

EXORCISING THE SPECTER OF A “PAY-PER-USE” SOCIETY: TOWARD PRESERVING FAIR USE AND THE PUBLIC DOMAIN IN THE DIGITAL AGE

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ABSTRACT

The Digital Millennium Copyright Act unconstitutionally limits the rights of users to make fair use of materials protected by technical protection systems (TPSs). By criminalizing the distribution of devices designed to circumvent digital fences, the DMCA prevents users who lack the technical facility to circumvent TPSs from accessing material protected by TPSs. As a result, it is impossible for users without the technical skill to circumvent TPSs to exercise their First Amendment right to make fair use of the material protected by TPSs. Courts, by giving a broad reading to the protections of the DMCA, have failed to militate against this restriction on fair use. Further, the fail-safe rulemaking provision provided for in the DMCA has failed to provide adequate protection for most fair use. Since the legislature has already spoken, it is up to the courts to interpret the DMCA in a manner that prevents content owners from using TPSs to erect digital fences throughout the public domain.

I. INTRODUCTION

The Internet has spurred a radical shift in the ability to reproduce, distribute, publish, and control media.¹ Digital content owners feel threatened by Internet users' ability to make and distribute digital copies. What once required a printing press can now be done quickly and easily with the click of a mouse. A compact disk containing the equivalent of 220,000

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1. See COMPUTER SCI. AND TELECOMM. BD. NAT'L RESEARCH COUNCIL, THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE 4-5 (2000) [hereinafter DIGITAL DILEMMA].

pages of text can be copied perfectly in fifteen minutes² with equipment already present in half of American homes.³ Because these copies are digital, the text, image, sound, or video will be reproduced perfectly every time.⁴ Each copy then can be used to produce an unlimited number of additional perfect copies.⁵ The potential for piracy is enormous,⁶ and this problem is exacerbated because control over copying rests in the hands of millions of hard-to-identify individual users.⁷ Complicating matters further is the fact that these users have little understanding of copyright law⁸

2. *See id.* at 31-32.

3. *See* Commerce.net, *Internet Demographics and eCommerce Statistics*, at <http://www.commerce.net/research/stats/images/facts15.gif> (last visited Sept. 1, 2001). By the end of the year 2005, seventy-five percent of Americans are expected to be online. At that point, an estimated 765 million people will use the Internet worldwide.

4. *See* DIGITAL DILEMMA, *supra* note 1, at 32.

5. *See id.*

6. Actual figures on copyright piracy are difficult to ascertain. Since illegal copying generally takes place in private, figures have to be extrapolated from limited information. *See id.* at 188. The International Intellectual Property Association, a private-sector coalition representing U.S. copyright industries, asserts that international piracy alone costs these industries as much as \$22 billion per year. *See* International Intellectual Property Association, *Description of the IIPA*, at <http://www.iipa.com/aboutiipa.html> (last modified Aug. 2001); *see also* Software & Info. Indus. Ass'n, *SIAA's Report on Global Software Piracy 2000*, available at <http://www.siaa.net/piracy/pubs/piracy2000.pdf> (last visited September 1, 2001).

7. Most online users leave little or no information about their identity or physical location in real-world space; adept users can be virtually untraceable. Geographic and personal anonymity make online personas hard to tie to individual persons. In the words of a notable New Yorker cartoon, "[o]n the Internet, nobody knows you're a dog." DIGITAL DILEMMA, *supra* note 1, at 50.

8. Some users believe that absence of copyright notice means the copy lacks copyright protection, that temporary downloading is not infringement, that noncommercial copies do not infringe, that personal use in the home is fair use, that license agreements made over the Internet are not binding, or that ignorance of the law absolves the user from liability. *See id.* at 124-25; *see also* Brad Templeton, *10 Big Myths About Copyright Explained*, at <http://www.templetons.com/brad/copymyths.html> (last visited September 1, 2001). Publicly held misconceptions are in part a result of the complexity of copyright law and the lack of the public's participation in its creation. *See* Jessica Litman, *Copyright Non-compliance (or Why We Can't "Just Say Yes" to Licensing)*, 29 N.Y.U. J. INT'L L. & POL. 237, 241 (1997) [hereinafter Litman, *Copyright Noncompliance*]; *see also* Jessica Litman, *Copyright, Compromise and Legislative History*, 72 CORNELL L. REV. 857 (1987) [hereinafter Litman, *Copyright, Compromise*]; Thomas P. Olson, *The Iron Law of Consensus: Congressional Responses to Proposed Copyright Reforms Since the 1909 Act*, 36 J. COPYRIGHT SOC'Y 109 (1989).

