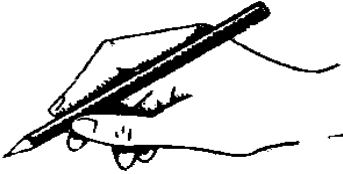


Free Expression Policy Project

Special Projects
The Information Commons
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Free Expression Policy Project



INTRODUCTION

For democracy to flourish, citizens need free and open access to ideas. In today's digital age, this means access to knowledge, information, and ideas online. A newly emerging concept, the information commons, offers hope of ensuring citizens' rights and responsibilities in the digital age. FEPP's project on the information commons, directed by our 2003-2004 senior research fellow, Nancy Kranich, will survey the diverse new initiatives that reflect the principles of a commons, will explore how the metaphor of the commons can reposition the public interest in information, and will illuminate the importance of the information commons to democracy and free expression.

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BACKGROUND

The emergence of the information age in the last half of the 20th century brought the promise of abundant, open access to an infinite array of information that would enrich the way we live, learn, work and govern. Observers of this explosion of technology imagined an information world that would migrate from a state of scarcity to a state of abundance, transcending geographic, legal, and political boundaries. This dream envisioned a utopia where people could connect with myriad ideas and individuals just by clicking a mouse, no longer constrained by location, format, cost, time of day, on-site rules and regulations, or other barriers. In essence, anyone, anytime, anyplace could receive, interpret and exchange ideas outside the limit of government controls or the marketplace. Many enthusiasts assumed that this new information infrastructure would reserve public spaces for educational and research institutions, libraries, nonprofits, and government agencies charged with promoting and fulfilling the public interest, and would constitute a public sphere of free speech and open intellectual discourse that enhances democracy.

However, over the past 20 years or so, a national policy of deregulation prompted the industries that create, transport, and disseminate information to transform from independent operators mostly involved with infrastructure into highly integrated, multinational conglomerates eager to increase market share and dominate access to both the home and business. The convergence of new technologies empowered these industries to expand their reach while controlling the terms and conditions of the electronic marketplace. This evolution has resulted in what many describe as a "walled garden" or "enclosure" that creates a highly inequitable information marketplace.

Today, many Americans have no access or ability to use the new technologies. Others cannot afford the high prices and limited usage rules created by the industries that control the copyrights on books, articles, and other forms of information and ideas. Meanwhile, with Congress continually extending the duration of copyright, the chance of these works ever entering the public domain keeps diminishing. And for those items that are freely available for public use, no plan for permanent public access has yet been devised.

Indeed, technological protection measures now restrict what Americans can read or view in libraries, in schools, and at home. Encryption and other technologies prevent individuals from lending and sharing creative works, as they have a right to do under the "first sale" doctrine of copyright law. They also drastically restrict our right to make "fair use" of copyrighted works through parody, scholarship, news reports, and criticism. Internet filters and other restrictions further stifle access to information online. Finally, commercial and governmental entities mine data and profile our reading and viewing preferences, activities that intrude on both our privacy and free expression rights.

Given the array of new restrictions limiting public access and free expression, the promise of a free and open 21st century information society is simply that. The technology that enables unfettered access is just as capable of restricting personal information choices and the free flow

of ideas. The dream of a high-tech society is now threatened by the perils of a highly controlled society. To protect our most precious right in a democratic society - the right of free speech and inquiry - we must develop a more balanced public policy. The information commons is a crucial part of this quest to preserve free expression in the digital age.

CHALLENGES TO INFORMATION ACCESS IN THE DIGITAL AGE

The writers of our Constitution assumed a role in shaping the nation's information policy. By empowering the Congress "to promote the progress of science and useful arts" in the Constitution's Copyright Clause, they recognized the power as well as the economic value of information, and attempted to reconcile the principles of free and open access with the profit incentives of authors, by giving them limited monopolies over their works. Along with copyright restrictions, they also, in the First Amendment, forbade government interference with free expression. The scholars Jorge Reina Schement and Terry Curtis argue that the tendencies and tensions of the information society stem directly from these competing visions of the founders, which were later played out as organizing principles of industrialization and capitalism.¹

In the post-industrial era, the inherent tensions between information as a public good and as a commodity have given rise to a highly contested policy environment. The competing priorities - to guarantee equal access for citizens to participate in public discourse; to enable consumers to choose among products and services; and to protect the public from government intrusion into the free flow of ideas - have placed intolerable strain on American institutions like schools, libraries, and data collection and delivery agencies that are devoted to information and communication. By the 1990s, when the ever-expanding, deregulated telecommunications industries began to dominate access to information, entertainment, and ideas, these powerful stakeholders also began to dominate information and communications policy, drowning out the voices of the public interest community.

