Can the Information Commons Be Saved?

How Intellectual Property Policies Are Eroding Democratic Culture & Some Strategies for Asserting the Public Interest

by David Bollier

One of the more confusing paradoxes of this Internet Era is that even as more information is becoming readily available than ever before, various commercial forces are converging to make information more *scarce*, or at least more expensive and amenable to strict market control. More than an oddity, this paradox may be an augury about the fate of the free information ecology that has long distinguished our democratic culture.

In unprecedented ways, a range of industries is using new technologies, expansive intellectual property rights and market consolidation to convert a great landscape of free, publicly accessible information into privately controlled markets. This is forging a radically new architecture for the flow of information in our society. It is determining who can access, use, and share different genres of information, and under what terms. It is no exaggeration to say that the future character of our polity, markets, education, and culture is being profoundly shaped by the new technologies and public policies, especially intellectual property law. Yet there has been remarkably little inquiry, broad public debate or sustained public-interest representation on these fundamental issues.

To be sure, the growth in Internet usage and e-commerce is invigorating competition and engendering entirely new ways of accomplishing everyday tasks. But the excessive marketization of the information commons is also diminishing many forms of artistic freedom, civic discourse, academic research, business innovation, privacy rights and consumer protection. These values are increasingly imperiled as entrenched industry sectors use their political clout to secure new types of intellectual property rights that advance narrow commercial interests. Lost in the shuffle, often with the full complicity of our government, are the American people's larger interests in open markets, robust cultural spaces, social equity and core democratic principles.

For complex reasons, many of the constituencies with the most at stake have barely begun to understand their long-term interests, let alone organize effective responses. Most citizens, consumers, computer users, creative artists, educators, scientists, journalists, among many others, do not truly recognize how they are losing their traditional fair use and public domain rights in information, and that the weakening of these rights – and the loss of diverse information commons – is changing some basic premises of our culture. Would-be competitors who might bring innovative

technologies, business methods and cheaper prices to the market are also being thwarted by new IP policies.

It is the dark side of the digital revolution: how a variety of new intellectual property policies, in conjunction with new technologies, are greatly empowering sellers at consumers' expense; fostering market concentration over open competition; homogenizing our society's diversity of information and expression; constricting the public domain from which new creative works and business innovations derive; supplanting free access to information with pay-per-use regimes; introducing intrusive new forms of surveillance of individuals' use of copyrighted material; and subverting the open standards and "gift culture" of the Internet which have been the very engines of our turn-of-the-century information explosion. This memorandum is an attempt to explain how these disturbing trends are remaking our society in pernicious ways.

I. ENCLOSING THE INFORMATION COMMONS

As more of the American economy, political life and culture migrate to online venues, a once-sleepy domain of law -- intellectual property (IP) – is assuming vast new powers to determine how our society will function. For many reasons, however, neither the dynamics of this shift nor its regressive political implications are widely appreciated. Therein lies a challenge.

The success of IP law over generations has been about striking balances between fundamental tensions – between creators and consumers, between industry monopolies and competitive markets, and between private, commercial control of expression and societal interests in free speech. While these tensions in IP law are nothing new, the rise of new digital technologies and market structures is undermining the traditional, tenuous compromises embodied in IP law. As our culture's "central nervous system" is re-wired, some basic social, democratic and cultural values are being eroded. The meaning of the First Amendment, the vitality of public discourse, the institutions for assuring social equity, the legal structures for assuring a competitive, inclusive economy – these are some of the key issues that new technologies and IP law are shaping.

Historically, IP debates have rarely attracted much interest among the press or public. Since copyright and patent controversies have tended to be inter-industry conflicts, Congress has typically been content to let the warring industries work out some compromise behind closed doors, which it then ratified. This was seen as acceptable because most IP policy disputes affected industry only; IP generally did not affect private, non-commercial uses of copyrighted works. Not surprisingly, the public has usually been indifferent toward IP controversies.

The lack of public interest in IP law also stems from its complex abstractions which are seen as the exclusive preserve of credentialed specialists in law, technology, economics and international trade. And since new IP policies have generally affected markets-in-the-making, the impact has tended to be prospective and not immediate. Typically people have not *experienced* the impact of IP policies firsthand. This is rapidly changing, however, as new technologies proliferate more rapidly and more people begin to use information in ways that established copyright industries see as contrary to their commercial interests.

All of these reasons help explain why Americans are fundamentally in the dark about the politics of IP. "When private parties are allowed to exploit federal land, we can all work out the politics of the situation," writes Duke University law professor James Boyle. "We know the arguments (and interest groups) for and against. But who wins and who loses when the property at stake is intellectual, and the struggle is over the extension of a copyright term or a software patent? As yet, we have no politics of the information age."[1] Indeed, many people erroneously apply their folk notions of copyright to cyberspace, oblivious to the retrograde effects. They believe, for example, that copyrighted works can be absolutely controlled in the manner of other kinds of property – a misconception that copyright interests deliberately play upon.

Many people also mistakenly believe that the architecture of the Internet is intrinsically open and inviolate. In fact, the technologies, public policies and institutions that govern the Internet are rapidly changing, chiefly in response to commercial pressures. The critical question is whether the remarkable public space made possible by the Internet will be re-designed to maximize the commercial interests of dominant intellectual property owners -- or whether the Internet's architecture will protect the public's interests in free speech, consumer rights, privacy and open, competitive access. Some fundamentally different values are vying for supremacy.

In the meantime, the public's ignorance about the politics of intellectual property is allowing a variety of copyright-based industries to carry out a highly lucrative "grab" of IP rights in plain sight, with little public awareness of the long-term costs to the commonweal. Indeed, the granting of expansive new intellectual property rights to various copyright industries represents one of the biggest giveaways of taxpayer assets in decades – incalculable billions of dollars that derive from legal[1] ownership of huge new market sectors, lucrative niche products and legally contrived market advantages. This is not just a huge financial loss to taxpayers and consumers, but a metaphorical clear-cutting of public rights in the information environment.