and a morality starkly different than that held by content owners.⁹ Thus, content owners,¹⁰ courts,¹¹ and the government¹² are understandably concerned about their ability to curb piracy and uphold proprietary rights on the Internet.¹³

In response to this situation, the producers and owners of copyrighted material have developed and implemented digital fences. This Comment refers to these fences as Technical Protection Systems (“TPSs”), although some commentators refer to them as copyright management systems¹⁴ or

9. Many users who would trade music files on the Internet without regard to whether they were violating copyright would most likely not steal the same music from a record store. *But see* DIGITAL DILEMMA, *supra* note 1, at 127-28 n.11 (citing a nationwide survey released in October 1998, indicating almost half of all high school students admitted to stealing property from a store within the preceding year).

10. According to the president of Time Warner:

This is a very profound moment historically. This isn't just about a bunch of kids stealing music. It's about an assault on everything that constitutes the cultural expression of our society. If we fail to protect and preserve our intellectual property system, the culture will atrophy Worst-case scenario: [t]he country will end up in a sort of cultural “Dark Ages.”

Chuck Philips, *Music Giants Miss a Beat on the Web*, L.A. TIMES, July 17, 2000, at A1.

11. Judge Kaplan in the Southern District of New York found the situation serious enough to compare “[t]he spread of means of circumventing access to copyright works in digital form” to a “propagated outbreak epidemic” in which “[i]ndividuals infected with the ‘disease’ . . . cannot be relied upon to identify themselves to those seeking to control [it].” *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 331 (S.D.N.Y. 2000).

12. *See* H.R. REP. NO. 105-551, pt. 2, at 25 (1998).

13. Since information can be taken from computers anywhere in the world, even if authorities can locate the user, questions of what court should have jurisdiction and whose law should apply present serious problems. *See, e.g., Cybersell, Inc. v. Cybersell, Inc.*, 130 F.3d 414 (9th Cir. 1997); *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 2d 692 (E.D. Va. 1999); *see also* David R. Johnson and David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996); *see generally* Dan L. Burk, *Jurisdiction in a World Without Borders*, 1 VA. J. L. & TECH. 3 (1997). Even assuming that courts can overcome these jurisdictional problems, enjoining Internet activities can be difficult. The Southern District Court of New York enjoined the posting of a decryption program designed to allow unauthorized access to DVDs, but the program was readily available on the Internet soon thereafter. *See generally Reimerdes*, 111 F. Supp. 2d 294.

14. *See, e.g.,* Julie E. Cohen, *Some Reflections on Copyright Management Systems and Laws Designed to Protect Them*, 12 BERKELEY TECH. L. J. 161, 161-64 (1997).

automated rights management systems.¹⁵ TPSs can protect content where the law cannot; they can be quite useful in overcoming problems of enforcement of proprietary rights for digital content owners. Strong TPSs are particularly appealing because they are extremely difficult to hack. Unfortunately, both strong and weak TPSs can offer greater protection than the law, until recently, has allowed. The recent change in the law is the Digital Millennium Copyright Act (“DMCA”), passed in 1998.¹⁶

Congress passed the DMCA to address the online piracy of digital media, the same threat targeted by TPSs.¹⁷ The new law represents a shift in legislative focus from the use of information—the traditional purview of the Copyright Act—to the devices and means by which one delivers or uses this information.¹⁸ The DMCA gives content owners a new right: the right to sue in court to prevent the circumvention of their TPSs.¹⁹ Specifically, the statute’s anti-circumvention provisions prohibit three things: first, the circumvention of TPSs that protect access to content that contains any copyrighted material;²⁰ second, the manufacture or distribution of de-

15. See Tom W. Bell, *Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright’s Fair Use Doctrine*, 76 N.C. L. REV. 557 (1998). TPS is used because the terms “copyright management systems” and “automated rights management systems” are too narrow: the former obscures the fact that technological means of protection may guard media that is not, and indeed cannot be, covered by copyright; the latter, like the former, includes the term “rights,” the scope of which is a crucial question.