In case after case involving copyright, media consolidation, Internet censorship, and more, civil libertarians, librarians, educators, and other public interest advocates have struggled to counter attempts to control and limit the free flow of ideas. But although they have mounted an impressive effort, they have had fewer opportunities to influence outcomes, pushed aside by communications and media industry giants that are concerned more with consumer than citizen behavior. The result is that the promises and guarantees of citizens' rights found in such concepts as equitable access, free expression, and fair use of copyrighted works totter on the verge of extinction as the free flow of ideas is enclosed by the profit-making corporations that dominate the marketplace.

America's information and communications infrastructure must ensure physical and virtual public spaces that are filled by educational and research institutions, libraries, and other nonprofits dedicated to free speech and open intellectual discourse, unhampered by the marketplace, and disconnected from the dominant political forces. These spaces must facilitate public interest and nonprofit needs if democracy is to exist in the new electronic landscapes. Faced with formidable obstacles to achieving these goals, many public interest advocates now believe that it is time to change the terms of the discourse by applying new metaphors and models for access that emphasize a fair and just information society.

To meet the challenge of access to information in the digital age, proponents of free expression propose that public interest advocates band together to amplify their voices and extend their reach. They believe that only collective action under a single uniting umbrella, with shared decision-making, can address their common concerns. In short, they are calling for a new movement comparable to the movement for environmental protection in the last two decades of the 20th century. As the legal scholar James Boyle observes:

In one very real sense, the environmental movement invented the environment so that farmers, consumers, hunters, and birdwatchers could all discover themselves as environmentalists. Perhaps we need to invent the public domain in order to call into being the coalition that might protect it.²

This concern for concerted action has prompted a new language centering on the commons. According to David Bollier, a pioneer in the development of this concept:

- The commons helps underscore the fact that we the American people collectively own certain public resources, such as the airwaves, the Internet and public spaces.
- The commons brings into focus phenomena and values that are otherwise vague and diffuse. The framework of the commons lets us see that control over the assets we own, citizen access to information and freedom of expression, are at stake in all of these areas.
- The commons is not just a reactive critique, but a positive vision. The commons helps showcase "the market" as a distinct force with its own limitations - while opening up a new vector of discussion that focuses on democratic and social values.³

In short, the information commons concept provides an opportunity to spell out what we want for future generations and to take collective action and share decision-making to achieve our goals. Like the environment, an information commons is a dynamic ecological system. It is open and accessible, a public sphere where creativity and information flow, and a resource that complements both the market and the public sector.

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THE EMERGING INFORMATION COMMONS

Americans already jointly own, share, and administer a wide range of common assets including natural resources, public lands, parks, schools, libraries, culture, and scientific knowledge. These are resources, institutions, and traditions that bring us together and define us as Americans. While these essential resources advance civil society and invigorate democracy, taxpayers often struggle to justify investments in their future, especially when the marketplace dominates political priorities. But neglecting these commonly held assets impoverishes the environment, creativity, scientific inquiry, innovation, and democracy.

Scholars who study new forms of citizen participation recognize that sharing information bolsters civic engagement. Beginning in the 1980s, political scientists such as Harry Boyte¹ and Benjamin Barber² elaborated on the importance of schooling citizens for democracy by informing them about issues and by utilizing a commons to listen, negotiate, exchange, act, and, in so doing, hold officials accountable. These civil society theorists were joined by other scholars starting in the last decade of the 20th century, who have documented and debated the state of civil society, both in the United States and abroad. Most notable is Robert Putnam, whose best-selling book, *Bowling Alone*,³ popularized the importance of reviving community by rebuilding social capital and increasing civic engagement.