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[1] James Boyle, "Sold Out," *The New York Times*, March 31, 1996. See also Boyle, 47 *Duke Law Journal* 87 (1997), available at "A Politics of Intellectual Property: Environmentalism for the Net?" http://www.wcl.american.edu/pub/faculty/boyle/intprop.htm.

A. Suspending the "Cultural Bargain" of Copyright

Copyright and patent law has always been regarded as a "cultural bargain." As mandated by the U.S. Constitution, copyright is a *limited* right granted by Congress to authors and inventors. Copyright is a grant of monopoly rights to authors, but a grant limited by a fixed term (originally 28 years, now extended to a lifetime plus 70 years) and by "fair use" rights (consisting chiefly of the right to quote and reproduce protected works for criticism, news reporting, teaching, scholarship and research). Other limitations also apply to copyright protection, such as the right of libraries and archives to reproduce works and limits on the ability of copyright owners to control a product after the first sale (the "first-sale doctrine").

The property rights granted to authors, in other words, are balanced by the right of public access to the work and its preservation in the public domain, once the copyright term expires. Copyright's primary purpose is to benefit the public, and rights are supposed to be granted to authors only to fulfill that purpose.

Increasingly, however, industries are seeking to suspend the terms of this bargain. They are claiming copyright as a plenary right. They want to arrogate broader, more exclusive new intellectual property rights to themselves while shirking the historic responsibilities associated with those rights, particularly the preservation of the public domain and fair use rights. Many business interests brashly assert that copyright is an *unlimited right* to control all access to, distribution and use of a copyrighted work. They brazenly argue, furthermore, that even the public's traditional interests in the public domain and fair use amount to "piracy."

This misconstrues the historic principles governing copyright law, which emphatically does not authorize copyright holders to control all markets. It only grants a reward for making a work available to the public, by publishing it. IP rights have always been limited in scope, not absolute, and balanced by corresponding responsibilities to the public. In the face of industry pressures, however, the cultural bargain of copyright -- intended as a system to reward authors as a way to bring new works to the public -- is being morphed into a market protectionist system.

Copyright industries have effected this transformation, in part, by arrogating to themselves the moral and legal rights that we associate with individual authors. The Constitution grants a limited monopoly to the *author*, after all, not to the publisher. But the rise of mass-media technologies has effectively shifted copyright prerogatives from authors to media corporations, via the work-for-hire doctrine. This has empowered companies to use copyright law as an instrument of monopoly and censorship – a dynamic that is intensifying as companies seek to maximize their competitive advantages in the digital marketplace.

From one perspective, the push for new IP policies can be seen simply as a way to build a functioning, efficient architecture for e-commerce. The effective result, however, whether intended or not, is to enclose the information commons. Instead of preserving an open public space accessible to all and influenced by democratic processes and social norms, recent copyright initiatives, if fully implemented, will transform the Internet into a vast pay-per-use vending machine.

B. The Fate of the Internet

These trends, of course, run directly contrary to the culture of the Internet as we know it today. Conventional intellectual property law assumes that only copyright protection and its market incentives can generate useful or desired information. The history of the Internet and the World Wide Web has shown that this is simply not true. An incredibly fertile and robust information commons has arisen through easy public access to content that has very *weak* copyright protection. In defiance of such empirical realities, copyright industries have insisted upon strengthening IP protections as a way to preserve their market prerogatives.

This is real mainspring for the reactionary IP campaigns waged by established industries. The Internet has enabled ordinary people to create and share information without necessarily having to use market intermediaries, particularly "old economy" intermediaries such as publishers and record companies. Never before has free speech had such a hospitable commons. Yet many business interests find this profoundly threatening to their entrenched ways of doing business. They want to neutralize the Internet's powerful capacities and domesticate the network to privilege commercial uses in general and their own business models in particular.

New intellectual property policies offer a ready means for doing so – a strategy made easier by years of industry's cozy access to lawmakers and generous campaign contributions. The impact on our information commons – the ability of people to interact freely with each other, build on each other's creativity, and hear a diversity of views – is more problematic, however. Ordinary readers, computer users, consumers, scientists, historians, libraries, and artists – not to mention would-be competitors -- find that their IP interests are being trampled on by "old economy" businesses.

For example, the new MP3 software compression format used for digital music makes possible a different, more competitive market structure in the recording industry. MP3 and the Internet enable the development of a marketplace that is more accessible to newcomers, offers cheaper products and compensates a more diverse range of creators than the current market oligopoly. But this is precisely what is alarming to the five major record companies that dominate the market. They rely upon an expensive production, distribution and marketing apparatus to create stars and maximize revenues. That once-impregnable apparatus is increasingly vulnerable.

It remains fundamentally unclear how the Old Guard and New Technologies will negotiate a rapprochement (or one side prevail by dint of politics, law or technology).

To date, copyright industries have generally been more intent on stifling online competitors than on exploring the profit- and market-making opportunities of the new technologies. They reflexively cry "piracy" and try to curb people's legitimate uses of materials by securing broader IP protections. Copyright is being seized upon as a market protection strategy even though it is eroding the public's traditional rights and arresting the development of remarkable new technologies. The point is not that the Internet should become a non-commercial haven -- a straw man argument; it is that risk-averse copyright industries are generally unwilling to entertain new business models and market structures despite the profit opportunities.

The issues raised by the new IP policies are of concern not just to consumers, but also to citizens who care about governance, politics and culture. Any strict constructionist reading of the Constitution would have to agree that the Founding Fathers envisioned a public sphere with hundreds of speakers and pamphleteers, not the tightly controlled mass-media oligopolies of our times (which, not incidentally, favor marketable styles of expression – spectacle, pseudo-news, contrived realities – over other genres). Yet increasingly, copyright law is being invoked to suppress the kinds of commentary and fair use that a working democratic culture needs. Two leading newspapers claim that the non-commercial sharing of online news articles violates copyright law (see p. 18 below); Microsoft has invoked a 1998 copyright law in an attempt to suppress online discussion of one of its product's specifications and quality (p. 10 below).

If a "copyright maximalist" regime engulfs the public domain, snuffs out fair use rights, and crowds out non-commercial modes of speech, what values will become embedded in the normative structures of our economy and law? What spaces will remain open both for free expression and civic speech? What sorts of new creativity will even be possible if large chunks of the public domain are privatized? What architectures of control and secrecy – or openness and transparency -- will prevail on the Internet and in other digital markets?

