

How Copyright Became Controversial

Drew Clark*

Introduction

How did copyright become controversial? In a phrase, the Digital Millennium Copyright Act (DMCA). Although many of legal controversies that have swirled since its October 1998 passage trace their roots to other elements of copyright law, the DMCA created a new feature in copyright law that has crystallized why so many academics, librarians, computer users, and technology entrepreneurs object to what they regard as the overreaching nature of copyright law.

This signal feature is the ban on individuals cracking encryption codes used by content owners to restrict access to digital works on which they hold copyrights. Now encoded in Section 1201 of the Copyright Act, the statute reads: “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.” (17 U.S.C. 1201(a)(1)(A)) The definitions of those terms are broad enough to bar almost all unauthorized decryption of content. Subsequent language in the section also prohibits the manufacture, release, or sale of products, services, and devices that can crack encryption designed to thwart either access to or copying of material unauthorized by the copyright holder.

In other words, for the first time in history, it isn’t the copyright violation that was the crime. It is the creation of the technological tools to violate copyright that became the crime.

The law germinated from a 1995 “white paper” drafted by Bruce Lehman, the first patent office chief and intellectual property guru in the Clinton administration. Heavily supported by copyright holders, the key rationale behind the white paper was that content owners would be unwilling to put their content in digital form were it not for new laws against those who defeat the digital locks they place on their products. The anti-circumvention concept gained momentum in 1996 when it was endorsed in a World Intellectual Property Organization Copyright Treaty. It was subsequently adopted as DMCA’s Title I, the “WIPO Copyright and Performance and Phonograms Treaties Implementation Act.”

Critics of current copyright law point to many expansions in its power over the past decade. Among the more recent measures are the Digital Performance Right in Sound Recording Act of 1995 (creating a new copyright in digital music performances), the No Electronic Theft Act of 1997 (elimi-

nating non-commercial use as a defense against copyright infringement), the Sony Bono Copyright Term Extension Act of 1998 (adding 20 years to the already-lengthy terms of all copyrights), portions of DMCA mandating new royalties for digital music performances, and the Digital Theft Deterrence and Copyright Damages Improvement Act of 1999 (stiffening penalties for infringement). There are a few measures that arguably limit the power of copyright holders, including the Fairness in Music Licensing Act of 1998 (granting a limited exemption from music licensing for food service and drinking establishments) and elements of DMCA that limited Internet service provider liability for copyright infringement if they comply with procedures to take down allegedly infringing material from Web sites they control.

Some of those changes in law are directly at issue in current copyright controversies, such as the debate over extending copyright terms – a challenge to Congress’ authority over copyright law that has been accepted by the Supreme Court – and what rates should be paid by Internet radio stations for the right to stream digital music over the Web. Other issues, like what to do about the free digital music Web site Napster and its many successor clones, delve into more fundamental questions: how file-sharing technologies can be held liable for contributing to the copyright infringement of their users, and whether users of a technology have a “fair use” defense against charges of infringement.

Yet it is the DMCA’s anti-circumvention prohibition – which has been upheld by the 2nd Circuit Court of Appeals – that is likely to have more sweeping effects on the future of copyright law because it is seen as undergirding the technological protection measures increasingly taken by content owners. This provision is also an illuminating lens through which to view the copyright debate.

I will examine four major positions about how extensive copyright law should be and evaluate the justification for each position. I will argue that the DMCA’s anti-circumvention provision itself demonstrates the technology-specific nature of copyright law and suggests that it is difficult and perhaps impossible to draw the technological boundaries needed to sustain a coherent defense of copyright law, once one has accepted the premise of copyright law. It may well be that the weaknesses of the concept of copyright in a digital world make it hard to sustain a principled defense for the enshrinement of state power represented by copyright law.

I’ll also discuss the challenges to Section 1201 in greater detail. I will then outline four major positions about copyright law, each with substantial support in the public debate. Finally, I’ll offer reasons for my conclusions that by injecting anti-circumvention into the concept of copyright law, the DMCA exposes inherent weaknesses in what copyright law should do.

The Controversial DMCA

Although the DMCA’s section 1201 has been at issue in an extremely limited number of court cases thus far, both supporters and critics agree that its implications for the future are enormous because of the desire by copyright holders to deploy more sophisticated copy protection devices. The movie, book, and commercial software industries already routinely use such digital locks in an effort to stymie unauthorized users from accessing and copying portions of works for which they have not paid.

