectives and Contemporary Practice." *Virginia Journal of International Criminal Law*. 2 (2008): 81-162. Print.
- Bazin, Patrick. Personal Interview. July 5th, 2011.
- BBC. "Iceland's volcanic ash halts flights in northern Europe." 15 April, 2010. Online.
- Beniger, James R. *The Control Revolution: Technological and Economic Origins of the Information Society*. Cambridge, MA: Harvard University Press. 1986. Print.
- Benhabib, Seyla. "Hannah Arendt and the Redemptive Power of Narrative." *Social Research* 57.1 (1990): 167-96. Print.
- . "Models of Public Space: Hannah Arendt, the Liberal Tradition, and Jürgen Habermas."

- Habermas and the Public Sphere*. Ed. Craig Calhoun. MIT Press, 1992. 73-98. Print.
- . "Political Geographies in a Global World: Arendtian Reflections." *Social Research*. 69.2 (2002): 539. Print.
- . *The Reluctant Modernism of Hannah Arendt*. Thousand Oaks: Sage Publications, 1996. Print.
- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." *Illuminations: Essays and Reflections*, ed. H. Arendt, trans. H. Zohn, New York: Schocken Books (217 -251). 1968.
- Benkler, Yochai. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, Conn.: Yale University Press, 2006. Print.
- Benthall, Jonathan. "Animal liberation and rights", *Anthropology Today*, volume 23, issue 2, April 2007.
- Bentham, Jeremy, and Louis Crompton. "Offences against One's Self." *Journal of Homosexuality*. 3.4 (1978): 389-406. Print.
- Bentham, Jeremy, and John Bowring. *The Works of Jeremy Bentham*. New York: Russell & Russell, 1962. Print.
- Bernard, Jack. "Google Book Search and the End of Obscurity: the digitization of library collections and what it means for readers, scholars, and libraries." Macalaster College. 16 April, 2010. Public Talk.
- . Personal Interview. September 17th, 2010.
- Bilton, Nick. "Countering the Google Plus Image Problem." *The New York Times: Bits*. 28 March, 2012. Online. 6 March, 2012. Online.
- . "Google's Driverless Cars Can Now Fetch Food." *The New York Times: Bits*. 28 March, 2012. Online.
- Binkley, Robert C. *Manual on Methods of Reproducing Research Materials. Joint Committee on Materials for Research*. Ann Arbor, Edwards, 1936, pp. 114-120.
- Binkley, Robert C, Luther H. Evans, and Max H. Fisch. *Selected Papers of Robert C. Binkley*. Cambridge: Mass., Harvard University Press, 1948. Print.
- Blasselle, Bruno and Jacqueline Melet-Sanson. *La Bibliothèque nationale de France, mémoire de l'avenir*. Nouvelle édition. Paris, Gallimard. 2006. Print.
- Blechman, Andrew. *Pigeons-The fascinating saga of the world's most revered and reviled bird*. St Lucia, Queensland: University of Queensland Press. 2007. Print.
- Blume, Mary. "The hallowed history of the carrier pigeon." *The New York Times*. January 30, 2004. Accessed February 6, 2012. Online.
- Boole, George. *An Investigation of the Laws of Thought: On Which Are Founded the Mathematical Theories of Logic and Probabilities*. New York, N.Y: Dover Publications, 1951. Print.

- Borges José Luis. "The library of Babel." *Collected Fictions: Jorge Luis Borges*, New York: Penguin, 112–118. 1941. Print.
- Borgman, Christine L. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, Mass: MIT Press, 2000. Print.
- Bosman, Julie. "Lawsuit Seeks the Removal of a Digital Book Collection." *The New York Times*. 12 September, 2011. Online.
- Bottando, Evelyn. "Google and French Library Politics: Patrick Bazin, Jean Noël Jeanney, and the Googlization of the Municipal Library of Lyon, France" *Internet Archive*. Posted July 30th, 2011. Online
- Boyle, James. "Is Google Naive, Crafty or Stupid?" *Huffington Post* 10 August, 2010: n. pag. Web. 7 September 2010. http://www.huffingtonpost.com/james-boyle/is-google-nave-crafty-or_b_677163.html
- . *The Public Domain: Enclosing the Commons of the Mind*. New Haven: Yale University Press. 2008.
- Bray, Robert S. "Photocopying and Copyright: A Second Report," National Microfilm Association Archives. University of Michigan. Ann Arbor. Box M2 Folder 13. 1957. Print.
- Brantley, Peter. "Corralling Lost Culture: Licensing and Orphan Works in Europe." *PWxyz: The News blog of Publishers Weekly*. 23 September, 2011. Online.
- Brin, Sergey. "A Library to Last Forever," *The New York Times*, 9 October 2009, A31.
- Brin, S. and L. Page (1998) "The Anatomy of a Large-scale Hypertextual Web Search Engine," *WWW7/Computer Networks* 30(1–7): 107–17.
- Brown, Kenneth. *Factory of Dreams: A History of Meccano Ltd, 1901-1979*. Lancaster: Crucible, 2007. Print.
- Bruns, Axel. *Blogs, Wikipedia, Second Life, and Beyond: From Production to Prodsusage*. New York: Peter Lang, 2008. Print.
- Buckland, Michael K. "Documentation, Information Science, and Library Science in the U.S.A." *Information Processing & Management*. 32.1 (1996): 63-76. Print.
- Buckland, Michael K. *Emanuel Goldberg and His Knowledge Machine: Information, Invention, and Political Forces*. Westport, Conn: Libraries Unlimited, 2006. Print.
- Bush, Vannevar. "As We May Think," *Atlantic Monthly* 176/102 (1945) 102 – 107. Microfilm.
- Buschman, John. *Dismantling the Public Sphere: Situating and Sustaining Librarianship in the Age of the New Public Philosophy*. Westport, Conn: Libraries Unlimited, 2003. Print.
- Butler, Brandon. "The Google Books Settlement: Who Is Filing And What Are They Saying?" *Association of Research Libraries*. 28 September, 2009. Print.