With the rise of the Internet, commentators on civil society have identified the electronic information commons as an essential underpinning to equitable participation in a cyberdemocracy.⁴ One leading intellect focusing on the commons in cyberspace, Lawrence Lessig, begins with a definition of the commons that taps into a well-known historic construct: a resource held "in common ... in joint use or possession; to be held or enjoyed equally by a number of persons."⁵ In his book, *The Future of Ideas*,⁶ Lessig adds that in most cases, "the commons is a resource to which anyone within the relevant community has a right without permission from others. In some cases, permission is needed but is granted in a neutral way."⁷ Commons include "non-rivalrous" resources that cannot be exhausted. Communities work out how to regulate them. Some examples are public streets, parks, and beaches. An extensive literature about commons and common pool resources provides guidance on how commons are best governed and managed.⁸

Lessig and others use a newly expanded notion of the commons to describe shared information resources - for example, Einstein's theory of relativity, the Internet, writings in the public domain, government information, open source software, and the broadcasting spectrum. What determines whether an information resource is also a commons is its character and how it relates to a community. To avoid overconsumption and to provide adequate incentives to produce a free and open resource, communities work out a technical architecture, rules, and governance structures that regulate use. Holding these resources in common produces innovation, creativity, education, and the advancement of scholarship.

Since 2000, civic-minded organizations have convened conferences and launched projects to design information commons for the digital age. One, in particular, Harry Boyte's Center for Democracy and Citizenship at the University of Minnesota, hosted a New Information Commons Conference where participants sketched out a plan for building new spaces by citizens in partnership with community organizations.⁹ Shortly afterwards, the New America Foundation launched its Public Assets Program

(http://www.newamerica.net/programs/pub_ass/pub_ass.htm), which includes an Information Commons Project directed by David Bollier,¹⁰ a prolific writer who focuses on intellectual property issues. Bollier has also co-founded Public Knowledge (<http://publicknowledge.org>), a nonprofit that represents the public interest in intellectual property law and debates over Internet policies. In the fall of 2001, the American Library Association sponsored a conference on the Information Commons (<http://info-commons.org>), with commissioned papers on information equity, copyright and fair use, and public access. This was followed by a similar meeting at Duke University Law School's Center for the Public Domain (<http://www.law.duke.edu/pd/schedule.html>), with papers on copyright and the information commons.

Thus, in just two years, the information commons has assumed a new dimension in the 21st century. This new wave of interest has resulted in exciting efforts to revive the concept of the commons in order to reframe the debate around issues central to the future of information access and democracy.

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FROM CONCEPT TO REALITY

In recent years, new information access initiatives that encompass the characteristics of common pool resources, or commons, have emerged. Some of these projects are simply digital library collections; others are digital repositories; and still others are digital communities. They share characteristics such as open and free access, self-governance, archiving and preservation, and limited if any copyright restrictions. These initiatives offer an opportunity to demonstrate and

analyze the benefits and structures of new paradigms for content creation and use. Some projects use the Internet itself as a commons, employing open source software, peer-to-peer file sharing, and collaborative Web sites. All represent a new genre of creativity and information artifacts, best understood through a commons paradigm. The following diverse examples illustrate the kind of new initiatives that reflect the principles of the commons:

• **The Internet Archive, International Children's Digital Library,**

<http://www.archive.org/texts/icdl.php/doc/Update.doc>

Developed by the Internet Archive and the University of Maryland, the International Children's Digital Library provides a prestigious collection of international literature for children around the world. The primary purpose of the library is to provide access to literature that can enable children to understand the global society in which they live. The materials in the collection reflect similarities and differences in cultures, societies, interests, lifestyles, aspirations, and priorities of peoples around the world. Its primary audiences are children ages 3-13, librarians, teachers, parents, caregivers, and others concerned with the interests and welfare of children.

• **The Digital Promise Project,** <http://www.digitalpromise.org/>

This project recommends the creation of the Digital Opportunity Investment Trust (DO IT), a nonprofit, nongovernmental agency designed to ensure people's access to knowledge and learning-across-a-lifetime in the sciences and humanities, and thereby transform learning in the 21st century. DO IT's charge is to unlock the Internet and other new information technologies for education in the broadest sense; to stimulate public and private sector research into the development and use of new learning techniques; and to encourage public and private sector partnerships and alliances in education, science, the humanities, the arts, civic affairs, and government. DO IT promises to "digitize America's collected memory stored in universities, libraries, and museums to make these materials available for use at home, school, and work." The proposed Trust would be financed by revenues earned from investing \$18 billion received from the mandated FCC auctions of the radio spectrum.

• **The Creative Commons,** <http://www.creativecommons.org/>

Founded in 2001 by Lawrence Lessig, James Boyle, and other cyberlaw and computer experts with support from the Center for the Public Domain, the Creative Commons offers a set of copyright licenses free for public use and a Web application that helps people dedicate their creative works to the public domain or license them as free for certain uses, on certain conditions. Creative Commons aims to increase the sum of raw source material online, cheaply and easily. In 2003, Creative Commons is building an "intellectual works conservancy." Like a land trust or nature preserve, the conservancy will protect works of special public value from exclusionary private ownership, with the goals of developing a rich repository of high-quality works in a variety of media, and of promoting an ethos of sharing, public education, and creative interactivity.