An example of such technology is the Content Scrambling System (CSS) for digital videodisks (DVDs) developed by a group of technology companies working in collaboration with the motion picture industry through the Copy Protection Technical Working Group (CPTWG). The technology, which is governed by the DVD-Copy Control Association controlled by both Hollywood and the consumer electronics manufacturers, scrambles the content on the DVDs in a manner that makes them

unviewable unless they are played on a DVD-licensed player. Those players, in turn, deactivate all copying functions.

But after Norwegian teenager Jon Johansen cracked the encryption code and published it on the Internet as DeCSS, Web sites including the hacker magazine *2600* posted the software and provided links to other sites that had posted it as well. In *Universal Studios v. Reimerdes*, the major Hollywood studios sued *2600* Web site owners Eric Reimerdes, Eric Corley, and Roman Kazan, none of whom were themselves accused of using the software code to engage in video piracy or commit other copyright violations. Purely on grounds of violating the DMCA, the company won in both district court and before the 2nd Circuit Court of Appeals. The Electronic Frontier Foundation, a civil liberties group representing the defendants and taking the lead on litigation opposing the DMCA, has sought reconsideration of the decision by the full court of appeals.

A second case involved Princeton University computer science professor Edward Felten, who found holes in the Secure Digital Music Initiative, a copyright protection scheme supported by the Recording Industry Association of America. Attorneys for RIAA and Verance, one of the companies involved in designing elements of the music encryption, threatened Felten with a lawsuit alleging DMCA violations if he presented his research at an academic conference in April 2001. Felten backed down, but the media outcry against the RIAA led it to say that it never intended to block Felten from speaking, and he did so at an August 2001 computer conference. EFF sought an injunction against the law, but a federal district judge in New Jersey threw out the case on the grounds that there was no case or controversy at issue.

A third case was the criminal prosecution of Dmitry Sklyarov, a Russian programmer arrested and charged in July 2001 after he attended a prominent hacker conference in Las Vegas. In the first criminal application of the law, the U.S. Attorney's Office in San Francisco alleged that Sklyarov and Elcomsoft, his Russian employer, had reverse-engineered Adobe's E-book reader, permitting users to decrypt electronic books and read them "in the clear." Adobe's product is an example of the emerging field of digital rights management technologies. It relies upon encryption to forbid such reading, because without the scrambling, computer users could e-mail e-books to their friends or share them with strangers over a peer-to-peer network (P2P) like Napster – where the material is transferred from one personal computer to another over the Internet. But the Elcomsoft work-around also permitted a user to read an e-book on both his desktop and his laptop, an application that some regard as a "fair use" defense under copyright law. Prosecutors initiated their charges after being informed of Elcomsoft's activities in a meeting with Adobe executives. Again after public outcry – and meetings with EFF officials – Adobe said it did not support his prosecution. In December 2001, the U.S. Attorney's office deferred the charges against Sklyarov – essentially dropping them – although the office insists it is continuing to build a case against Elcomsoft for future trial.

Perhaps more important are the new threats of DMCA actions on the horizon. Because the recording industry fears declining sales of CDs because of the widespread availability of digital music files on P2P networks like Aimster, Grokster, Kazaa, and Morpheus – each of which they have sued – some studios have begun introducing CDs that will not play on computers at all. A digital flaw inserted onto the CDs in the manufacturing process renders them inaudible except on conventional, dedicated CD players. Done in an effort to stop consumers from copying and sharing digital files "ripped" into MP3 tracks, the effort again runs afoul of consumers' expectations that they be able to make personal and backup copies of their CDs, including the ability to "mix" and rearrange tracks before "burning" them onto their own CDs, or put them on a portable MP3 player. Technology providers have said that they

can provide the tools to enable consumers to play such copy-protected CDs on their computers, but have held back from doing so because of the DMCA's strict language.

Rep. Rick Boucher, D-Va, one of the Capitol Hill's most knowledgeable experts on copyright law, said he believes that the Sklyarov indictment and the record companies' efforts to put out copy-protected CDs shows that the DMCA needs to be amended to permit "fair use." He has said he will propose legislation to allow circumvention so long as it is done for a permissible use under the "fair use" doctrine.