- Byrne, Richard. "Silent Treatment." *The Chronicle of Higher Education*. 16 July, 2004 A14. Print.
- Calhoun, Craig J. "Plurality, Promises, and Public Spaces." In Calhoun, Craig J, and John McGowan, eds. *Hannah Arendt and the Meaning of Politics*. Minneapolis: University of Minnesota Press, 1997. Print.
- Carey, James W. "Technology and Ideology: The Case of the Telegraph." In *Communication as Culture: Essays on Media and Society*, 201-230. London: Routledge. 1989. Print.
- Carlson, Scott, and Jeffrey R. Young. "Google Will Digitize and Search Millions of Books from 5 Top Research Libraries." *Chronicle of Higher Education*. 51.18 (2005). Print.
- Carr, Nicholas. "The Library of Utopia." *Technology Review*. May/June (2012). Cambridge, Mass.: MIT Press. Online.
- Cash, Julian. "Jon Orwant." *Spidereyeballs.com*. Accessed 5 March, 2012. Online.
- Cawley, Piers. "Healthcheck: Perl - The Perl Future." *The H Open*. 12 January, 2009. Online.
- Champeau, Guillaume. "Sarkozy veut un G20 du droit d'auteur pour 'un internet civilisé.'" *Numerama.com*. January 19, 2011. Online.
- Chander, Anupam, and Madhavi Sunder. "The Romance of the Public Domain." *California Law Review*. 92.5 (2004): 1331-1373. Print.
- Chen, Brian. *Always On: How the iPhone Unlocked the Anything-Anytime-Anywhere Future--And Locked Us In*. Philadelphia: Da Capo Press. 2011. Print.
- Clausewitz, Carl von. Col. J. J. Graham, translator. *Vom Kriege. On War — Volume 1*, Project Gutenberg eBook. 1873. Online.
- Clements, Maureen. "The Secret Of Google's Book Scanning Machine Revealed." *NPR.org*. April 30, 2009. Online.
- Cmiel, Kenneth. "From Knowledge to Information." Unpublished Chapter. N.d.
- . "Libraries, Books, and the Information Age: 1940 – Present." Unpublished Chapter. 2005.
- Coalition for Accessible Technology (COAT). "American Council of Blind Denounces Amazon's Kindle Fire Tablet for Inaccessibility." Oct. 4, 2011. Press Release. Online.
- Cohen, Julie E. "A Right to Read Anonymously: A Closer Look at 'Copyright Management' in Cyberspace." *Connecticut Law Review*. 28 (1996): 981-1039. Print.
- Cohen, Daniel J. *Equations from God: Pure Mathematics and Victorian Faith*. Baltimore: Johns Hopkins University Press, 2007. Print.
- Collins, Samuel G. *Library of Walls: The Library of Congress and the Contradictions of Information Society*. Duluth, Minn: Litwin Books. 2009. Print.

- Conley, Kevin. "Sheryl Sandberg: What She Saw at The Revolution." *Vogue.com*. April 15, 2010. Online.
- Coombe, Rosemary. *The Cultural Life Of Intellectual Properties: Authorship, Appropriation, And The Law, Post-Contemporary Interventions*. Durham: Duke University Press. 1998.
- Courant, Paul. "On being in bed with Google." *Au Courant: Paul Courant's blog about libraries, economics, public policy, and other stuff*. 4 November, 2007. Online.
- . Personal Interview. September 17th, 2010.
- . "A National Digital Library?" *Au Courant: Paul Courant's blog about libraries, economics, public policy, and other stuff*. 12 October, 2010. Online.
- . "Response #3 - Paul Courant of Michigan Addresses Google Book Search Criticism." *The Googlization of Everything Blog*. 6 November, 2007. Online.
- . "Statement from Paul Courant, university librarian and dean of libraries." *Record Update: University of Michigan Office of the Vice President for Communications*. 16 September, 2011. Online.
- Curtis, Liane, ed. *A Rebecca Clarke Reader*. Bloomington: Indiana University Press, 2004. Print.
- D'Agostino, Giuseppina. "Healing Fair Dealing? a Comparative Copyright Analysis of Canada's Fair Dealing to U.K. Fair Dealing and U.S. Fair Use." *The McGill Law Journal*. 53.2 (2008): 309. Print.
- Darnton, John. "In the Name of the Father." *The New York Times*. Accessed 16 October, 2005. Online.
- Darnton, Robert. Personal Interview. May 14, 2010a.
- . "A Library Without Walls." *The New York Review of Books: Blog*. 4 October, 2010. Online.
- . *The Case for Books: Past, Present, and Future*. Harvard: Public Affairs. 2010b. Print.
- . "The Library: Three Jeremiads." *New York Review of Books*. 57.20 (2010c). Print.
- Davis, Phillip M. "How the Media Frames 'open Access'." *Journal of Electronic Publishing*. 12.1 (2009): Ann Arbor, MI: Scholarly Publishing Office, University of Michigan Library. Online.
- Davidson, Lee. "Senate passes, names copyright bill in honor of late Hatch aide." *Deseret News*. 30 September, 2008. Online.
- de Certeau, Michel. *The Practice of Everyday Life*. Berkeley: University of California Press, 1984. Print.

- De Grazia, Victoria. *Irresistible Empire: America's Advance Through Twentieth-Century Europe*. Cambridge, Mass: Belknap Press of Harvard University Press, 2005. Print.
- de, Sola R. *Microfilming*. New York: Essential Books, 1944. Print
- de Tocqueville, Alex. *Journeys to England and Ireland*. New Haven, Conn. Yale University Press. 1958. Print.
- Demers, Joanna. *Steal This Music: How Intellectual Property Law Affects Creativity*. Athens: University of Georgia Press. 2006.
- Diebold Press Releases and Ads. 1945-1970. Box J5 Folder 17. National Microfilm Association Archives. The University of Michigan. Ann Arbor. Print.
- Dinerstein, Joel. "Technology and Its Discontents: on the Verge of the Posthuman." *American Quarterly*. 58.3 (2006): 569-595. Print.
- Doctorow, Cory. "Fight back against Sarkozy's EG8 -- an exercise in censorship and control dressed up as a technology summit." *Boing Boing*. May 17, 2011. Online.
- Dor, Danny. "From Englishization to Imposed Multilingualism: Globalization, the Internet, and the Political Economy of the Linguistic Code." *Public Culture*. 16.1 (2004): 97-118. Print.
- Duffy, John. F. "The death of Google's patents." *Patentlyo.com*. 21 July, 2008. Online.
- European Digital Rights. "Sarkozy Wants A 'Civilised' Internet." *EDRi-gram* Number 9.2, 26 January 2011. Online.
- Eaton, Nancy L. "Dean Nancy L. Eaton reports on the recent Google Partners summit." *Google Books Project at Penn State*. 19 November, 2009. Online.
- Ferguson, Niall. *The House of Rothschild vol. 1*. London: Penguin, 2000. Print.
- Fiske, John. "Audiencing: A Cultural Studies Approach to Watching Television." *Poetics*. 21: (345 – 359). 1992.
- Fraser, Nancy. "Rethinking the Public Sphere: a Contribution to the Critique of Actually Existing Democracy." *Social Text*. 1990.26 (1990): 56-80. Print.
- Foucault, Michel. *The Archaeology of Knowledge and the Discourse on Language*. Trans. A. M. Sheridan Smith. New York: Pantheon. 1972.
- . *Discipline and Punish: The Birth of the Prison*. New York: Pantheon Books, 1977. Print
- . "What is an author?" In *Language, counter-memory, practice*, ed. Donald F. Bouchard, 113-138. Cornell University Press: New York. Print.
- Fowler, Geoffrey A. and Jeffrey A. Trachtenberg, "New Kindle Audio Feature Causes a Stir." *The Wall Street Journal*. 10 February 2009. B9.
- Garrison, Dee. *Apostles of Culture: The Public Librarian and American Society, 1876-1920*. New York: Macmillan Information, 1979. Print.