16. 17 U.S.C. §§ 1201-1203 (Supp. 2000).

17. The Congressional Commerce Committee stated in its report on the DMCA:

[T]he digital environment poses a unique threat to the rights of copyright owners, and as such, necessitates protection against devices that undermine copyright interests. In contrast to the analog experience, digital technology enables pirates to reproduce and distribute perfect copies of works—at virtually no cost at all to the pirate. As technology advances, so must our laws.

H.R. REP. NO. 105-551, pt. 2, at 25 (1998).

18. See David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 683 (2000).

19. The statute may also be read to have created a new right similar in scope to those in the copyright bundle. Section 106 protects the rights to make copies, to prepare derivative works, to distribute copies to the public, to perform or display limited types of works, and to perform sound recordings by means of digital audio transmission. 17 U.S.C. § 106 (Supp. 2000). Jane Ginsburg argues that the DMCA creates an “access” right as an integral part of the copyright bundle. See Jane C. Ginsburg, *From Having Copies to Experiencing Works: the Development of an Access Right in U.S. Copyright Law*, in U.S. INTELLECTUAL PROPERTY: LAW AND POLICY 3 (Hugh Hanson ed., 2000).

20. 17 U.S.C. § 1201(a)(1)(A) (Supp. 2000).

VICES designed to circumvent TPSs protecting copyrighted material,²¹ and third, the manufacture or distribution of devices for circumventing TPSs protecting any exclusive right in copyrighted material.²²

Congress recognized, however, that the indiscriminate legal reinforcement of TPSs favored digital media producers over users and therefore potentially threatened otherwise permissible access to—and traditional fair use of—copyrighted materials for valuable endeavors like education.²³ Congress, sensing that it was shifting the balance of intellectual property law too far toward copyright owners,²⁴ added a complex set of

21. *Id.* at § 1201(a)(2). The section provides in full:

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title; (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or (C) is marketed by that person or another acting in concert with that person with that person’s knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

Id.

22. *Id.* at § 1201(b). This paragraph prevents the production of devices that would allow users who have lawfully acquired a work from making unauthorized access for uses inconsistent with the exclusive rights of the owner under copyright law.

23. See H.R. REP. NO. 105-551, pt. 2, at 36 (1998). See also 144 CONG. REC. S11887 (daily ed. Oct. 8, 1998) (statement of Sen. Ashcroft).

24. Exactly what the legislature intended regarding the balance is difficult to discern. Congress spoke with great reverence for fair use:

The principle of fair use involves a balancing process, whereby the exclusive interests of copyright owners are balanced against the competing interests of users of information. This balance is deeply embedded in the long history of copyright law. . . . [C]opyright law for centuries has sought to ensure that authors reap the rewards of their efforts and, at the same time, advance human knowledge through education and access to society’s storehouse of knowledge. . . . This critical balance is now embodied in [the author’s exclusive rights] and in Section 107, which codifies the fair use doctrine. . . . Fair use, thus, provides the basis for many of the most important day-to-day activities in libraries, as well as in scholarship and education. It also is critical to advancing the personal interests of consumers. Moreover . . . it is no less vital to American industries.

