possible use of protected creations that is consistent with the copyright system's encouragement of authorship, then digital technology changes very little. The fact that technology enables copyright owners to exercise more complete control is no reason to modify the copyright law to facilitate it. If, in contrast, the goal of copyright law is to place all feasible control over works of authorship firmly in the hands of copyright owners, new digital technology offers us the opportunity for the first time to come very close to perfecting the system.

The controversy over which view of the law is more nearly true is no longer academic. Over the past ten years, many have come around to the view that, in a networked digital world, limitations on copyright owners' control of their works are no longer desirable. Congress has added more than one hundred pages to the copyright statute, almost all of them billed as loophole-closers. We've also seen the emergence of a new way of thinking about copyright: Copyright is now seen as a tool for copyright owners to use to extract all the potential commercial value from works of authorship, even if that means that uses that have long been deemed legal are now brought within the copyright owner's control.

In 1998, copyright owners persuaded Congress to enhance their rights with a sheaf of new legal and technological controls. Armed with those copyright improvements, copyright lawyers began a concerted campaign to remodel cyberspace into a digital multiplex and shopping mall for copyright-protected material. The outcome of that effort is still uncertain. If current trends continue unabated, however, we are likely to experience a violent collision between our expectations of freedom of expression and the enhanced copyright law. I wish I could be confident that copyright law would be the loser in such a fight.

NOTE

public to consume them, copyright has always divided up the possible rights in and uses of a work, and given control over some of those rights to the creators and distributors and control over others to the general public.

When you buy a book today, you pay a flat fee to some bookseller rather than agreeing to be billed by the glance. You may read and reread the book, or any part of it. You may learn the stuff that’s in it. You may talk about the book with your friends. You may loan your copy of the book to any friend who wants it. When you’ve finished with the book, you may resell it to a used bookstore or donate it to the local library, which may loan it out to anyone with a library card. You don’t need the copyright owner’s permission to do any of these things.

When you buy a musical recording on compact disc, you again pay some amount of money to own the thing. You have no further obligation to pay for each listen. The law permits you to make a tape of the recording for your car. You may resell the CD, or loan it out, even to friends who want to use it to make tapes for their cars. What you can’t do without the copyright owners’ permission is rent the CD out commercially, or broadcast it over the radio, or play it at a concert or in your restaurant, bar, or store.

When your child needs to consult an encyclopedia for a report on hive-building insects, you don’t have to buy one; you can send her to the public library to look the stuff up. When she writes her report, she doesn’t have to pay the encyclopedia company to use what she learned. When you see a building, you can snap a picture without paying the architect. When you go to a bookstore, you may skim the first chapter of a book before you buy it. When you turn on your car radio, you needn’t pay the composers of the music you hear, or the artists who perform it. But you know at some level that in the process of writing music and delivering it to your ears, someone at some point has paid them something.

When you turn on your computer, you needn’t pay a royalty to Microsoft or Apple\(^8\) for the use of the operating-systems program that makes the computer work. We take this for granted, but it isn’t natural law. It is the result of a complicated legal bargain that allocates the different benefits that flow from works of authorship to writers, to publishers, and to the public at large in a way intended to promote the progress of science and useful arts. There’s no particular reason why we had to choose this system. We could have relied on the patronage system that gave us Shakespeare. We could have decreed that authors who create works of authorship have exclusive control over every use of their works for a year, or a decade, or a life, or forever.

Instead, we came up with a system designed to give some market-based financial compensation to people who create works, and to people who distribute them, without giving them extensive rights to prevent the use and reuse of those works by the public and by the authors of the future. The system is premised on the assumption that we can give authors and their publishers rights to control some ways of exploiting their works, and reserve the rest of the value of the works to the public at large.

Under the current copyright statute,\(^3\) copyright vests automatically in original works of authorship as soon as they are “fixed in tangible form,” i.e., embodied in a permanent, tangible object. No notice or registration is required.\(^4\) The copyright in this book came into being as I typed the words that you are reading. The copyright in a song exists from the moment the song is first written down or recorded on tape, disc, or microchip. The copyright will belong either to the individual who created it (in which case it will last until seventy years after that person’s death), or, if the work is created within the course of employment, to that individual’s employer (in which case it will last for ninety-five years from its first public distribution).\(^5\) It will give the copyright owner rights over the material the author added, but not over any preexisting material appropriated from elsewhere. The copyright will protect the expression in the work from being copied without permission, but will give no protection whatsoever to the underlying ideas, facts, systems, procedures, methods of operation, principles, or discoveries.\(^6\) It may seem paradoxical that copyright fails to protect what for many works are their most valuable features, but that balance is a longstanding one; it derives, the U.S. Supreme Court tells us, from copyright’s constitutional foundation.\(^7\) The chief purpose of copyright is to promote learning, and learning would be frustrated if facts and ideas could not be freely used and reused.