- Garcia, David and Geert Lovink. "The ABC of Tactical Media." Posted on the nettime mailing list, 16 May, 1997. Archived at: <http://www.nettime.org>. Also available at: http://subsol.c3.hu/subsol_2/contributors2/garcialovinktext.html.
- Gasaway, Laura. "Balancing Copyright Concerns: The TEACH Act of 2001." *Educause Review*, 47.1 November/December, 2001. Print.
- Geist, Michael. *In the Public Interest: The Future of Canadian Copyright Law*. Toronto: Irwin Law, 2005. Print.
- Ginsparg, Paul. "Creating a global knowledge network." *Responses from the scientific community*. UNESCO Expert Conference on Electronic Publishing in Science. 20 February, 2001. Online.
- Gitelman, Lisa. "Welcome to the Bubble Chamber: Online in the Humanities Today." *The Communication Review*. 13.1 (2010): 27-36. Print.
- Golden, Daniel. "Countrywide's Many 'Friends'." *Portfolio.com*. 12 June, 2008. Online.
- "Google, Facebook warn on Internet rules at e-G8." *Reuters*. May 25, 2011. Online.
- Gossard, Donald J. "Suddenly - Instant Information," 1960. National Microfilm Association Archives. University of Michigan Ann Arbor. Box M3 Folder 66. Print.
- Goodnight, G T, and David B. Hingstman. "Review Essay: Studies in the Public Sphere." *Quarterly Journal of Speech*. 83.3 (1997): 351-370. Print.
- Google. "Authors, Publishers, and Google Reach Landmark Settlement". 2008. Accessed December 6, 2010. Online.
- . "Google Checks Out Library Books" 14 December, 2004. *News from Google*. Accessed 8 March, 2012. Online.
- . "The engineer's life at Google." *Jobs at Google*. Accessed 5 March, 2012. Online.
- Google I/O 9. "Google Wave Developer Preview at Google I/O 2009." *YouTube.com*. 28 May, 2009. Online.
- Grimmelmann, James. "The Orphan Wars." *Educause Review*, 47.1 January/February 2012. Online.
- Guédon, Jean-Claude. *In Oldenburg's Long Shadow: Librarians, Research Scientists, Publishers, and the Control of Scientific Publishing*. Washington, D.C: Association of Research Libraries, 2001. Print.
- Habermas, Jurgen. "Hannah Arendt's Communications Concept of Power." *Social Research* 44.1 (1977): 3-24. Print.
- . *The structural transformation of the public sphere: an inquiry into a category of bourgeois society*. Cambridge, Mass.: MIT Press. 1991. Print.
- . "Further reflections on the public sphere." In C. Calhoun (Ed.), *Habermas and the Public Sphere*. 421-461. Cambridge: MIT Press. 1997. Print

- Hahn, Trudi B, and Michael K. Buckland. *Historical Studies in Information Science*. Medford, NJ: Published for the American Society for Information Science by Information Today, 1998. Print.
- Hafner, Katie. "At Harvard, a Man, a Plan and a Scanner." *The New York Times*. November 21, 2005. Online.
- . "In Challenge to Google, Yahoo Will Scan Books." *The New York Times*. October 3, 2005b. Online.
- Hall, Gary. *Digitize This Book! The Politics Of New Media, Or Why We Need Open Access Now*. Minneapolis, MN: University of Minnesota Press. 2009.
- Hall, Holly, and Jack Zibluk. "The ORPHAN Copyright Act: Open Door Or A Deluge?" *Visual Communication Quarterly* 17.2 (2010): 68-76. *Communication & Mass Media Complete*. Web. 10 Mar. 2012.
- Hall, Stuart. "Cultural studies: two paradigms," *Media, Culture and Society* 2 (1980): 57–72.
- . *Encoding and Decoding in the Television Discourse*. Birmingham, England: Centre for Cultural Studies, University of Birmingham, 1973. Print.
- . "On postmodernism and articulation: an interview with Stuart Hall," ed. by Larry Grossberg, *Journal of Communication Inquiry*. 10.2 (1986): 45-60.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991. Print.
- Hardin, Garrett J. *The Tragedy of the Commons*. Washington, D.C.: American Association for the Advancement of Science, 1968. Print.
- Hart, Michael. *Project Gutenberg: Fine Literature Digitally Re-Published*. S.l.: Project Gutenberg and Promo.net, 1971. Computer file.
- HathiTrust. "Strategic Advisory Board." *About HathiTrust Digital Library*. Accessed 2 April, 2012.
- Havens, Timothy. *Black Television Travels: Media Globalization and Contemporary Racial Discourse*. NYU Press, *forthcoming*.
- Havens, Timothy, Amanda D. Lotz, and Serra Tinic. "Critical Media Industry Studies: a Research Approach." *Communication, Culture & Critique*. 2.2 (2009): 234-253. Print.
- Havens, Timothy, Evelyn Bottando, and Matt Thatcher, "Intra-European Media Imperialism: Hungarian Program Imports and the Television Without Frontiers Directive" in *Popular Television in Eastern and Southern Europe*, edited by Timothy Havens, Aniko Imre, and Katalin Lustyik. London: Routledge. 2012. Print.
- Hayhurst, J D. *The Pigeon Post into Paris, 1870-1871*. Ashford, MD. J.D. Hayhurst, 65 Ford Bridge Road. 1970. Print.