Codified in the Copyright Act at 17 U.S.C. 107, fair use provides judges with four factors that they must consider in determining whether a copyright infringement has occurred: 1) the purpose and character of the use, including whether it is commercial or for non-profit educational purposes; 2) the nature of the copyrighted work itself; 3) whether the section used constitutes a substantial portion of the work as a whole; and 4) the effect of the use upon the potential market for, and value of, the copyrighted work. In a letter to RIAA President Hilary Rosen, Boucher also said he believed the Audio Home Recording Act of 1992 limited the recording industry's ability to make copy-protected CDs. But at the very least, he said in second letter to the RIAA, the record labels need "to make sure that the copy-protected CDs carry appropriate labels informing consumers and retailers of the specific reduced functionality or quality degradation of the product that they are purchasing."

The question about circumvention to permit fair use raises one of the core questions about the DMCA: what happens to individuals' traditional conception of "fair use" when companies use digital rights management technologies to lock down copyrighted material? And should copyright owners be able to rely on the law to limit the use of their copyrighted material when their technologies fail? The examples above show that the sweeping nature of the DMCA could easily lead courts to privilege copyrights over other rights – including the right to free speech in the development of software code.

And yet the questions above are given especially sharp focus by the introduction of legislation that goes considerably beyond this. Hollywood studios have persuaded Senate Commerce Committee Chairman Ernest "Fritz" Hollings, D-S.C., to introduce legislation that would actually bar the creation of all computer software and hardware that does not include a government-sanctioned digital rights management (DRM) technology. Dubbed the Consumer Broadband and Digital Television Promotion Act and presented as a measure designed to spur their adoption, S. 2048 was introduced in March 2002.

S. 2048 is an extreme example of legislative deference to perceived interests of some copyright holders at the expense of nearly everyone else. It gives the information technology industry and Hollywood one year to create "security system standards that will provide effective security for copyrighted works." If they agree, the Federal Communications Commission will implement them; if they do not, the FCC is obliged to attempt to create its own standards for digital rights management. Device manufacturers and software creators who fail to include the mandated standard would be subject to the same criminal penalties as are violators of the DMCA.

In other words, beyond simply criminalizing the circumvention of private digital rights management technologies voluntarily deployed by copyright holders, the Hollings legislation would itself mandate the DRM technology to be used, force compliance upon the entire technology industry, and then penalize those who failed to use them as if they had cracked them.

Four Camps of Thinking

The foregoing discussion sets the stage for considering what I view as the four major positions about the proper scope for copyright in a digital world. Each of the following views commands some significant portion of the public debate, with none currently representing a consensus view. This very fact of fluidity – with divergent views driven by the interests of the industries and professions that they represent – underscores the controversial nature of copyright law and suggests an opportune moment for rethinking exactly what it is that copyright is designed to protect and why.

The four groups are: 1) supporters of government-mandated DRM technologies, 2) supporters of the DMCA's anti-circumvention language, 3) those who emphasize the importance of copyright's "fair use" doctrine and criticize the DMCA for undermining it, 4) critics of the current state of copyright law, including all uses of the DMCA, and highlight its clash with free speech rights. For short, I'll call these mandatory DRM, DMCA, "fair use," and free speech, and show these positions play into the debates over the use of content.

Mandatory DRM. Walt Disney Co. and News Corp. executives have been among the loudest advocates of the principles embodied in Hollings' S. 2048, and they have gradually dragged along the other five major studios that are members of the Motion Picture Association of America. In testimony before a February 2002 Senate Commerce Committee hearing on Hollings' draft legislation, Disney CEO Michael Eisner and News Corp. Chief Operating Officer Peter Chernin argued that because Internet piracy of digital movies is so widespread, the technology industry must be forced to create the tools to stop their movies from being transmitted digitally.

As mentioned above, Hollywood collaborated with technology industry representatives on the creation of the DVD encryption scheme, an effort begun in 1996 in a technical working group. Also emerging from that effort has been a proposal by a consortium of five equipment manufacturers – Intel Corp., Matsushita Electric Industry Co., Toshiba Corp., Sony Corp., and Hitachi Ltd. – to provide technologies that impede unauthorized access to and copying of cable and satellite broadcasts of digital content. Sony Corp.'s Sony Pictures Entertainment and AOL Time Warner's Warner Brothers have signed on to the consortium's technology – dubbed "5C" because it was first proffered by five consumer electronics manufactures, although it is now accepted by many others – while the others held off because of a desire to also include protections for over-the-air broadcasts of digital television.