This theme is explored by Stanford Law Professor Lawrence Lessig in his seminal book, *Code and Other Laws of Cyberspace*. In effect, political choices can now be artfully embedded in the Internet, hardware and software systems (through anticopying chips, surveillance software, access checkpoints, etc.), and buttressed by intellectual property rules enforceable by government. The political implications of technology design can be seen in the new computer chip that Intel encoded with a unique Processor Serial Number (PSN). The company wanted to help e-businesses identify specific computers and help large companies to manage their computer assets. But the chip design also enabled new forms of electronic snooping – a capability that

provoked a firestorm of protest that led Intel to swear off similar designs in the future.

Technology design can have positive political implications as well. The very design of the Internet – its open transmission protocols, public-domain software and interconnectivity of networks – seems to advance the very values that lie at the heart of Jeffersonian democracy: free expression, openness, accountability. This design architecture is not sacrosanct, however. AT&T and other companies are currently developing a closed-cable model for the Internet -- a quite different architecture of power, commerce and culture.

The point is that software and system design is at once a form of politics, policymaking and "cultural engineering." The architectural design of our future society is being crafted by corporate strategists and computer engineers, by the potent rules of IP law that structure how information will flow, and by the new market structures (concentrated vs. competitive) that either foster or impede innovation, competitive pricing and quality service.

We need to realize that the convergence of new market structures, technological systems and expansive intellectual property rights forces us to reconceptualize the practical meaning of many democratic values in the Internet Age. Private enterprises can now censor free speech and invade personal privacy at least as effectively as government. The availability of public spaces for civic discourse and cultural expression can no longer be taken for granted when giant media companies are so powerful and ubiquitous. Lessig puts the challenge well: "How do we protect liberty when the architectures of control are managed as much by the government as by the private sector? How do we assure privacy when the ether perpetually spies? How do we guarantee free thought when the push is to propertize every idea? How do we guarantee self-determination when the architectures of control are perpetually determined elsewhere?" Our political culture has barely begun to grapple with these questions.

Copyright and patent law now affects all citizens and consumers; they are not simply inter-industry squabbles. That is why a new politics of intellectual property is urgently needed. The evolution of IP law as a closed-door process dominated by industry and ratified by compliant legislators and executive branch agencies is no longer acceptable. Too many protectionist policies are being enacted which profoundly limit the public's rights while impeding competition and innovation. Too many changes in technology and market structure are destroying various information commons. These trends will only continue as long as the societal importance of intellectual property law goes unaddressed and public-interest IP advocacy remains so sporadic and weak.

II. HOW NEW INTELLECTUAL PROPERTY REGIMES ARE ERODING DEMOCRATIC VALUES

In state, federal and international arenas, copyright industries are advancing a wide variety of legal provisions and technologies to strengthen their commercial rights. The impact on the public, quite often, is an erosion of fair use rights and the public domain. Three industry gambits for enclosing the information commons are particularly alarming: technological locks on digital information that thwart fair use, new copyright protection for facts assembled in databases, and a uniform licensing framework that rescinds well-established consumer rights. Copyright industries are waging other campaigns as well to extend their property rights at the expense of free speech, privacy, consumer rights, and free and open source software. This section examines this broad array of threats.

A. Using IP Policy and "Techno-locks" to Control Markets -- and Stifle Free Speech

Electronic media are the principal vehicles for our public interactions, yet increasingly their artifacts -- text, video, music – are being proprietized and controlled for strict market uses that preclude even excerpts and citations. IP owners want their information products and concepts to be *ubiquitous* in the culture (Barbie dolls, cartoon characters, corporate logos, software programs), but never to be *freely usable* by the culture. The idea is to sanction only a controlled consuming relationship, not an open, interactive relationship with the products introduced into commerce.

One potent tool toward this end is the Digital Millennium Copyright Act, or DMCA, enacted by Congress in 1998. This law goes well beyond traditional copyright principles by making it illegal for anyone to overcome a technological measure that restricts access to digital works. The DMCA also makes it illegal and possibly criminal even to *share* information about how to defeat a technological lock. A consumer violates the law by deciphering the encryption keys that control access to DVD movies, for example, or by sharing information *about* DVD encryption with anyone.

The problem with the DMCA is that it allows copyright holders to control any later use of the product, even if it would normally constitute a fair use activity. All a company needs to do is assert its own terms of usage for consumers, and then put a "technology lock" around the information, even a weak, nominal lock. If a paying consumer then circumvents the lock for any reason, or shares information about the lock itself, a violation of the law has occurred. The effect of the anti-circumvention provisions of the DMCA is to authorize large copyright industries to stifle competition and innovation and prevent the widest possible dissemination of creative works. This, of course, runs directly contrary to the very constitutional purpose of copyright – to advance and diffuse knowledge. Worse, industries are able to assert

their copyright claims through legal intimidation of alleged violators, enabling a form of private censorship without even a prior court review.

The most celebrated prosecution under the DMCA is a lawsuit pending against a 16-year-old Norwegian programmer who wrote a program that can run Hollywood's DVD movies on Linux operating systems (and not just on Windowsbased DVD players). This alarms the film studios because DVD makers are paying them license fees; an alternative distribution channels for DVD movies, such as Linux-based players, would upset Hollywood's control of the market and its pricing prerogatives. By preventing the fair use of a digital product – without even a copyright violation alleged – studios are using the DMCA to raise new barriers to the independent distribution of creative works.

The DMCA is also being used to stifle free speech in an alarming way. In May 2000, Microsoft demanded that *Slashdot*, a website forum for programmers, remove materials that criticized the technical specifications for Microsoft's Kerberos software. The software is of interest to the software community because critics charge that Kerberos represents yet another attempt by Microsoft to substitute a closed, proprietary Web standard for an open standard. After complaints, Microsoft agreed to post the specifications to Kerberos on its website. But access was granted only if users first clicked on an "End User License Agreement" that stated that the specs were proprietary trade secrets that could not be used or disclosed without Microsoft's permission.