- Helft, Miguel. "Judge Rejects Google's Deal to Digitize Books." *The New York Times*. 22 March, 2011. Online.
- Hilderbrand, Lucas. *Inherent Vice: Bootleg Histories of Videotape and Copyright*. Durham: Duke University Press. 2009.
- Hillis, Ken, Michael Petit, and Kylie Jarrett. *Google and the Culture of Search*. New York: Routledge, 2012. Print.
- Honig, Bonnie. *Feminist Interpretations of Hannah Arendt*. University Park, Pa: Pennsylvania State University Press, 1995. Print.
- Horkheimer, Max, and Theodor W. Adorno. *Dialectic of Enlightenment*. New York: Herder and Herder, 1972. Print.
- Howard, Jennifer. "National Digital Library Spurs Conversation About 'Cultural Patrimony.'" *The Chronicle of Higher Education*. 15 October, 2010. Online.
- . "Research Libraries See Google Decision as Just a Bump on the Road to Widespread Digital Access." *The Chronicle of Higher Education*. 23 March, 2011. Online.
- . "In Authors' Suit Against Libraries, an Attempt to Wrest Back Some Control Over Digitized Works." *The Chronicle of Higher Education*. 14 September, 2011. Online.
- Howard, Michael. *The Franco-Prussian War: The German Invasion of France, 1870-1871*. New York: Routledge, 1990.
- Humphries, Courtney. *Superdove: How the Pigeon Took Manhattan ... and the World*. New York, NY. HarperCollins. 2008. Print.
- Hyde, Lewis. "Advantage Google." *The New York Times*. 4 October 2009. Online.
- . *Common as Air: Revolution, Art, and Ownership*. New York: Farrar, Straus, and Giroux. 2010. Print
- . *The Gift: Creativity and the Artist in the Modern World*. New York, NY. Vintage Books. 2007. Print.
- Innis, Harold. *The Bias of Communication*. Toronto, Canada. University of Toronto Press. 1951. Print.
- Internet Archive. "How do I report that there's an issue with an item?" *Frequently Asked Questions*. Accessed 10 December, 2009. Online.
- Jeanneney, Jean-Noël. "Quand Google défie l'Europe." *Le Monde*. January 24, 2005. Print.
- . *Quand Google Défie L'Europe: Plaidoyer Pour Un Sursaut*. Paris: Mille et une nuits, 2005. Print.
- . *Google and the Myth of Universal Knowledge: A View from Europe*. Chicago: University of Chicago Press, 2007. Print.

- Jencks, Christopher S. "The Management of 120 Miles of Books." *The Harvard Crimson*. April 15, 1955. National Microfilm Association Archives. The University of Michigan. Ann Arbor. Box M4 Folder 48. Print.
- Jenkins, Henry. *Textual poachers: Television fans and participatory culture*. London: Routledge. 1992.
- . *Convergence Culture*. New York: New York University Press. 2006.
- Jensen, Kristian. *Incunabula and Their Readers: Printing, Selling, and Using Books in the Fifteenth Century*. London: British Library, 2003. Print.
- Johns, Adrian. *Piracy: The Intellectual Property Wars from Gutenberg to Gates*. Chicago: University of Chicago Press, 2009. Print.
- Jones, Elisabeth A, and Joseph W. Janes. "Anonymity in a World of Digital Books: Google Books, Privacy, and the Freedom to Read." *Policy & Internet*. 2.4 (2010). Print.
- Jones, Tim. "Disability Access Activists Gather to Protest Kindle DRM." *EFF*. April 8th, 2009. Online.
- Joseph, Heather. "The Scholarly Publishing and Academic Resources Coalition - an Evolving Agenda." *College & Research Libraries News*. 67.2 (2006): 84. Print.
- Kahle, Brewster. "A Book Grab by Google." *The Washington Post*, 19 May 2009, A21.
- . "Universal Access to all Knowledge." *Community Audio*. InternetArchive.org 16 December, 2004. Online.
- Kang, Cecilia. "Google announces privacy changes across products; users can't opt out." *WashingtonPost.com – Bloomberg Business*. 24 January, 2012. Online.
- Karels, Liene. "HathiTrust adds new members, goes global - Consortium creating vast international digital library." *Montage: Collaboration, Creativity, Innovation*. The University of Michigan. Online.
- Karle-Zenith, Anne. Personal Interview. 17 September, 2010.
- Ke, Xian. "Bringing the Power of Creative Commons to Google Books." *Inside Google Books*. 13 August, 2009. Online.
- Kelly v. Arriba Soft Corp., 336 F.3d 811, 817-22 (9th Cir. 2003).
- Kelty, Christopher M. *Two Bits: The Cultural Significance of Free Software*. Durham: Duke University Press, 2008. Print.
- . "The disappearing virtual library." *Aljazeera*. 1 March, 2012. Online.
- Kersands, Billy. "Old Aunt Jemima." 1875 in Deborah Willis *Black Venus, 2010: They Called Her "hottentot"*. Philadelphia, Pa: Temple University Press, 2010. Print.