Almost all observers acknowledge that unauthorized copying on cable and satellite systems can be limited by voluntary agreements because of a chain of licensing agreements that require distributors, equipment manufacturers, and consumers themselves to abide by such limitations. But such agreements are unable to provide such content protection when television programs and movies are broadcast over-the-air and "in the clear," i.e. without encryption. (To broadcast digital content in an encrypted format would mean that hundreds of millions of analog television sets would be unable to view them.) And television and movie producers perceive danger in making such unencrypted digital broadcasts available because digital copies are easily reproduced and do not degrade. For them, the only alternative is simply not broadcasting digitally.

That problem could be solved by means of a "broadcast flag" to signal the electronic device receiving the digital broadcast that content may not be redistributed in another form, such as over the Internet. Technology industry officials in a broadcast unit of the CPTWG group said that they were set to finalize the technical standards for such a "flag" by the end of March 2002. Officials at Intel, which

has taken the lead in opposing the Hollings legislation because of its interjection of the government in its engineering processes, recently agreed with AOL Time Warner that “some narrowly focused government regulation will be necessary,” presumably from the FCC.

But solving this “broadcast flag” program was only the first of three demands that Motion Picture Association of America President Jack Valenti set in his February testimony before the Senate Commerce Committee. The second calls for plugging what he called the “analog hole,” or the analog output device on the back of television equipment. Even when video content is delivered in an encrypted digital format, it must be converted into an unprotected analog format to be viewed on existing analog televisions, and viewers may then convert it back to a digital form through which it could be sent transmitted to a Napster-like file sharing service. Technology officials say that implementing a proposal to digitally “watermark” copyrighted content – such that it will be garbled whenever copied to another device – would not be as straightforward as the motion picture industry believes.

And they are nearly apoplectic over the third demand, which appears to drive the sweeping nature of Hollings’ S. 2048: that the technology industry do something to develop unspecified technical solutions that would counter the ability of someone to use computers, software, or electronic equipment to make an authorized copy available through a file-sharing service. Many share the view that Princeton professor Edward Felten expressed in written testimony to the Commerce Committee: “A standard for copy protection is as premature as a standard for teleportation.” Intel CEO Craig Barrett said that he is aware of no technology that could do what MPAA wants done, short of monitoring every electronic communication and comparing the bit streams to those of all known or registered copyrighted content.

DMCA. The debate over the Hollings bill has united the technology, consumer electronics, and Internet rights communities against Hollywood. Among those leading the charge against the bill are the Business Software Alliance, the Computer Systems Policy Project, the Information Technology Industry Council, all of which represent the biggest players in the software and hardware industries.

Many of the same companies, particularly leading lights in the Business Software Alliance such as Microsoft and Adobe, played a key role in lending support to the DMCA. They now argue against Hollings’ bill on a number of grounds: that it presumes bad faith on the part of the technology industry, that it gets government involved in the technology standards-setting process, that it would mandate a single digital rights management technology instead of permitting competing ones to flourish, and that by doing so it would inevitably freeze technological development.

But they also argue that privately created standards must be enforced with bars on circumvention, or “locks for digital doors.” Without such a legal infrastructure, they contend, their efforts to secure content via encryption would come to naught as soon as the first crack is made available on the Internet. Not having the DMCA would grant too much flexibility to software pirates in a world when a single digital copy obtained via circumvention could be reproduced countless times.

Sophisticated defenders of the DMCA position also make another point as well. In addition to greatly facilitating unauthorized copying, the emergence of an Internet that is “always on” enables new sorts of access to copyrighted content. Instead of a world in which optical disk factories print CD-ROMs, we are moving to a world where software services that are “consumed” on high-speed Internet connections not by means of reproduction, but by having the proper access control to the service. In this view of the world, a thief is not a pirate who has copied software but a hacker who publicizes the password to the service.

“Without the anti-circumvention provisions, the business models of the future would not happen,” said Tom Rubin, a Microsoft attorney specializing in the DMCA. “You would be cutting off entire new business models and lines of business, all of which ultimately help the public and the consumer.”

Among these services are DVDs, pay-per-view movies on subscription-based cable and satellite services, digital music webcasting, and libraries of digital music pre-installed on the hard disks of computers sold through retailers, Rubin and DMCA proponents argue.

But DMCA critics counter that copyright holders made the argument that there would be greater content if there were more protection – which is also being pressed by proponents of the Hollings’ bill – before the DMCA’s passage, and yet a digital music and digital video services remain stalled.