H.R. REP. NO. 105-551, pt. 2, at 25-26 (1998).

exceptions to the general ban on circumvention. Good intentions aside, the exceptions that Congress included in the DMCA are not adequate safeguards to protect fair use and the public domain should the specter of reduced access and availability materialize.²⁵ In fact, since the DMCA, as currently interpreted by courts and the Register of Copyrights, will reinforce even overly restrictive TPSs, it seems that the final legislative product itself welcomed this threatening apparition. If technology develops so that decreased access and availability of digital media becomes the reality—if, as one Senator phrased it, a “pay-per-use” society²⁶ emerges—the current outlook for users is dim. The DMCA reinforces TPSs without a serious inquiry into their restriction of the public domain and fair use.

This Comment offers some first steps towards ensuring that the legal system preserves fair use and the public domain in the face of the current legal landscape. Part II of this Comment therefore discusses TPSs and how they implicate constitutional media use rights. In Part III, this Comment considers whether the DMCA’s anti-circumvention regulations impermissibly convey a legal right to enforce technological restrictions on the speech of users. Section IV asserts that overly restrictive TPSs themselves should be subject to judicial regulation. Throughout the analysis, this Comment distinguishes between strong TPSs, which should be promoted and reinforced, and overly restrictive ones, which should not. The latter TPSs will effectively create new, broad proprietary rights in digital information. When this expansion of digital property restricts users’ constitutional rights, courts should intervene.

These arguments lead to the Comment’s two conclusions. First, courts should hold the DMCA anti-circumvention provisions unconstitutional where they impermissibly restrict usage rights by creating a right to legal reinforcement of TPSs. Second, for similar reasons, courts evaluate and

On the other hand, Congress recognized that the digital environment necessitates the modernization of the law, “including the rules that ensure that consumers have a stake in the growth in electronic commerce.” *Id.* Thus it seems Congress intended to change or at least have some effect on fair use and the balance of intellectual property. It is clear from the legislative history that both sides of the debate seemed to consider themselves bound to preserve the intellectual property balance. Even the DMCA’s proponents believed that it “fully respected and extended into the digital environment the bedrock principle of ‘balance’ in American intellectual property law for the benefit of both copyright owners and users.” *Id.* at 26.

25. Note that a threat arises only where the digital work is available in no real-world form. Fencing off a copy of a book on the Internet that is also available in stores will have little effect on users’ rights. *See* Nimmer, *supra* note 18, at 729.

26. 144 CONG. REC. S11887, S11888 (daily ed. Oct. 8, 1998) (statement of Sen. Ashcroft).

regulate TPSs directly on constitutional grounds or indirectly through the copyright misuse doctrine.

II. TECHNOLOGY DRIVING LEGAL LIMITATIONS ON USERS' SPEECH: TPSs' POTENTIAL EFFECT ON FAIR USE AND ENCLOSURE OF THE PUBLIC DOMAIN ON THE INTERNET

Content owners are understandably concerned about theft of their media on the Internet. Accordingly, the most problematic limitation of TPSs from content owners' perspective is their susceptibility to circumvention. The DMCA fills in the technological gap in protection left by imperfect TPSs by creating a right to legal reinforcement. The size of this gap varies dramatically among TPSs and continues to change with new technological developments.

The DMCA, however, protects all current and future TPSs indiscriminately,²⁷ even though the need for legal reinforcement decreases as digital fences get stronger. This broad-brush approach is least justified where least necessary, and strong TPSs are in the least danger from all but the most intrepid hackers. This is not to say that even strong TPSs warrant no legal backup, because they too can be cracked. But the justifications for the DMCA put forth by the motion picture and musical recording industries, which stem from the idea that technical protection alone is inadequate, are not as compelling where the digital fences are already very secure.²⁸ Conversely, the potential for strong TPSs to overly restrict users'

27. The DMCA does require that the TPS "effectively" protect the copyrighted work, but this is an exceedingly low threshold. The 40-bit encryption system used to protect DVDs was apparently quite easy to break through—so easy that the defendants in *Reimerdes* claimed it did not "effectively control" access to content on DVDs within the meaning of the DMCA. The court rejected this interpretation of the statute. *See Universal City Studios v. Reimerdes*, 111 F. Supp. 2d 294, 317 (S.D.N.Y. 2000).