- Kim, Jin. "The Institutionalization of YouTube: from User-Generated Content to Professionally Generated Content." *Media, Culture and Society*. 34.1 (2012): 53-67. Print.
- King, Ross. *The Judgment of Paris: The Revolutionary Decade That Gave the World Impressionism*. New York: Walker & Co. 2006. Print.
- Kittler, Friedrich. *Optical Media: Berlin Lectures 1999*. Cambridge: Polity Press, 2009. Print.
- Kleinman, Molly. "About." *MollyKleinman.com*. Retrieved February 15th, 2012. Online. Personal Interview. October 19th, 2009.
- Kravets, David. "'Orphan Works' Copyright Law Dies Quiet Death." *Wired.com*. 30 September, 2008. Online.
- . "Supreme Court Says Congress May Re-Copyright Public Domain Works." 18 January, 2012. *Wired.com Threat Level*. Online
- Kristeva, Julia. "L'engendrement de la formule", *Semeiotike: recherches pour une sémanalyse*, Paris, Seuil, (1969): 216-310.
- Kristeva, Julia. *Hannah Arendt*. New York: Columbia University Press, 2001. Print.
- Kumar, Girja. S.R. *Ranganathan: An Intellectual Biography*. Har-Anand Publications, 1992. Print.
- Landon, Brooks. "Less is More: Much Less is Much More: The Insistent Allure of Nanotechnology Narratives in Science Fiction Literature." Unpublished Paper. Print.
- Lange, David. "Reimagining the Public Domain." *Law and Contemporary Problems*. 66.2 (2003): 463-483. Print.
- Lavoie, B, and L Dempsey. "Beyond 1923: Characteristics of Potentially In-Copyright Print Books in Library Collections." *D-lib Magazine*. 15 (2009): 11-12. Print.
- Lasfargues, France, Clément Oury, and Bert Wendland. *Legal Deposit of the French Web: Harvesting Strategies for a National Domain*. 2008. Online.
- Launius, Roger D. "A Western Mormon in Washington, D.C: James C. Fletcher, NASA, and the Final Frontier." *Pacific Historical Review*. 64.2 (1995): 217-241. Print.
- Lefevere, Francois-Marie and Marin Saric. "Detection of grooves in scanned images." Patent 7,508,978. March 24, 2009. Online
- Lerner, Frederick A. *The Story of Libraries: From the Invention of Writing to the Computer Age*. New York: Continuum, 2009. Print.
- Lessig, Lawrence. *Code and other laws of cyberspace*. New York: Basic Books. 1999
- . "Is Google Book Search 'Fair Use.'?" *YouTube.com*. Online. 15 January, 2006.
- . "For The Love Of Culture: Google, Copyright, And Our Future." *The New Republic*. 26 January 2010. 7 September 2010. Online
- . *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and*

- Control Creativity*. New York: Penguin Press, 2004. Print.
- . *The future of ideas: the fate of the commons in a connected world*. Random House, New York, 2001.
- . "Little Orphan Artworks." *The New York Times*. 20 May, 2008. Online.
- . "On the Google Book Search agreement." *Lessig.org*. 29 October, 2008. Online.
- . *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. New York: Penguin Press, 2008b. Print.
- Levinson, Natasha. "Teaching in the Midst of Belatedness: the Paradox of Natality in Hannah Arendt's Educational Thought." *Educational Theory*. 47.4 (1997): 435. Print.
- Library Copyright Alliance. "Library Copyright Alliance Supports Orphan Works Reform." 13 March, 2007. Online.
- Litman, Jessica. *Digital Copyright*. Amherst, N.Y: Prometheus Books, 2006. Print.
- . "The Exclusive Right to Read." *Cardozo Arts and Entertainment Law Journal* 13 (1994): 29-54.
- Lohmann, Fred von. "Amicus Curiae Brief Of The Electronic Frontier Foundation, American Library Association, Medical Library Association, American Association Of Law Libraries, Association Of Research Libraries, And Special Libraries Association In Support Of Google, Inc." *Perfect 10, Inc. v. Google, Inc.*, No. 06-55405. United States Court of Appeals for the Ninth Circuit. 20 July, 2006. Online.
- . "Authors Guild Sues Google." *Electronic Frontier Foundation*. 20th September, 2005. Online.
- . "YouTube's Content ID (C)ensorship Problem Illustrated." *Electronic Frontier Foundation*. 2 March 2010. Online.
- Lornell, Kip. *From Jubilee to Hip Hop: Readings in African American Music*. Upper Saddle River, NJ: Prentice Hall, 2010. Print.
- Luther, Frederick. *Microfilm: A History 1839 – 1900*. Barre, Mass. Barre Publishing Company. 1959. Print.
- . "The Earliest Experiments in Microphotography." *Isis*. 41.4 (1950): 277-281. Print.
- . "Rene Dagon and the Siege of Paris." *American Documentation*. 1.4 (1950): 196-206. Print.
- Lyman, Peter. "What Is a Digital Library? Technology, Intellectual Property, and the Public Interest." *Daedalus*. 125.4 (1996): 1-33. Print.
- MacLeod, Roy. *The Library of Alexandria: Centre of Learning in the Ancient World*. New York: I.B. Tauris Publishers. 2001.
- Mann, Keith. *Forging Political Identity: Silk and Metal Workers in Lyon, France, 1900-1939*.

- New York: Berghahn Books, 2010. Print.
- Manring, M M. *Slave in a Box: The Strange Career of Aunt Jemima*. Charlottesville: University Press of Virginia, 1998. Print.
- Markoff, John. "The Coming Search Wars." *The New York Times*. February 1st, 2004. Online
- Marx, Karl. *The Civil War in France*. Gloucester, U.K.: Dodo Press. 2009. Print.
- Mazin, Cecile. "Patrick Bazin nommé directeur de la BPI du Centre Pompidou." *Actualité*. April 2nd, 2010. Online
- McCarthy, Anna. *Ambient Television: Visual Culture and Public Space*. Durham: Duke University Press, 2001. Print.
- McChesney, Robert. *Telecommunications, Mass Media and Democracy*. Cambridge: Oxford University Press, 1994. Print.
- McGraw-Hill Companies, Inc. et al v. Google Inc. 1:2005cv08881. New York Southern District Court. 19 October 2005.
- McLeod, Kembrew. *Freedom of Expression®: Resistance and Repression in the Age of Intellectual Property*. Revised paperback edition. Minneapolis: University of Minnesota Press. 2007.
- . *Owning Culture: Authorship, Ownership and Intellectual Property Law*. In *Popular Culture and Everyday Life Series*, T. Miller (Series Ed.). New York: Peter Lang Publishers. 2001.
- McLeod, Kembrew, and Peter DiCola. *Creative License: The Law and Culture of Digital Sampling*. Durham, NC: Duke University Press, 2011. Print.
- McLeod, Kembrew, and Rudolf E. Kuenzli. *Cutting Across Media: Appropriation Art, Interventionist Collage, and Copyright Law*. Durham, N.C.: Duke University Press, 2011. Print.
- McSherry, Corynne. "In Perfect 10 v. Google, Round 3 Goes to Google: No Sloppy DMCA Notice." *EFF.org*. 28 July, 2010.
- Merges, Robert P. "Of property rules, Coase, and Intellectual Property." *Columbia Law Review* 94 (1994): 2655-73.
- Miller, Claire Cain. "At Google, Mayer Takes a New Job." *The New York Times: Bits*. 12 October, 2010. Online.
- Miller, Toby, Nitin Govil, John McMurria, Richard Maxwell, and Ting Wang. *Global Hollywood 2*. London: British Film Institute, 2005. Print.
- Mills, Mara. "Deaf Jam: from Inscription to Reproduction to Information." *Social Text*. 102 (2010): 35-58. Print.
- MIT Media Lab. "Levels of sponsorship." Accessed 5 March, 2012. Online.