“*Fair Use.*” However, advocates of the “fair use” doctrine emphasize how much the DMCA upsets traditional habits and patterns of copyright use from the perspective of the user. Among those who hold this view are manufacturers who benefit from the sale of consumer electronics products, Internet service providers who saw demand for bandwidth skyrocket during the heyday of Napster from July 2000 until the 9th Circuit Court of Appeals ruled that it was engaging in contributory and vicarious copyright infringement in February 2001, librarians who want greater access to copyrighted material, and consumers who believe that the balance in copyright law has swung too far away from consumers.

One strong new representation of this view is a group dubbed Digitalconsumer.org, founded by Joe Kraus, a former co-founder of ExciteAtHome, the Internet portal and broadband company that has since filed for bankruptcy. The group, which includes many technology industry and venture capital luminaries, is attempting to put content owners on the defensive by asserting a six-point “Bill of Rights” with regard to consumers’ use of digital materials:

1. Users have the right to “time-shift” content that they have legally acquired. This gives you the right to record video or audio for later viewing or listening. For example, you can use a VCR to record a TV show and play it back later.
2. Users have the right to “space-shift” content that they have legally acquired. This gives you the right to use your content in different places (as long as each use is personal and non-commercial). For example, you can copy a CD to a portable music player so that you can listen to the songs while you’re jogging.
3. Users have the right to make backup copies of their content. This gives you the right to make archival copies to be used in the event that your original copies are destroyed.
4. Users have the right to use legally acquired content on the platform of their choice. This gives you the right to listen to music on your Rio, to watch TV on your iMac, and to view DVDs on your Linux computer.
5. Users have the right to translate legally acquired content into comparable formats. This gives you the right to modify content in order to make it more usable. For example, a blind person can modify an electronic book so that the content can be read out loud.
6. Users have the right to use technology in order to achieve the rights previously mentioned. This last right guarantees your ability to exercise your other rights. Certain recent copyright laws have paradoxical loopholes that claim to grant certain rights but then criminalize all technologies that could allow you to exercise those rights. In contrast, this Bill of Rights states that no technological barriers can deprive you of your other fair use rights.

Principle one, regarding time-shifting, is the least controversial and flows directly from the 1984 Supreme Court decision in *Universal v. Sony Betamax*, which upheld the sale of videocassette record-

ers, including its use by consumers to make copies of copyrighted television and movie programs. Regarding principle three, provisions of copyright law already permit backup copies of software, but not digital music files. (Music file-backup would be included under one of the changes contemplated by H.R. 2724, the Music Online Competition Act introduced by Rep. Chris Cannon, R-Utah, and Rep. Boucher.) But principles two, four and five – each dealing with some form of altering copyrighted material to suit other formats or devices – are opposed by many copyright interests. And they are particularly critical of principle six, which essentially calls for a “fair use” exception to the DMCA along the lines proposed by Boucher.

Content holders argue that these positions are based on an excessively broad reading of “fair use” – as understood by some consumers, perhaps, but not by copyright law. They also point to two studies conducted by the Library of Congress’s Copyright Office, which rebutted the notion that the DMCA was responsible for limiting consumers’ “fair use” access to material and rejecting almost all calls for exceptions to the anti-circumvention language.

Noting that “fair use” is a defense against infringement and not an affirmative right to copy, the more extreme among the copyright maximalists actually argue that “fair use” extends to quotation and parody, not to home and personal copies. They also argue that these broad definitions of fair use sanction those who would justify the use of Napster-like services on such grounds.

Free Speech. Most “fair use” defenders including Boucher, Digitalconsumer.org, and many consumer electronics companies, blanch at defending the old Napster. (In March 2002, the company was still in the process of preparing to launch its new licensed service.) But free speech advocates – as exemplified by the Electronic Frontier Foundation, many copyright law professors and computer scientists – will rise to the occasion and argue that P2P services should not be shut down whether or not infringing activity is conducted by individual users of such services.

Perhaps of even greater concern for this group, including librarians, are the DMCA’s restrictions on what they see as legitimate scientific research and other activities chilled by the DMCA. Just as cryptographers sought to publish research about and deploy strong encryption free from government export restriction, they oppose private efforts to use the DMCA to quash investigations that could lead to breaking the encryption algorithms used by copyright holders. And they can point to a precedent in the 1999 9th Circuit Court of Appeals decision in Bernstein v. U.S. Department of State, upholding a mathematician’s view that source code was protected as speech under the First Amendment.

A few of these advocates – such as EFF board member John Perry Barlow and Columbia University law professor Eben Moglen – would like to see the elimination of copyright law in its entirety. But there remains lively debate over what, if anything, should replace it.