When some *Slashdot* subscribers nonetheless posted the specs – a classic fairuse copying of material for the purposes of criticism and comment – Microsoft charged copyright infringement and insisted that the material be removed from the *Slashdot* website. If this precedent is allowed to stand, warns Georgetown law professor Julie E. Cohen, "a publisher can prohibit fair-use commentary simply by implementing access and disclosure restrictions that bind the entire public. Anyone who discloses the information, or even tells others how to get it, is a felon."[2] (For more on how this fosters a "copyright police state," see Section E below; for more on other copyright vehicles for suppressing free speech, see Section F below.) Encryption and licensing might be used in the future for an even more ominous purpose – the revocation of freedoms traditionally associated with books. Makers of the so-called "eBook" -- handheld appliances that are being developed by a[2] number of media giants -- are likely to invoke the DMCA to "lock up" the digital text. The harm to free speech and our culture could be severe. Encryption locks on eBook content could eliminate free or cheap public access to texts (through libraries, e.g.) and wipe out the fair use rights of readers. NYU law professor Yochai Benkler warns:

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[2] Julie E. Cohen, "Call it the Digital Millennium *Censorship* Act," *The New Republic*, May 23, 2000. See also http://www.tnr.com/online/cohen052300.html.

> Books have been the foundation of our political democracy as well as our free market economy and free religion in the United States. If books are encrypted and shrinkwrap licensed to readers [see Section C], blind people will not be able to read them and libraries will not function. When the term of copyright expires the books will not actually enter the public domain. These "eBooks" will become payper- view infotainment.

Traditionally, of course, readers can share their books with whomever they want. This right derives from the "first sale doctrine," which limits the right of vendors to control their products after the first sale. (This doctrine enabled the videotape rental business to emerge independent of the film studios). Would the first sale doctrine apply to eBooks, allowing content to be freely used in subsequent uses, or would it be illegal for a young girl to share the e-version of *Harry Potter* with her brother? Would the DMCA apply to eBooks, thereby preventing fair use of the text and its passage into the public domain?

Such possibilities are already being explored. When Simon & Schuster experimented with an online sale of a new Stephen King novella, the book was not available to public libraries under any license, nor was it available to computers that did not run on Windows operating systems. The novella had essentially "gone private," shedding any responsibilities for providing public access while retaining full copyright protection. The cultural implications of these developments are chilling – yet virtually unknown to the reading public or policymakers.

B. Claiming "Ownership" of Public Facts

As computer technologies have made it possible to assemble huge numbers of facts into searchable databases, it has created new quandaries for how to protect the commercial value of the aggregated information. Vendors who assemble databases of book prices, CD titles, scientific research or statistics generally want to have tight proprietary control over their compilations. It would be patently unfair for a freeloader to simply download one vendor's database for free and then resell it with impunity. On the other hand, there is a serious danger if facts – which have never been eligible for copyright protection – can suddenly be owned and removed from the public domain. Much of education, scientific research, journalism and civic life could not function if *facts* can be owned and their free flow restricted.

These issues have been playing themselves out in Congress for the past six years as database vendors have sought the right to prevent any extraction or reuse of database information. Their legislative vehicle, the Collections of Information Antipiracy Act, H.R. 354, would significantly over-protect database compilations in a way that exceeds traditional copyright principles. According to a petition signed by scores of universities, academic societies, search engines, and telecom companies, the bill would grant the compiler of any information "an unprecedented right to control

transformative, value-added, downstream uses of the resulting collection or of any useful fraction of that collection."

Strict database protection could give the New York Stock Exchange monopoly control of its stock quotes, to the detriment of online stockbrokers and efficient trading. The eBay auction site could prohibit the use of online agents to sift through its databases to make price comparisons with other e-vendors. The use of links to websites could be interpreted as an unauthorized use of a copyrighted database. Sports data could become proprietary. Recently the 2000 Summer Olympics in Sydney sought to prevent news media from using its website tabulations of Olympic sporting events. It feared that the news media's free use of the real-time data would undercut the commercial value of its website, sponsored by IBM and Swatch. At the Masters' golf tournament, reporters were to be charged for access to a website with up-to-the-minute statistics.

Proprietary claims to public facts are also being claimed under novel legal theories such as trespass trademark dilution and copyright infringement. A leading case is *eBay v. Bidder's Edge*, which was filed by the online auction house, eBay, in December 1999. eBay complained that Bidder's Edge, a service that helps shoppers identify the lowest prices for goods and services, was using web-crawling software "bots" to compile comparative price data from dozens of Internet auction sites, including eBay. Even though eBay's price data are accessible to anyone via the Web, eBay claimed that the "spidering" represented a "trespass" on its personal property (its servers) as well as a form of copyright infringement and trademark dilution. A federal judge agreed with eBay's complaint in May 2000, and ordered Bidder's Edge to stop gathering data from eBay's site. That ruling is now on appeal.

Trademark dilution complaints have skyrocketed since passage of the Federal Anti-Dilution Act, which holds that a person can be liable for using someone else's mark even if consumers are not deceived or confused as to the source of goods or services. All that matters is that the distinctive quality of the mark is "blurred" by the unauthorized usage, thereby "tarnishing" the mark's value. This legal argument has allowed companies to go after websites that criticize them (the ubiquitous ".sucks" sites), cultural commentary sites (e.g., parodies and criticism), as well as web-crawling bots.

These new attempts to claim proprietary control of public facts could inflict significant harm on scientific research, academic dialogue and political life. Converting the information commons of public facts into a market regime would shut down or impede all sorts of creativity and discussion. IP scholars J.H. Reichman and Pamela Samuelson cite the case of Landsat satellite images, which many scientists use to "map and monitor" terrestrial ecosystems and to develop models to assess land quality, soil productivity and erosion hazards. After this databank was privatized,

prices soared from $400 to $4,400 per image, bringing academic research in these areas to a complete halt.[3]

Besides privatizing and commodifying facts that are currently available at low cost or for free from the public domain, the database legislation (and other legal protections) would give data vendors monopoly control over their markets, with all the pricing abuses and anti-innovation effects that that entails. Moreover, the fundamental beauty of the Internet – the cheap and easy ability to find and aggregate information on a vast scale – would be subverted.