28. The copyright industry argued that content will not be provided on the Internet without legal backup and that as a result an important domestic industry will suffer. *See infra* text accompanying notes 165-69; *see also The WIPO Copyright Treaties Implementation Act, Hearing on H.R. 2281 Before the Subcomm. on Telecommunications, Trade, and Consumer Protection, House Comm. on Commerce*, 105th Cong. 56 (1998) (statement of Steven J. Metalitz, on behalf of Motion Picture Association of America) (defending provisions as necessary for robust electronic commerce) [hereinafter *Hearing on H.R. 2281*]; *see also id.* at 45 (statement of Hilary B. Rosen, President and CEO, Recording Industry Association of America) (supporting the provision); Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 422 n.264 (1999).

rights is very high because so few people will have the technical ability to crack them in order to exercise their rights.

A. Technical Protection Systems

In order to understand what the DMCA protects, and to see why private parties create digital fences, one must first examine TPSs themselves. The development of digital fences and the protection they offer is constantly advancing and, absent legal limitations, it is the extent of the protection TPSs offer that will define the contours of information flow on the Internet.²⁹ Any evaluation of TPSs, and in turn the DMCA, therefore demands heightened sensitivity to the role of developing technology in shaping our information society.

The current statutory scheme, as courts have interpreted it thus far, confers legal reinforcement indiscriminately on all TPSs. It is therefore conducive to the creation of strong TPSs capable of extensive restrictions on content use. The DMCA's indiscriminate protection may stem in part from a clouded view of TPS technology.³⁰ TPSs may be helpful to copyright holders, but they are not a panacea. The fear of piracy, however, has given TPSs an unwarranted rosy tint. As such, the law must make a more

29. As Lawrence Lessig has pointed out, the belief—the “is-ism,” as he puts it—that the Internet will always be a free forum for the exchange of information is not necessarily true. *See* LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 24 (1999). The technological architecture of the Internet, in which TPSs will play a role, will define the boundaries of information access online. If all information is available only on a pay-per-use basis, then users and exchangers of information will construct new boundaries.

30. The *Reimerdes* court, for example, blithely suggests in a footnote that “[i]t is conceivable that technology eventually will provide means of limiting access only to copyrighted materials and only for uses that would infringe the rights of the copyright holder. . . . We have not yet come so far.” 111 F. Supp. at 330 n.206. Assuming this is actually conceivable, it is extraordinarily improbable. Relying on content owners alone to limit the scope of their exploitation of the cyberspace market to what is allowed under copyright laws seems naïve. Furthermore, it is highly unlikely that TPSs will ever be advanced enough to account for all non-infringing uses of protected material. The technical capacity of TPSs to allow for fair use would at best extend to uses that are always or nearly always fair. *Cf.* Mark Stefik, *Shifting the Possible: How Trusted Systems and Digital Property Rights Challenge Us to Rethink Digital Publishing*, 12 *BERKELEY TECH L.J.* 137, 152-53, 155-56 (1998). Fair use requires a complex case-by-case statutory analysis that computers cannot perform unless they develop human judgment abilities. For a possible solution to this problem, see Dan L. Burk and Julie E. Cohen, *Fair Use Infrastructure for Copyright Management Systems* (Georgetown Public Law Research Paper No. 239731, 2000), available at http://papers.ssrn.com/paper.taf?abstract_id=239731.

careful distinction between the abilities of different TPSs to prevent illegal use (their strength) and to prevent unauthorized use (their restrictiveness).

The first TPS—one that underlies many others—is encryption.³¹ Cryptography can serve as both a means of maintaining protection, by keeping content secure, and as a means of identification, by certifying digital identities.³² Relying on encryption alone, however, is dangerous because hackers can attack it at many levels. If someone breaks the code, the protected content becomes freely available. Perhaps most importantly, encryption provides no control over how one uses the media once it becomes accessible. Given that encryption is a relatively weak means of protection, the legal safety net created by the DMCA may be necessary for copyright holders who rely exclusively upon it.³³ Conversely, any technological threat posed to users' interests by encryption is somewhat minor.