Georgetown University law professor Julie Cohen, for example, has argued that “fair use” is an intrinsic part of copyright law, and that private digital rights management technologies must not override it. Chapman University law professor Tom Bell takes the opposite tack, suggesting that – absent the DMCA – nothing should preclude content companies from doing what they will to restrict copying of their intangible creations. Instead, the focus should be on “escaping copyright law” and relying exclusively on private contractual remedies against copying. And Stanford University law professor Lawrence Lessig directs much of his criticism about copyright law to the length of its terms. (Lessig is attorney for Eric Eldred, the electronic book publisher challenging the Copyright Term Extension Act’s 20-year bequest to current and future copyright holders, and will argue the case before Supreme Court next term.) He argues that if the law limited copyright holders to five years upon registration – renew-

able for up to 95 years – then the public domain would benefit from a huge influx of materials that are currently being locked out of it to no apparent benefit.

The Rise of Mandatory DRM

By linking the concept of anti-circumvention to copyright infringement, the DMCA starkly raises new questions about the nature of copyright law. Originally designed to prevent *copying*, it now also constrains *access*, including access to materials that one has purchased, like a DVD or a computer. While examining the justification for doing this as a form of contract law is beyond the scope of this essay, I do suggest this fundamental change in copyright law forces a reevaluation of its grounding.

In the sections above I recounted many of the arguments that technology industry officials, including strong advocates of the DMCA, use to argue against Hollings' S. 2048, including the presumption of bad faith, putting government in the standards-setting business, mandating a single DRM technology, and freezing technological development. To these must also be added the concerns of those in the "fair use" and free speech camps: even if a technological standard or standards were to be agreed upon by Hollywood and the technology industry, would that justify a government imposition of it? Wouldn't such a measure do untold harm to those who wish to design products (including "open source" software) that permit consumers to conduct unfettered copying — whether for fair use purposes, for reproducing uncopyrighted materials, or for infringing purposes not sanctioned by the manufacturers?

When the battle between Hollywood and Silicon Valley was just heating up in August 2001, two top officials in key trade associations squared off at a dinner conversation at the Progress and Freedom Foundation conference in Aspen, Colorado.

"High-definition recent [movie] releases absolutely must have a secure distribution path to the consumer," said Fritz Attaway, executive vice president for government relations at the MPAA. "Unfortunately, some segments of the information technology industry have not reached this conclusion. The information technology industry rebels at that very thought of producing a trusted device" — or a computer with its copying functions disabled, he said. "I think that is a shame because it is going to drive high-quality content to cable, satellite and other secure distribution systems and away from the Internet."

Several tech officials snapped right back at Attaway's contention. "We take a back seat to no one in protecting intellectual property," said Rhett Dawson, president of the Information Technology Industry Council (ITI). "We are committed to protecting your intellectual property, but we are not committed to protecting your business model."

In other words, tech industry officials are not willing to short-circuit competition and permit the motion picture or recording industries to assert that their shares of the market for distribution of entertainment goods are a right. They will have to earn it by offering competitive services that consumers will support.

But many of the same objections against Hollings' bill apply equally against the DMCA. Although unquestionably less burdensome in some respects, many of the same arguments about S. 2048 seeking to write business models into the law applies equally against the DMCA. Thinking about all the benefits that could flow from tougher copyright laws is an easy exercise for copyright holders not counting the costs to users, to economic welfare, and to free speech rights for their rent-seeking behavior.

By criminalizing technologies that could be used to circumvent copy-protection devices, the Digital Millennium Copyright Act's anti-circumvention provision adds significant new burdens to the already bloated corpus of copyright law. What was once a minor constraint on the capabilities of content users to reproduce copyrighted material is increasingly likely to become an intolerable straightjacket on the way in which individuals may enjoy and experience intangible creations.

But content owners would be loath to return to the pre-DMCA world. Instead, it seems as though our society will increasingly be forced to choose which vision of the future it would prefer: restrictions on digital devices in exchange for securing copyrights or technological freedom at the price of greater piracy. In either case, copyright law has lost its familiar grounding. In its short period of operation, the DMCA has already changed many fundamental perceptions about copyright law and turned many users of technology against copyright law itself. The DMCA and proposed new laws like the Consumer Broadband and Digital Television Promotion Act are the leading edge of these new digital restrictions. But if copyright is to have a future at all in the digital world, its defenders must articulate a better rationale upon which to build copyright policy in the future.

(Footnotes)

* Drew Clark is a senior writer for National Journal's Technology Daily