C. Resurrecting Old Forms of Consumer Abuse

As the Internet has become a new venue for commercial activity, various businesses are seizing the opportunity to roll back a number of basic marketplace rights that consumers have long taken for granted. The most troubling initiative is a universal licensing scheme for online transactions known as UCITA, the Uniform Computer Information Transactions Act.

UCITA is a model state law of contracts for information products, intended for future adoption by state legislatures. Drafted primarily by Microsoft, other big software makers, database firms and many Internet-based companies, UCITA sets forth a set of default contracting rules for transactions in computerized information that will apply unless parties override the default rules with negotiated terms (an unlikely or impossible proposition in most mass-market transactions). The rules are now generally set forth in "shrink-wrap" contracts on software packages and "clickthrough" licenses that precede transactions on the Web.

At one time, take-it-or-leave-it, non-negotiated contracts were considered "contracts of adhesion," which were unenforceable as a matter of law because there was no "meeting of the minds" between the contracting parties. UCITA alters the traditional definition of a contract by regarding a consumer's mere use of information -- after she has had the opportunity to read the terms of a license -- as constituting assent to the terms of the license.

The primary problem with UCITA is that it guts a number of legal principles that have been at the heart of consumer protection for a generation. UCITA rescinds the legal presumption that consumers should be informed of pertinent information before a sale. It allows sellers to sell software they know to be defective, and to restrict how consumers shall use products. Sellers, for example, could require consumers to obtain prior consent before publishing a review of the product. Consumers who criticize an information service to which they are subscribing could

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[3] National Research Council, *Bits of Power: Issues in Global Access to Scientific* Data (National Academy Press, 1997), Chapter 4, Box 4.2, cited in J.H. Reichman and Pamela Samuelson, "Intellectual Property Rights in Data?" 50 *Vanderbilt Law Review* (1997), p. 121.

be muzzled or have their service terminated. Sellers could also prohibit consumers from transferring ownership of their software to others, and could limit how long they could use the software. UCITA might also allow sellers to prohibit certain forms of "reverse engineering" of software (i.e., taking a program apart to see how it works). Free software champions contend UCITA would allow proprietary software makers to sabotage free software by inserting secret file formats and protocols into their products.

Essentially, the law would be a backdoor way for companies to enlarge their copyright protection via contract law while thwarting competition and innovation. (Imagine if GM welded its hoods shut and made it a contract violation for its customers and their mechanics to tinker with GM engines.) To further insulate themselves from consumer accountability, software and information vendors have inserted provisions in UCITA that would allow them to dictate the legal venue for any litigation about their products and services. Not many lawsuits would ever move forward if consumers had to file their cases in Kings County, Washington (Microsoft's home turf) to exercise their basic legal rights.... which is precisely the goal.[4]

Several provisions in UCITA purport to guard against seller abuses by allowing federal IP law to preempt state contract law, and by allowing federal courts to strike down contract terms that conflict with "fundamental public policies" (however those may be defined by the courts). But the practical ability of consumers to use these provisions to strike down onerous contract terms that will govern by default is dubious. Drafted through industry-dominated deliberations, UCITA is a concerted attempt to roll back the baseline norms of seller/consumer relationships to the 1950s, when sellers could sell defective products, with no warranties, at burdensome terms, with impunity.

Apart from constitutional and consumer concerns, UCITA represents an insidious form of government protectionism. "Imagine, if you can, that in the 1960s the Big Three auto manufacturers had convinced Congress to pass a law allowing them to use mass-market 'licenses' to insulate themselves from criticism of their products," writes Prof. Julie Cohen. "In the short run, they might have avoided some unflattering comparisons to superior imports; in the longer run, however, the restrictions would have shielded flawed product designs from the competitive pressures of a healthy market. Together, the DMCA and UCITA will do exactly that."[5] Markets (not to mention our democracy) won't function well, or fairly, if accurate information can be suppressed. UCITA is not the only vehicle for legalizing consumer abuses on the

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[4] See UCITA critique by Vergil Bushnell, Consumer Project on Technology, in letter to Maryland Governor Parris Glenening, April 11, 2000, available at http://www.cptech.org/ecom/MD-ucita.html. Also, Cem Kaner and David L. Pels, "UCITA: A Bad Law that Protects Bad Software," published in *Network World*, 1999, and available at http://www.badsoftware.com/networld.htm.

[5] Julie E. Cohen, "Unfair Use," *The New Republic*, May 23, 2000.

Internet and in the digital marketplace. At the international level, a little-known set of negotiations known as the Hague Convention on Jurisdiction seeks to formalize legal rules for business-to-consumer transactions in cyberspace. A key issue is determining which country's legal regimes shall prevail in transactions involving two or more countries. In a move that echoes the UCITA provisions on legal venue, the U.S. Government wants treaty language that would strike down the traditional right of consumers to bring private legal actions in their country of residence. This means that an aggrieved consumer seeking to exercise his legal rights against a software company based in Bangalore, India, would have to litigate in Bangalore. "The potential impact and exposure for Internet related activities is enormous, and essentially unknown and yet to be discussed by anyone but a handful of experts," writes James Love, one of the few consumer advocates monitoring the Hague treaty negotiations.

An even worse scenario waits in the wings – the substitution of weak, privately drafted industry rules for strong government mandates for consumer protection. According to Love, a system is being proposed whereby e-commerce firms could legally bypass a country's consumer protection laws by obtaining industry "certification" that they provide good consumer protection. The Hague Convention may also end up endorsing an international system of self-regulation with respect to personal privacy. (Self-regulation has been a dismal failure in the U.S.) If adopted, the treaty proposals "raise the possibility that the Hague Convention will be used to privatize parts of our legal system and shift control of public policy from democratically elected governments to powerful industry trade groups," writes Love.[6]

The rise of the Internet has also opened the door to some entirely novel forms of consumer abuse for which no legal or practical remedies yet exist. These include the new blurring of advertising and editorial content, usually without any disclosure of the deception; undisclosed biases in search engines as a result of commercial payments; undisclosed new security risks posed by "always-on" broadband service and by some commercial software; new invasions of privacy by market research firms monitoring individuals' web usage; new risks of "identity theft" as a result of the recently enacted "digital signatures" law; and new kinds of anti-consumer business practices of the sort pioneered by Microsoft (restrictive licensing agreements, deliberate software incompatibilities, etc.).