United States copyright law gives authors a number of broad rights: the right to reproduce the work in fixed, tangible copies; the right to create adaptations; the right to distribute copies to the public; and the rights to perform publicly and display publicly. These rights are made subject in the statute to a variety of exceptions.\(^8\)

Some of the exceptions are broad: under the “first sale doctrine,” for example, the copyright owner has no right to control the distribution of a copy of a work after she has sold that copy.\(^9\) The buyer can keep it, loan it, rent it, display it, or resell it to others. Another exception covers useful articles: If a protected photograph, painting, or sculpture embodies or depicts
a useful article, anyone can reproduce the useful article, which is not itself subject to copyright protection. In other words, copyright protects a painting or photograph of an automobile, but gives no protection to the automobile itself. Under the fair use privilege, a variety of otherwise infringing acts are excused for policy reasons. (Common fair uses include quotations, parodies, photocopies for classroom use, and home videotaping of television programs.)

Most of the exceptions, though, are narrow and specific. Broadcasting organizations, for example, licensed to broadcast a musical recording, are allowed to make a copy of the work to facilitate the broadcast. Libraries may make photocopies so long as they comply with a long list of conditions and limitations. Cable television operators can retransmit broadcasts without the permission of the owners of the copyrights in the works being broadcast, so long as they pay a statutory license fee. A small restaurant may play radio or television broadcasts for its customers, but may not play prerecorded music. A church may play religious music during services.

The presence of detailed exceptions shouldn’t obscure the fact that some uses of copyrighted works are simply not subject to copyright owners’ control at all. Copyright owners are given no control, for example, over private performance or display. Watching a videotape in your living room, showing the sculpture you just purchased to your cousin, or singing the latest Metallica hit to your friend over the telephone are simply not among the uses that the copyright owner has any right to prohibit or permit. They have no power to prevent the owners of copies of their works from loaning them repeatedly. More fundamentally, copyright does not protect ideas, no matter how original, brilliant, or unique they may be. \( E=mc^2 \) is in the public domain. Nor may copyright give owners legal rights over the functional or factual elements of their works. The design used for the onramps to the Triborough Bridge is not protected by copyright. The facts reported in a biography of San Francisco Jewish families belong to no one. Copyright owners do not own any of the ideas expressed in their works. They have no ownership of the functional or factual aspects of their works. They have no claim to any compensation when their readers learn and use their teachings.

All of this has worked more or less invisibly to the general public, because traditionally, copyright owners have had control over the sorts of uses typically made by commercial and institutional actors and little consideration of the consumptive uses made by individuals. That has permitted the copyright law to be drawn as a complex, internally inconsistent, wordy, and lopsided code, since the only folks who really needed to know it were folks from copyright lawyers were an item of essential overhead. Most copyright-infringement suits proceed against businesses and institutions. The law intended to be enforced against individual consumers would need to be structured differently; the current setup would strike individuals as unfair. Under the current statute, anyone who invades copyright owner’s exclusive rights without a license or statutory privilege can be held liable for infringement. The law has never required that a court first be aware that she is violating another’s copyright. It is copyright infringement to copy a protected work subconsciously and unknowingly. It is also copyright infringement to perform or distribute copies of a work in the mistaken belief that one’s use is licensed. Successful plaintiffs in copyright-infringement suits can recover substantial damages and need not prove any actual harm to the market for their works. Courts routinely order defendants to stop infringing activity, either or destroy infringing copies, and to pay plaintiffs’ lawyer bills. Digital technology changed the marketplace. It’s a cliché that digital technology permits everyone to become a publisher. If you’re a conventional publisher, though, that cliché doesn’t sound so attractive. If you’re a company, the last thing you want is a world in which musicians and fans can eliminate the middleman. But can you stop it, or at least delay it?

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U.S. Const., art. I, § 8, cl. 8.

Until 1909, one secured copyright through registration. The copyright was for a fixed term, and could be renewed for an additional term if the copyright complied with renewal procedures. The 1909 act provided that one could copyright in some works by registering them, and in others by publishing with the prescribed copyright notice. Registration was in any event necessary to apply for the renewal term. In either case, distributing copies of the work without the statutory notice forfeited the copyright. See Robert A. Gorman and C. Ginsburg, Copyright: Cases and Materials 4-9, 339-43, 383-97 (5th ed., Law Publishing, 1999).