• **The MIT DSpace digital repository,** <http://www.dspace.org/>

DSpace is an open source software platform that enables institutions to capture and describe digital works using a submission workflow module; distribute digital works over the Web through a search and retrieval system; and preserve digital works over the long term. Located at MIT with the initial aim of making faculty members' scholarship widely available, the project is also promoting a federation of systems that makes available the collective intellectual resources of the world's leading research institutions.

• **Budapest Open Access Initiative**, <http://www.soros.org/openaccess/>

The purpose of the Open Access Initiative is to accelerate progress in the international effort to make research articles in all academic fields freely available on the Internet and to make open-access publishing economically self-sustaining. Many individuals and organizations from around the world who represent researchers, universities, laboratories, libraries, foundations, journals, publishers, learned societies, and kindred open-access initiatives have adopted this open access approach to scientific and scholarly materials. The project aims to provide the leadership, software, technical standards, and funding to develop new commons of scholarly literature.

• **Los Alamos e-Print Archive**, <http://www.arxiv.org/>

The Los Alamos ArXiv.org is an open access, electronic archive and distribution server for research papers in physics and related disciplines, mathematics, computer science, and cognitive science. The service, started in 1991 and formerly hosted by Los Alamos National Laboratory, was acquired by Cornell University in September 2001. Users and authors interact with the arXiv using a Web interface, file transfer protocol (FTP), or e-mail. Authors can update their submissions if they choose, though previous versions remain available. Users can also register to automatically receive an e-mail listing of newly submitted papers in areas of interest to them.

• **Digital Library of the Commons**, <http://dlc.dlib.indiana.edu/>

The Digital Library of the Commons (DLC) is a gateway to the international literature on the commons. This site contains a Working Paper Archive of author-submitted papers, as well as full-text conference papers, dissertations, pre-prints, and reports. DLC is a collaborative project of the Indiana University Workshop in Political Theory and Policy Analysis and the Indiana University Digital Library Program. DLC uses "Eprints" -- an open source-compliant software program that enables researchers to access databases efficiently. DLC also provides free access to an archive of international literature on the commons, common-pool resources, and common property.

• **Project Vote Smart**, <http://www.vote-smart.org/>

Project Vote Smart (PVS) is a citizens' organization formed to provide unbiased, nonpartisan, accurate, and comprehensive information for voters' electoral decision-making. In addition to profiles of elected officials and candidates, PVS maintains monitors the status of major federal legislation and posts calendars for the U.S. Senate and House of Representatives.

WHY WE NEED THE INFORMATION COMMONS

In one of the great ironies of the 21st century, public policy is threatening the advancement of "science and useful arts" rather than encouraging creativity and innovation. According to law professor Yochai Benkler,

Stakeholders from the older economy are using legislation, judicial opinions, and international treaties to retain the old structure. ... As economic policy, letting yesterday's winners dictate the terms of tomorrow's economic competition is disastrous. [A]s social policy, missing an opportunity to enrich our freedom and enhance our justice while maintaining or even enhancing our productivity is unforgivable.¹

Stifling free expression and the free flow of ideas results in a controlled society, lacking diversity, equity, and democratic participation in the digital age. Already, the public has experienced a widening gap between those with and without access to communication and information technologies, skyrocketing costs, limited preservation and archiving abilities, restrictions on the ability to lend and dispose of electronic information products, blocking of massive amounts of constitutionally protected speech through Internet filters, and a reduction in the rights to make fair use of copyrighted works.

The concept of the information commons offers a fresh approach to the terms of the public policy debate, emphasizing the fundamental issues critical to our future as a democracy. It provides a useful framework for envisioning the public interest. It gives an opportunity to stake a claim in the future of the public sphere - to give a language from which we can explain how the extraordinary public assets invested in our information infrastructure deliver opportunities for all citizens to participate in our democracy.

The development of the information commons as both a metaphor and a new structure for access in the digital age fills a critical need. The commons elevates the role of individuals as more than just consumers in the marketplace, and shifts the focus to their rights and needs as citizens. Reviving a language of the commons is thus critical to the future of an open, democratic society, rooted in the words of James Madison:

A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy ... [A] people who mean to be their own governors must arm themselves with the power which knowledge gives.²

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