D. Impoverishing the Public Domain by Extending Copyright Terms.

The public domain is the shared reservoir of knowledge and art from which new creations can arise. To ensure that the public domain can survive and grow, the Constitution directs Congress to grant authors an exclusive right to their work "for

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[6] James Love memo, "Meeting in Ottawa on the Hague Convention on Jurisdiction and Foreign Judgments in Civil and Commercial Matters," March 2000, available at http://www.cptech.org/ecom/hague-march-2000.html.

limited times." Once the term limit expires, the work enters the public domain and can be used for free by anyone. But the vitality of the public domain was suddenly curbed in 1998 with enactment of the Sonny Bono Copyright Term Extension Act, which extends by twenty years the protection of cultural works copyrighted after 1923. Tens of thousands of works such as *The Great Gatsby*, films such as *The Jazz Singer*, the musical *Show Boat*, and works by Robert Frost and Sherwood Anderson, will not enter the public domain until at least 2019.

The law is a clear case of corporate welfare for major corporations and a sheer windfall for authors' estates. The constitutional rationale for copyright is to encourage authors to create new works. A retroactive benefit to dead authors cannot possibly help achieve that goal. The Supreme Court has consistently held that copyright's primary purpose is to enhance the public domain, which is precisely the opposite result achieved by the Bono Act. The net effect of the law is to delay thousands of works from entering the public domain and to force consumers to pay hundreds of millions of dollars more for creative works and characters that rightfully belong to them.

The law also amounts to a tax on the freedom of speech of authors who want to use the public domain to create new works. One such user is Eric Eldred, a hobbyist who launched a website of public domain literature, including many out-of-print books. Soon Eldred's website was getting 20,000 hits a day; the National Endowment for the Humanities recognized it as one of the twenty best humanities sites on the Web. But the Bono Act forced Eldred to remove a number of works from his site. With the help of Professor Lawrence Lessig and the Berkman Center for Internet and Society, Eldred has launched a constitutional challenge, *Eldred v. Reno*, which is now wending its way through the courts.[7]

E. The Rise of a "Copyright Police State"?

The expansion of copyright protection into new areas has a disturbing correlate: intrusive new surveillance of people's reading and viewing habits. In a pay-per-use environment, after all, a single unauthorized use constitutes "piracy." Now that the technology can feasibly detect such "violations," copyright industries have every incentive to step up their monitoring of readers/viewers. The right to be an "anonymous reader" is being superseded by corporate interests in "digital rights management."[8]

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[7] See http://cyber.law.harvard.edu/eldredvreno. For a list of copyrighted works affected by the Bono Act, see http://kingkong.demon.co.uk/ccer/ccer.htm.

[8] See Julie E. Cohen, "A Right to Read Anonymously: A Closer Look at 'Copyright Management,'" 28 Connecticut Law Review 981 (1996).

In order to more tightly control market distribution and use, new software technologies are being devised to allow copyright holders to keep precise track of who accesses what digital works and under what circumstances. Copyright enforcement is only one goal. Digital rights management also enables a company to institute new regimes of discriminatory pricing for different market segments (individuals, companies, libraries, etc.). It can also collect valuable consumer usage data to refine its own marketing strategies, or to re-sell or lease to third-party vendors (advertisers, market research firms, etc.).

The troubling implications of these schemes became clear a few months ago when Hollywood studios successfully sued a Canadian Internet company, iCraveTV.com, which was redistributing live broadcast TV programs over its website. While this is apparently not illegal in Canada, it is in the U.S. – and U.S. Internet users were still gaining access the iCraveTV.com site. To counter studio complaints that the site was facilitating copyright violations and to assure that only Canadian users were (legally) accessing the site, the company's president and co-founder invented a system that would make it possible to pinpoint the geographic location of any user attempting to access the site.

This represents a logical end-point for digital rights management: a tightly managed system of pay-per-use access subject to centralized control and surveillance monitoring: a model of perfect control.[9] It is the antithesis of the Internet today – and of our open, democratic norms. A user-identification system could lead to greater user surveillance, the balkanization of the Internet into regulated national enclaves, and the loss of the kinds of creativity and diverse expression that can only come through the free, unmetered exchange of information. That is why we prize public libraries, academic freedom, and open societies with First Amendment protection – they provide the "white space" in which new experimentation and creativity can occur. Excessive copyright protection in the digital environment tends to inhibit such exchange and erode the robustness of the information commons.

F. How New IP Regimes Undermine Free Speech.

The real meaning of the First Amendment in cyberspace, Professor Lessig has pointed out, is to be found in the *architecture* of Internet protocols, intellectual property, market structures and social norms. The current incarnation of the Internet enables a far richer kind of free speech than has ever existed before. But these gains are not sacrosanct. The legal requirements of the Digital Millennium Copyright Act, UCITA, various IP initiatives, the policies being adopted by the Internet governance

[9] See Julie E. Cohen, "Copyright and the Perfect Curve," forthcoming in 53 *Vanderbilt Law Review* (November 2000), and at http://www.law.georgetown.edu/faculty/jec/publications.html.

body ICANN,[10] and the subscriber rules of dominant Internet companies, may be decisive in shaping the practical meaning of free speech on the Internet.

NYU law professor Yochai Benkler has written extensively about how greater propertization of information is threatening free speech and the diversity of information sources in our society.[11] One of the starkest examples occurred in 1998 when the *Washington Post* and *Los Angeles Times* sought to stop a right-wing web service called Free Republic from sharing newsclips online as part of an opinion forum. The newspapers argued that this usage was illegal, and not a legitimate fair use of copyrighted material. That two of the nation's leading newspapers, champions of the First Amendment, would seek to shut down robust political discourse in the name of copyright suggests how IP and First Amendment values may be coming into greater conflict.