The current statute was enacted in 1976 and has been amended periodi-
cally in the years since then. It is codified at 17 U.S.C. §§ 101-1332 (2000).
9. 17 U.S.C. § 109. There are two narrow exceptions. Owners of copyrights in sound recordings and computer programs have the right to prohibit rental, but not loan, gift or resale, of copies of sound recordings or computer programs. Ibid.
14. 17 U.S.C. § 111. Federal Communications Commission regulations impose other restrictions that limit the ability to transmit particular works, and some of those regulations may constrain cable operators in ways that echo copyright limitations. See 47 U.S.C. § 325(b).
17. In Columbia Pictures Industries, Inc. v. Professional Real Estate Investors, 866 F.2d 278 (9th Cir. 1989), for example, motion picture studios sued a resort hotel that rented videodiscs for its guests to play on the large-screen TVs in their rooms. The court held that there was no public performance and therefore no infringement.
18. 17 U.S.C. § 102(b). See Baker v. Selden, 101 U.S. 99 (1879). Charles Selden devised a novel bookkeeping system that permitted accountants to condense six pages of accounts onto only two. Selden published several copyrighted manuals about his system, and hired an agent to travel through the country seeking to license the system and the ledger forms Selden had designed to go with it. An Ohio accountant, impressed with the Selden system but unable to pay Selden’s price, adopted it anyway, and later peddled his version to other accountants. The United States Supreme court dismissed Selden’s copyright infringement suit:

The very object of publishing a book on science or the useful arts is to communicate to the world the useful knowledge which it contains. But this object would be frustrated if the knowledge could not be used without incurring the guilt of piracy of the book.

101 U.S. at 103.
20. See Narell v. Freeman, 872 F.2d 907 (9th Cir. 1989).
small group of "buddies." Programs like Gnutella and Freenet supplied distributed search and file-sharing capability, bypassing a central server entirely, so that there would be no intermediary to sue and no records of who had transferred what files to subpoena.

As a comprehensive strategy, litigation works best against commercial actors. If it takes a lot of money to produce or distribute content, producers and distributors will need money, will have money, will be likely to hire lawyers, and will be vulnerable to weapons aimed at their pocketbooks. MP3.com and Napster have investors to keep happy. Universities have legislatures and donors to soothe. Thus it is completely understandable that the content industry focused its lobbying efforts on pinpointing intermediaries to sue. It eschewed the politically difficult course of seeking an amendment expressly imposing liability on individual consumers for noncommercial copying and private transmission. It sought instead to prevent individual infringement by securing a tough anticircumvention law. That focus turned out to be shortsighted. When producing and distributing content is cheap, commercial intermediaries are optional. The Internet permits individuals to share material with one another on an immense scale and at negligible cost. Stopping each of them is not the sort of task that litigation does best—especially when the basis for their liability is murky.

The strategy of making it impossible for millions of teenagers to engage in unauthorized uses by enacting legal protection for access controls has not worked particularly well either—at least so far. Content owners started pressing for anticircumvention laws as early as 1993. The Lehman Working Group recommended such a law in its Green Paper report in 1994. Multiple access-control technologies appeared under the name of "electronic rights management systems" in 1995, and commercial systems appeared early in 1996. Yet, in the spring of 2000, several generations later in Internet time, record companies had failed to secure their recordings, or to make them available for digital download. Had record companies begun encrypting their recordings in 1993, or even 1996, the vast majority of content traded on Napster would have been unavailable to the ordinary consumer with no hacker skills, because the source recordings would have been technologically protected. Having failed to deploy secure digital music, record companies have relied on courts to revise the bargain to insert a provision imposing liability on consumers for noncommercial copying, private performance, and private distribution. That's a hard sell, especially if the consumers don't go along.
Moreover, the music industry’s reluctance to release product over the Internet undermined its campaign to persuade citizens to “say yes to licensing.” The RIAA failed in its bid to marginalize MP3 software and keep portable MP3 players from the market. It failed to persuade consumer electronics manufacturers to make their portable digital music players MP3 incompatible. It promised consumers, repeatedly, that the availability of licensed major-label music for their SDMI-compliant portable players was imminent, and then it didn’t deliver any. What did it imagine consumers were going to play on their portable MP3 players? If unlicensed major-label music was the only major-label music available, consumers didn’t have the option to say yes to licensing.

Nor was the record companies’ moral position appealing. The recording industry’s insistence that unless musicians were fairly paid, there would be no music rang particularly hollow with fans given the industry’s years of demonstrating that when musicians are not fairly paid, they continue to play, write songs, perform at concerts, and cut records. Record companies had collected the lion’s share of record revenues for years, arguing that their part of the process of creating and selling records was the expensive part. They controlled the recording studios, record pressing and CD burning plants, and the distribution network, and if studios, pressing plants, and distributors don’t get paid, they don’t stay in business. The Internet makes much of that infrastructure optional. Yet not one major label proposed reallocating the share of revenue as between the record company and the artist. No major label has been willing to invest in models in which individuals pay artists and authors directly, even one oblige artists and authors to send the record companies their cut. Not one major label has announced that the money it won’t spend burning, packaging, and shipping CDs would be shared with consumers in the form of lower prices. Instead, the recording industry suggested that when it did make its catalog available online, the consumer should pay the same $17.99 for an encrypted, downloaded digital file (protected from copying, sharing, lending, or resale) that she pays for an unencrypted, loanable, copyable, resalable CD. No wonder consumers aren’t going along.