MLLibrary. "Copyright Review Management System - IMLS National Leadership Grant." Accessed 10 April, 2011. Online.

Morley, David. and Kuan-Hsing Chen. *Introduction. Stuart Hall: Critical Dialogues in Cultural Studies*. New York: Routledge. 2005.

Murrell, M. "Digital + Library: Mass Book Digitization As Collective Inquiry." *New York Law School Law Review*. 55.1 (2011): 221-250. Print.

National Microfilm Association (NMA) Archives. University of Michigan Special Collections. Ann Arbor. 2012. Online.

National Writers Union. "National Writers Union Critiques Government White Paper on Intellectual Property & The National Information Infrastructure." *New Technologies Campaign*.

Newseum. "Byron Darnton," Accessed 20 February 2012. Online.

Nunberg, Geoff. "Google Books: A Metadata Train Wreck." *Language Log*. 29 August 2009. n. pag. Web. 7 September 2010.
<http://languagelog ldc.upenn.edu/nll/?p=1701>

Nyce, James M. and Paul Kahn, eds. *From Memex to Hypertext: Vannevar Bush and the Mind's Machine*. Boston, Mass. Academic Press. 1994. Print.

Olijhoek, Tom. "Open Access Week 2011: A Short History of Open Access." *Open Access Week*. 27 October, 2011. Online.

Orwant, Jon. Personal Interview. 13 May, 2010.

———. "Privacy and User Models: Threats, Caveats, and Safeguards." *UM-94*. February, 1994. Online

Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press, 1990. Print.

Otlet, Paul. *International Organization and Dissemination of Knowledge: Selected Essays*. (FID 684). Amsterdam: Elsevier. 1990 [1891]. Print.

———. "Les Sciences Bibliographiques et la documentation [The Science of bibliography and documentation]." Brussels: *Institut International de Bibliographie Bulletin* 8, 1903: 84-4, translated by W. Boyd Rayward, as quoted by Rayward, W. Boyd. *European Modernism and the Information Society*. Surrey, United Kingdom: Ashgate, 2008: 15. Google Books. Web.

———. *Traité De Documentation: Le Livre Sur Le Livre, Théorie Et Pratique*. Bruxelles: Editiones Mundaneum, 1934. Print.

Palfrey, John. "Harvard library materials to be digitized, searchable by Google," <http://blogs.law.harvard.edu/palfrey>. 14 December, 2004. Online.

———. "Symposium: Collective Management of Copyright: Solution or Sacrifice?" *The Columbia Journal of Law & the Arts*. 34.4 (2011). Print.

Parry, Marc. "A Copyright Expert Who Spoke Up for Academic Authors Offers Insights on the

- Google Books Ruling." *TheChronicle.com*. 23 March, 2011. Online.
- . "Supreme Court Takes Up Scholars' Rights." *TheChronicle.com*. 23 March, 2011. Online.
- Peters, John D. "Calendar, Clock, Tower." *Deus in Machina: Religion and Technology in Historical Perspective*, ed. Jeremy Stolow, forthcoming.
- . *Courting the Abyss: Free Speech and the Liberal Tradition*. Chicago: University of Chicago Press, 2005. Print.
- . "Genealogical Notes on 'The Field'". *Journal of Communication*. 43.4. (1993).
- . "Mass Media." *Critical Terms in Media Studies*. Ed. W. J. T. Mitchell and Mark B. Hansen. Chicago: University of Chicago Press, 2010. 266-279.
- . *Speaking into the Air: A History of the Idea of Communication*. Chicago: University of Chicago Press, 1999. Print.
- . "Strange Sympathies: Horizons of Media Theory in America and Germany." *critical ecologies*. 4 June, 2009. Online.
- Peters, John D, and Peter Simonson. *Mass Communication and American Social Thought: Key Texts, 1919-1968*. Lanham, Md: Rowman & Littlefield Publishers, 2004. Print.
- Peters, Marybeth. "The Orphan Works Problem and Proposed Legislation." *Copyright.gov*. 3 March, 2008a. Online.
- . "On the Importance of Orphan Works Legislation." *Copyright.gov*. 25 September, 2008b. Online.
- Pépin, Guénaël. "Le Centre national de la musique n'enchant pas les fournisseurs d'accès." *Le Monde*. November 11, 2011. Online.
- Porsdam, Helle. *Copyright and Other Fairy Tales: Hans Christian Andersen and the Commodification of Creativity*. Cheltenham, UK: Edward Elgar, 2006. Print.
- Power, Eugene B, and Robert Anderson. *Edition of One: The Autobiography of Eugene B. Power*. Ann Arbor, Mi: University Microfilms International, 1990. Print.
- Priebe, Paul M. "From Bibliothèque du Roi to Bibliothèque Nationale: The Creation of a State Library, 1789- 1793." *The Journal of Library History* (1974-1987), Vol. 17, No. 4. 1982. Print.
- Price, Gary. "Amazon debuts new book search tool." *Search Engine Watch*. 26 October, 2003. Online.
- Public Knowledge. "Rescue Orphan Works!" *PublicKnowledge.com* 7 May, 2008. Online.
- Public Libraries in the United States of America: Part 1, 1876 Report*. Champaign, Ill: University of Illinois, Graduate School of Library Science, 1960. Print.
- Radway, Janice A. *A Feeling for Books: The Book-of-the-Month Club, Literary Taste, and*