There are many such examples. Besides the Microsoft/*Slashdot* episode mentioned above, there are a number of cases in which critics of companies have sought domain names that either overtly criticize a trademarked name (e.g., walmartsucks.com) or closely resemble a well-known commercial name (e.g., etoys.com, an artists' collective). While the legality of such names has not been definitively settled, companies have often intimidated the owners of such names into surrendering domain names. Meanwhile, ICANN has asserted its support for trademark rights over free speech in assigning domain names. James Love of the Consumer Project on Technology has formally asked ICANN to create a new set of top-level domain "civil society" suffixes such as .union, .unite, among others, which could be used by citizens to organize themselves and discuss common problems.[12] But it remains to be seen whether ICANN (or WIPO, the World Intellectual Property Organization) will sanction a domain system (or specific domain names) that would discomfit commercial interests.[13]

The future legality of hyperlinking is another issue that could have a profound influence on free speech rights on the Internet. One of the most important features of the World Wide Web is the ability to embed links within a web page that allows users to easily "surf" to another document on another website entirely. This capacity is tremendously useful in locating and sharing information, and has made the web the most participatory communications media in history. By custom, creating a website amounts to an implicit grant of permission for others to create hyperlinks directing

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[10] The Internet Corporation for the Assignment of Names and Numbers, a nonprofit organization chartered in the state of California to set technical and governance policies for the Internet.

[11] Yochai Benkler, "Free as the Air to Common Use: First Amendment Constraints on the Enclosure of the Public Domain," 74 *NYU Law Review 354* (May 1999).

[12] James Love of the Consumer Project on Technology has formally requested that ICANN issue new toplevel domain suffixes for civil society purposes. See http://www.cptech/ecom/icann/tlds-march1-2000.html.

[13] See Consumer Protect on Technology Comments on Terms of Reference, Procedures and Timetable for the Second WIPO Internet Domain Name Process, August 11, 2000, available at http://www.cptech.org.

users to a site. Increasingly, however, commercial enterprises want to control who can use their trade names and create hyperlinks to their websites.[14]

In a 1997, for example, Ticketmaster Corp. objected to a Microsoft city guide site's posting of a Ticketmaster link, arguing that it prevented Ticketmaster from exploiting its own business and advertising opportunities. Some companies have objected when links allow users to bypass the "framing" on their sites – the surrounding visual material that often contains advertising. Perhaps the most famous attack on linking involves Napster, the software service that allows registered users to find specific MP3 files on other users' servers. Because so many of the MP3 files contain copyrighted music, the recording industry is suing to shut down Napster's file-sharing service as a illegal means of copyright infringement. Other lawsuits are challenging automatic compilations of hyperlinks via search engines as copyright infringements. If these challenges prevail, they could shut down many entirely legitimate and useful search engines, beyond those that facilitate copyright infringement. As if objections to linking were not troubling enough, British Telecom recently made an even more startling proprietary claim: that it would seek fees for a 1989 patent it holds on web linking technology. If this claim is upheld in court, it could radically increase costs of weblinking and reduce free speech.

One aspect of the "copyright maximalist" agenda often goes unnoticed: its tendency to foster media concentration and constrict *the range* of expression. The Supreme Court has long held that it is central to our democratic processes "that we secure 'the widest possible dissemination of information from diverse and antagonistic sources.'" Yet as Benkler points out in his 1999 law review article, property rights in information "require the state to prevent people from speaking in order to increase information production in society....[Furthermore], the mechanism of property rights tends to favor a certain kind of increased production by a relatively small number of large commercial organizations. This, in turn, conflicts with the First Amendment commitment to attain a diverse, decentralized 'marketplace of ideas."

Already we have seen how dominant media corporations such as AOL offer a cyber-architecture that monitors its users' every move on the Web, intervenes to prevent a wide range of unacceptable online behaviors, and offers no "public space" where a subscriber can address all members of AOL (online "crowds" are limited to no more than 23 people). Since AOL subscribers represent 43 percent of domestic Internet users, the potential for a private company to redefine free speech and the character of public spaces is significant; its analogue is the supplanting of Main Street (open to all; mixed civic and commercial uses; free speech rights) with shopping malls (strictly private and commercial with highly limited free speech guarantees). The homogenizing impact of the marketplace is intensified by an unprecedented wave of

[14] For an overview, see Walter A. Effross, "Withdrawl of the Reference: Rights, Rules, and Remedies for Unwelcomed Web-Linking," *South Carolina Law Review*. vol. 49., no. 4 (Summer 1998), pp. 651-691.

media mergers motivated chiefly by "synergies" -- i.e., developing more homogenized commercial expression that can sell across different media platforms.

The breadth of free expression available online – its diversity, liveliness, noncommercial content – is likely to shrink dramatically if the FCC fails to promulgate a rigorous open access rule for high-speed cable "broadband" Internet service. Historically, federal telecommunications law has required that the owners of the communications "conduits" be different from the owners of "content." The goal has been to prevent conduit owners from thwarting competition, charging discriminatory prices, or suppressing undesired speech. But this long-standing principle may change if the new media giants succeed in controlling high-speed Internet access and interactive TV, establishing themselves as a small clique of gatekeepers that can decide what content will and will not be available to Americans. That is essentially what the May 2000 squabble between Time Warner and ABC was all about (which led to Time Warner's blackout of ABC), and why it is important for the FCC to promulgate a rigorous "open access" rule for cable broadband systems.

It is imperative that the architecture of public communications, both the Internet and traditional media, remains open and diverse, and that IP policies not simply promote a more concentrated, homogenized media environment. This means that "bottom-up" forms of creativity and speech, especially of a non-commercial nature, need affirmative protection in IP and other relevant public policies.

G. How Transparent Technologies Fortify Democratic Values.

As discussed above, political values can be embedded in software. Software code is a powerful mechanism for structuring markets, online communities, and political life. Code can determine how people may interact online, what kinds of content will be accessible, what surveillance of users will occur, and what range of user choices will be allowed. The question for the future is: Will the "politics of software" be an open or closed affair? Will the new technologies be transparent and accountable – or opaque and amenable to abuse?