And they aren’t. Napster has more than forty million subscribers despite the record industry’s attempts to paint it as a pirate. In the forty-eight hours after the court ordered Napster to shut down, Napster traffic increased markedly. Napster subscribers checked out Gnutella and Freenet. Millions of people apparently decided that they would continue to share files without regard to the court’s ruling. In the following weeks, several small start-ups announced their own file-sharing applications. Either they figured that they had incorporated some features that evaded Napster’s legal problems, or they gambled that the legal ruling wouldn’t last. If forty million people refuse to obey a law, then what the law says doesn’t matter. It may be that people flout it because they’re natural lawbreakers, or it may be, as I argue in chapter 8, that they don’t comply because it doesn’t make sense to them. Whatever the reason, the law is not going to work well in the real world.

Bandwidth constraints have so far limited both the demand for digital, downloadable movies and the unauthorized trading of feature films. Digitized movies comprise very large files; 56k modems are slow. The movie studios are even further from distributing encrypted product via download than their siblings in the recording industry. Although the motion picture industry distributes CSS-encrypted DVDs, it has limited its release of online product to low-resolution, video streaming of movie trailers. The ease with which DeCSS was created and disseminated, however, suggests that, as high-speed Internet connections become more common, the motion picture industry may face similar difficulties. Its litigation strategy, aimed in part at banishing unwanted links from the Internet, suggests that it insists on tighter control of the networked digital environment than the public is likely to allow it to exercise.

Beyond a very small number of well-publicized “e-books,” the print publishers’ forays into online publishing of technologically protected words has thus far been limited to a rudimentary and leaky subscription model. Online newspapers, magazines, technical publishers, and information services condition access to text on registration, payment (in money, personal data, or both), and clicking “I accept” to a long recital of restrictive terms of use. Subscribers who click seem to feel little compunction, however, about reposting access-protected texts to their friends, their acquaintances, and the world at large. Again, the publishers’ moral position is not especially appealing. At the same time newspaper publishers joined as plaintiffs in a copyright infringement suit to shut down a site encouraging individuals to repost copyrighted news stories, many of them were posting or licensing others to post content online without permission from or payment to the individual copyright owners who had written it. Digital print publishers are only beginning to deploy heavy encryption and disappearing digital ink to prevent authorized readers from saving what
they read and passing it along. It remains to be seen how much control the public will be willing to let publishers exercise over reading.

Access controls and anticircumvention laws may yet enable the copyright industry to assert its control over audiences’ eyes and ears, once it discovers its encrypted content online. Or, the industry may need to return to the bargaining table and try to achieve yet another law to plug the perceived leak. There are noises being made in that direction already. Unless the stakeholders do things very differently this time around, though, that law won’t work either.

NOTES

3. See ibid.

When we examine the question whether copyright needs redesign to stretch it around digital technology, we can look at the issues from a number of different vantage points. First, there is the viewpoint of current copyright stakeholders: today’s market leaders in copyright-affected industries. Their businesses are grounded on current copyright practice; their income streams rely on current copyright rules. Most of them would prefer that the new copyright rules for new copyright-affecting technologies be designed to enable current stakeholders to retain their dominance in the marketplace.

One way to do that is to make the new rules as much like the old rules as possible. Current copyright holders and the industries they do business with are already set up to operate under those rules: they have form agreements and licensing agencies and customary royalties in place. There are other advantages in using old rules: if we treat the hypertext version of the New York Times as if it were a print newspaper, then we have about two hundred years’ worth of rules to tell us how to handle it. We can avoid the problems that accompany writing new rules, or teaching them to the people (copyright lawyers, judges, newspaper publishers) who need to learn them.

Using old rules, however, has the obvious disadvantage that the rules will not necessarily fit the current situation very well. Where the new sorts of works behave differently from the old sorts of works, we need to figure out some sort of fix. Here’s a simple example: Newsstands turn out to be an effective way of marketing newspapers and magazines in part because it is difficult as a practical matter to make and distribute additional copies of newspapers and magazines that one buys from the newsstand. If one “buys” a newspaper by downloading it from the World Wide Web, on the other hand, it is pretty easy to make as many copies as one wants. The old rules, customs, and practices, therefore, will not work very well unless we can come up with a way to prevent most of those copies from getting made.
DIGITAL COPYRIGHT

Protecting intellectual property on the Internet • The Digital Millennium Copyright Act • Copyright lobbyists conquer the Internet • Pay per view...pay per listen...pay per use • The war against Napster • What the major players stand to gain • What the public stands to lose

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