- Middle-Class Desire*. Chapel Hill: University of North Carolina Press, 1997. Print.
- Rayward, W.B. *The Universe of Information: The Work of Paul Otlet for Documentation and International Organisation*. All-Union institute for scientific and technical information VINITI, 1975. Internet resource.
- Rayward, W B. "Visions of Xanadu: Paul Otlet (1868-1944) and Hypertext." *Journal of the American Society for Information Science*. 45.4 (1994): 235-50. Print.
- Rajagopalan, T S. *Relevance of Ranganathan's Contributions to Library Science*. New Delhi: Vikas Pub. House, 1988. Print.
- Rangnath, Rashmi. "Senate passes the Shawn Bentley Orphan Works Act of 2008. Will the House do the same?" *Public Knowledge*. 30 September, 2008. Online
- Ranganathan, S. R. *The Colon Classification*. New Brunswick, N.J: Graduate School of Library Service, Rutgers, the State University, 1965. Print.
- . *The Five Laws of Library Science*. Bombay, New York: Asia Pub. House, 1963. Print.
- . "Monologue on Melvil Dewey." Faculty of Information Studies at the University of Toronto. 1964. Online.
- Ranganathan, S. R, and P. N. Kaula. *A Librarian Looks Back: An Autobiography of Dr. S.R. Ranganathan*. New Delhi: ABC Pub. Hosue, 1992. Print.
- Ranganathan, Yogeshwar. *S.R. Ranganathan, Pragmatic Philosopher of Information Science: A Personal Biography*. Mumbai: Bharatiya Vidya Bhavan, 2001. Print.
- Rebecca Clarke Society. "A Rebecca Clarke Reader." *RebeccaClarke.org*. Accessed 19 March, 2012.
- Rider, Fremont. *The Scholar and the Future of the Research Library: A Problem and its Solution*. New York: Hadham Press, 1944. Print.
- Richardson, Marjorie. "Larry Wall, the Guru of Perl". *Linux Journal*. 1 May, 1999. Online.
- "Rockers of Utah Valley: From 1960's to the Present." *UtahValleyRockers.com*. Accessed 10 March, 2012. Online.
- Rogers, Thomas and Andrew Szamoszegi. *Fair Use in the U.S. Economy: Economic Contribution of Industries Relying on Fair Use*. Washington, D.C.: CCIA. 2010. Print.
- Samuelson, Pamela. "Google Book Search and the Future of Books in Cyberspace." *Minnesota Law Review*. 94.5 (2010): 1308-1374. Print.
- . "The Google Book Settlement as Copyright Reform." *Wisconsin Law Review*. 17 April, 2011: 479-560. Print.
- . "Legislative Alternatives to the Google Book Settlement." *The Columbia Journal of Law & the Arts*. 34.4 (2011): 697-730. Print.
- Sassón-Henry, Perla. *Borges 2.0: From Text to Virtual Worlds*. New York: Peter Lang, 2007. Print.

- Sawyer, Michael S. "Filters, Fair Use, and Feedback: User-Generated Content Principles and the DMCA." *Berkley Technology Law Journal* 24:1 (2009): 28-30. Print.
- SAXO Institute, The. "About – Cultivate." Accessed February 20, 2012. Online
- Schlozman, Kay L, Sidney Verba, and Henry E. Brady. "Who Speaks? Citizen Political Voice on the Internet Commons." *Daedalus*. 140.4 (2011): 121-139. Print.
- Scott, J. C. "The mission of the university: Medieval to Postmodern transformations." *Journal of Higher Education*, 77(1), 2006. Print. pp. 10-13.
- Shannon, Claude E. & Warren Weaver. *The Mathematical Theory Of Communication*. Urbana: University of Illinois Press. 1949.
- "Shawn M. Bentley." Obituaries. *Daily Herald*. 5 October, 2005. Online.
- Shelton, Johanna. "The economics of Fair Use." *Google Public Policy Blog: Google's Views on Government, Policy, and Politics*. 13 September, 2007. Online.
- Sheppard, Nathan. *Shut Up in Paris*. London, England. Richard Bentley and Son. 1871. Online.
- Siegler, MG. "What is Google's other 'Ocean' project?" *VentureBeat*. February 2nd, 2009. Online.
- . "Schmidt Talks Wave's Death: 'We Celebrate Our Failures.'" *TechCrunch.com*. 4 August, 2010. Online.
- Silberman, Steve. "Scripting on the Lido Deck." *Wired* 8.10. 2000. Online.
- Snickars, Pelle, and Patrick Vonderau. *The Youtube Reader*. Stockholm: National Library of Sweden, 2009. Print.
- Soderdahl, Paul. Personal Interview. 22 March, 2010.
- Spigel, Lynn. *Make Room for Tv: Television and the Family Ideal in Postwar America*. Chicago: University of Chicago Press, 1992. Print.
- Stallman, Richard. *Free Software, Free Society: Selected Essays of Richard M. Stallman*. Boston, MA: SoHo Books, 2010. Print.
- Streeter, Thomas. *Selling the Air: A Critique of the Policy of Commercial Broadcasting in the United States*. University of Chicago Press, 1996. Print.
- . *The Net Effect: Romanticism, Capitalism, and the Internet*. New York: New York University Press, 2011. Print.
- Striphas, Ted. "The Abuses of Literacy: Amazon Kindle and the Right to Read." *Communication and Critical/Cultural Studies*, 7: 3, 297 – 317. 2010. Online
- . *The Late Age of Print: Everyday Book Culture from Consumerism to Control*. New York: Columbia University Press. 2009. Print.
- Striphas, Ted, and Kembrew McLeod. "Strategic Improprieties: Cultural Studies, the Everyday, and the Politics of Intellectual Properties." *Cultural Studies*. 20 (2006): 119-144. Print.

- Suber, Peter. "Who should control access to research literature?" *SPARC Open Access Newsletter*, no. 79. Scholarly Publishing and Academic Resources Coalition, 2 November, 2004. Online.
- . "Open Access and the Google Book Settlement." *SPARC Open Access Newsletter*, no. 141. Scholarly Publishing and Academic Resources Coalition, 2 December, 2009. Online.
- Sumida, Jon Tetsuro. *Decoding Clausewitz: A New Approach to On War*. Lawrence, Kansas: University Press of Kansas, 2008. Print.
- Summers, Lawrence. "GEP." *World Bank*. December 12, 1991. Online.
- Tomlinson, John. *Cultural Imperialism: A Critical Introduction*. Baltimore, Md: Johns Hopkins University Press, 1991. Print.
- Toobin, Jeffrey. "Annals of Law - Google's Moon Shot - Copyright and the Universal Library." *The New Yorker*. (2007): 30. Print.
- Turkle, Sherry. *The Second Self: Computers and the Human Spirit*. New York: Simon and Schuster, 1984. Print.
- Turner, F. "Burning Man at Google: a Cultural Infrastructure for New Media Production." *New Media and Society*. 11 (2009): 73-94. Print.
- University of Michigan News Service. "HathiTrust offers full-text search of millions of digitized books and journals." *Office of the Vice President for Communications*. 9 February, 2010. Online.
- United States District Court Southern District Of New York. *The Authors Guild Et al., Plaintiffs, Google Inc., 05 Civ. 8136 (DC)*. 22 March, 2011. Online.
- Vaidhyanathan, Siva. . "A Risky Gamble with Google." *The Chronicle of Higher Education*, 2 December 2005, B7.
- . "Afterword—Critical Information Studies: A Bibliographic Manifesto." *Cultural Studies* 20.2/3. (2006): 292 – 315. Print.
- . *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*. New York: New York University Press, 2001. Print.
- . "Is the Google Book Search project a "privatization" of library resources and functions?" *The Googlization of Everything*. May 2009. Online.
- . *The Anarchist in the Library: How the Clash Between Freedom and Control Is Hacking the Real World and Crashing the System*. New York: Basic Books, 2004. Print.
- . "The Googlization of Everything and the Future of Copyright." *U.C. Davis Law Review* 40 (2006): 1207. Print.
- . *The Googlization of Everything: (and Why We Should Worry)*. Berkeley: University of California Press, 2011. Print.