The "source code" of most commercial software – the proprietary blueprint of the product – is considered a trade secret of the highest order. This means that no one can learn how the software functions, what anti-competitive design features it may contain, or what hidden flaws or compatibility problems may lie buried in its depths. By contrast, there are two related types of software – free software and open source code software – that allow users to gain access the design code of software, modify it as desired, and share it with anyone. Open code (the term I will use to refer to free software and open source code software)[15] greatly empowers users. It also neutralizes

[15] "Free software," perhaps most associated with Richard Stallman of the Free Software Foundation, stresses the moral freedom to use source code as one sees fit and the freedom to make and use derivative programs

attempts to use software design as a means to limit competition and innovation -- the primary charge leveled by the Justice Department against Microsoft in its design of Windows, a proprietary software program.

Proprietary code shields the "political choices" embedded in software from public scrutiny. But open code "functions as a kind of Freedom of Information Act for network regulation," as Professor Lessig puts it. "As with ordinary law, open code requires that lawmaking be public, and thus that lawmaking be transparent. In a sense that George Soros ought to understand, open code is a foundation to an open society." On the Internet, the catalytic power of openness is a demonstrable fact.[16] The Internet has unfolded in the way it has – as a robust global medium of unsurpassed scope and diversity – precisely because it has been based upon a variety of open code software systems and networking protocols. Anyone could develop interoperable linkages because the standards and code were all open. This enabled the Internet explosion of information and innovation in the 1990s, particularly after the popularization of the World Wide Web. It also enabled the creation of GNU/Linux, the operating kernel and system that has emerged as a far more robust, technically superior alternative to the Windows and NT operating systems.

"Transparent technologies" do not refer solely to software, but to any technical system – Internet protocols, cable broadband systems, computer hardware specifications, etc. – that allows fair and competitive access to the technological platform. Closed technologies, by contrast, use proprietary designs to set *de facto* standards that can serve to thwart competition, innovation and accountability.

As proprietary companies seek to extend their competitive advantages through IP law, attempts to transform transparent technologies into closed, proprietary systems are intensifying. As the Justice Department lawsuit revealed, Microsoft has pursued a notorious strategy of "embrace, extend and extinguish," whereby it adopts an open software standard, extends its range with new proprietary features, and then marginalizes the open standard as more people, especially Windows users, come to rely upon the Microsoft software. Microsoft's attempt to "extinguish" Java through proprietary extensions -- the focus of a Justice Department lawsuit as well as a lawsuit by Sun Microsystems – is a prime example.

As the great promise of GNU/Linux and other open code alternatives become more vivid, attempts are growing to sabotage open code software through UCITA licensing restrictions on reverse engineering and patents that "take private" a previously open technology. This marginalization of free software and open source code software is

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without any copyright restrictions. Champions of open source code software share the same interest in accessing and modifying source code, but unlike free software advocates, are not troubled by the idea of making derivative versions of source code proprietary.

[16] See David Bollier, "The Power of Openness," (essay), Harvard Law School, Berkman Center on Internet and Society, March 10, 1999, at http://www.opencode.org/h2o.

dangerous because it subverts rich sources of innovation, consumer choice and market discipline.

A similar enclosure of the commons – and erosion of creative diversity – is occurring through promiscuously granted patents for business methods and software algorithms. Ten years ago such developments as Windows, spreadsheets and electronic networks were created without patent protection. But now, excessive IP rights are erecting tollbooths throughout the marketplace – deterring competitors with better ideas, raising prices for consumers and introducing an inefficient new layer of legal gamesmanship. Scott McNealy, CEO of Sun Microsystems, once railed against Microsoft's proprietary control of key network and software standards by declaring "no one should own the alphabet." Yet that is essentially what is happening now that some basic online business methods and software designs are being patented: the lexicon of e-commerce is being privatized. Amazon.com has a patent for "one-click shopping," Priceline.com owns the process for "buyer-driven sales" on the Internet, and British Telecom, as noted above, claims a patent on hyperlinking.

A tale from history suggests where all this may lead. For nine years, the Wright brothers defended their broad patent on their airplane, thereby inhibiting the progress of American aviation while Europeans surged ahead. Finally, in order to help the U.S. war effort during World War I, the U.S. Government forced the Wrights to license their technology. So it is today that patent rights have become so far-reaching that new creativity is being inhibited. Companies aggressively acquire patents not only to preempt potential markets but also as bartering chits in crosspatenting agreements and as defensive shields. Contrast this behavior to the early days of computing and software development, in which no software was patented and thousands of programmers freely built on each other's creativity. This commons produced an unprecedented surge of innovation.

These trends make it all the more important that the principles and reality of transparent technologies be defended. They are important not only for advancing a competitive marketplace and innovation, but for assuring the openness that is the hallmark of our democratic polity. This imperative is even more important now that software and Internet standards are becoming new, *de facto* venues for structuring so many aspects of our society.

CONCLUSION

Critical choices are rapidly being made that will profoundly shape market structures and democratic culture for a generation or more. Unless a more coherent public-interest critique for intellectual property can be developed and popularized – a task that will require strong institutional leadership and resources -- some pivotal policy choices will be ceded, by default, to entrenched commercial interests. We already know where that trend heads – and the worrisome implications for free speech,

consumer rights, privacy and open markets. Each passing week sees new assaults on the information commons.

Existing advocacy players work hard and valiantly, but as currently organized, they simply do not have the mandate or abilities to develop a new politics of intellectual property. Yet there is a plethora of valuable resources (including these very groups) that could, with the right leadership and funding, be woven together into a powerful advocacy alliance. A confluence of constituencies could be united by a commitment to a robust information commons.

The strategic networking of existing activism, law clinics, legal scholarship, economic analysis, publicity through the trade and general press, and innovative Internet tools, could help create a new movement to preserve the public domain, fair use and the information commons. If the Internet and other digital technologies are truly revolutionary – a claim that seems less hyperbolic with each passing week – then perhaps it is time to act on that conviction. We need to ensure that the new IP policies that lie at the heart of the Information Economy truly do advance the public interest.

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