- . “Paul Courant of Michigan Addresses Google Book Search Criticism.” *The Googlization of Everything*. November 2007. Online.
- . “The Googlization of Universities.” *NEA 2009 Almanac of Higher Education*. 2009. <http://www.nea.org/home/32967.htm>.
- van Creveld, Martin. *Supplying War: Logistics from Wallenstein to Patton*. Cambridge: Cambridge University Press. 1977. Print.
- Vault Corp. v. Quaid Software Ltd., 655 F. Supp. 750 (E.D. La. 1987aff'd, 847 F.2d 255, 7 U.S.P.Q.2d (BNA) 1281 (5th Cir. 1988). Online.
- Verba, Sidney. Personal Interview. May 13th, 2010.
- Virilio, Paul. *The Information Bomb*. London: Verso, 2000. Print.
- Volkov, Soloman. *Testimony: the memoirs of Dmitri Shostakovich*. New York: Harper and Row. 2004. Print.
- Wall, Larry, Tom Christiansen, and Randal L. Schwartz. *Programming Perl*. Sebastopol, Calif: O'Reilly, 1996. Print.
- Wall, Larry, Tom Christiansen, and Jon Orwant. *Programming Perl*. Beijing: O'Reilly, 2000. Print.
- Walker, Ruth. “Sidney Verba to retire.” *Harvard Gazette*. September 21, 2006. Print.
- Warner, Michael. *Publics and Counterpublics*. New York: Zone Books, 2002. Print.
- Wawro, Geoffrey. *The Franco-Prussian War: The German Conquest of France in 1870–1871*. Cambridge: Cambridge University Press. 2003. Print.
- Weinberger, David. *Everything Is Miscellaneous: The Power of the New Digital Disorder*. New York: Times Books, 2007. Print.
- . “Brewster Kahle on Google Books.” *Joho the Blog*. 19 May, 2009. Online.
- . “Google Books contract with the British Library.” *Joho the Blog*. 24 August, 2011. Online.
- Wells, Herman B. “A Case Study on Interinstitutional Cooperation.” *Educational Record*, American Council on Education, Washington, D.C. Fall, 1967. Print.
- Whitman, James Q., "The Two Western Cultures of Privacy: Dignity versus Liberty" *Faculty Scholarship Series*. Paper 649. Print.
- Wiegand, Wayne A. *Irrepressible Reformer: A Biography of Melvil Dewey*. Chicago: American Library Association. 1996. Print.
- . *Main Street Public Library: Community Places and Reading Spaces in the Rural Heartland, 1876-1956*. Iowa City: University of Iowa Press, 2011. Print.
- . "Tunnel Vision and Blind Spots: What the Past Tells Us About the Present; Reflections

- on the Twentieth-Century History of American Librarianship." *The Library Quarterly*. 69.1 (1999): 1-32. Print.
- Wilkin, John. Personal Interview. July 21, 2010.
- Williams, Raymond. *Culture and Society, 1780-1950*. New York: Columbia University Press, 1958. Print.
- . *The Long Revolution*. Orchard Park, N.Y.: Broadview Press, 2001. Print.
- Williford, Miriam. "Bentham on the Rights of Women." *Journal of the History of Ideas*. 36.1 (1975): 167-176. Print.
- Willinsky, John. *The Access Principle: The Case for Open Access to Research and Scholarship*. Cambridge, Mass: MIT Press, 2006. Print.
- Willshir, Kim. "Sarkozy opens 'historic' forum on future of internet in runup to G8." *The Guardian*. May 24, 2011. Print.
- Wilson, Andrew Norman. "Workers Leaving the Googleplex." *AndrewNormanWilson.com*. 2011.
- Winkin, Yves. Personal Interview. June 28, 2011.
- Winthrop-Young, Geoffrey. "Silicon Sociology, Or, Two Kings on Hegel's Throne? Kittler, Luhmann, and the Posthuman Merger of German Media Theory." *Yale Journal of Criticism*. 13.2 (2000): 391-420. Print.
- Wirtén, Eva Hemmungs. *Cosmopolitan Copyright: Law and Language in the Translation Zone*. Uppsala: Uppsala universitet, Institutionen for ABM, 2011a. Print.
- . *No Trespassing: Authorship, Intellectual Property Rights, and the Boundaries of Globalization*. Toronto: University of Toronto Press incorporated, 2004. Print.
- . "Out of Sight and Out of Mind: on the Cultural Hegemony of Intellectual Property (critique)." *Cultural Studies*. 20 (2006): 282-291. Print.
- . *Terms Of Use: Negotiating The Jungle Of The Intellectual Commons*. Toronto: University of Toronto Press Incorporated. 2008. Print.
- . "Visualizing Copyright, Seeing Hegemony Toward a Meta-Critique of Intellectual Property." in McLeod, Kembrew, and Rudolf E. Kuenzli, eds. *Cutting Across Media: Appropriation Art, Interventionist Collage, and Copyright Law*. Durham N.C.: Duke University Press, 2011b. Print.
- Woods, Tiger. *How I Play Golf*. New York: Warner Books, 2001. Print.
- Wyatt, Edward. "Frankfurt Is Still Publishing's Main Event." *The New York Times*. October 24, 2005. Print.
- Zittrain, Jonathan. *The Future of the Internet and How to Stop It*. New Haven Conn.: Yale University Press, 2008. Print.
- Zubatsky, David, D W. Krummel, Alan M. Meckler, and Allen B. Veaner. "Micropublishing

History: a Review Essay." *Journal of Library History*. 18.3 (1983): 317-321. Print