It is for precisely these reasons that one rarely uses this technique alone; encryption often plays a role in more complex services whose larger goal is to control access.³⁴ Access control systems attempt to track the identity of the user, what content she accesses, and how she uses that content.³⁵ Even with access control in place, the consumer may still legally

31. This involves scrambling digital content so that it is unreadable until unscrambled with a key. See DIGITAL DILEMMA, *supra* note 1, at 155. A simple form of this technique, “symmetric-key” encryption, uses the same key to scramble and unscramble the content. *Id.* at 156. The danger here is that if the key, which must be used to decrypt the content, is intercepted, then the protection service fails. “Public-key” encryption, a more complicated service, uses two keys for each user, one of which is kept secret and the other of which is publicly available in a directory. *Id.* at 157; see also R.L. Rivest, A. Shamir and L.M. Adelman, *A Method for Obtaining Digital Signatures and Public-Key Cryptosystems*, 21 COMM. OF THE ACM 120-26 (1978). To send a message to a user, one encrypts it in his public key. It can then only be opened with his privately held key. Conversely, to send a message *as* a user, one encrypts it in his own private key. Decryption with one's public key proves that the proper user sent the message.

32. See LESSIG, *supra* note 29, at 36.

33. *Cf. Reimerdes*, 111 F. Supp. 2d at 294 (finding that, but for the prohibition of circumvention in the DMCA, the movie studios would presumably have had to develop another stronger TPS to protect the content on their DVDs once the first code was broken).

34. See LESSIG, *supra* note 29, at 40-42.

35. See DIGITAL DILEMMA, *supra* note 1, at 158. These occasionally have involved the use of a computer language to represent the conditions attached to the use of the digital media. See *id.* at 159; see also Arun Ramanujapuram and Prasad Ram, *Digital Content and Intellectual Property Rights*, 23 DR. DOBB'S J., Dec. 1998, at 20-27. Effective access control on an open network like the Internet has been difficult because unlike smaller communities where the users are all known, the millions on the Net cannot be

purchase and decrypt the media, and then pass it on to others without authorization. Further, one needs only small gaps in protection to capture the media. Such imperfections make these relatively weak TPSs and provide a good justification for legal protection. However, there are other techniques involving watermarking the media itself that make gaps in digital media protection even smaller.³⁶ So-called “web crawlers”—programs that methodically search the Net looking for unauthorized documents traceable by watermarks³⁷—are in development and will soon be widely available.³⁸ Where content owners can use web crawlers, tracking infringement of copyrights on the Internet will prove easier than in the real world.³⁹ This

presumed to adhere to the conditions of use. *See* DIGITAL DILEMMA, *supra* note 1, at 160. Some techniques currently used involve posting documents in ways easily viewed but not easily captured from web browsers, or providing specially designed browser plug-ins without which the media cannot be accessed. *See id.* Other means focus on anchoring the digital media to something physical, such as encoding the identity of the user or a particular computer in the decryption key itself, making it possible to subsequently identify the person who has done the decoding from the media. *See id.* at 161.

36. A simple version of this method involves placing a copyright or authorized usage notice on the content. DIGITAL DILEMMA, *supra* note 1, at 165. This may at least deter users whose natural inclination is to make only legal (or “authorized”) use of media from illicit behavior. A less frequently used but more subtle approach, targeted at maintaining the authenticity of digital documents, archives digital documents and affixes an authoritative, encrypted time-date stamp and content signature. *Id.*; *see also, e.g.*, Surety Inc., *Welcome to Surety*, at <http://www.surety.com> (last visited Sept. 1, 2001) (introducing Surety’s patented service to authenticate digital documents and records); WebArmor, *WebArmor FAQ*, at <http://www.webarmor.com/misc/faq.html> (last visited Sept. 1, 2001) (discussing WebArmor’s similar technology). A third, more common approach is steganography, the use of digital watermarks. Bits of information can be changed in digital media to contain usage rights information, author identity, and even information about the user who decrypted a digital file. The data can be readable by the user or can be imperceptible. Steganography does not directly prevent unauthorized use, but it is particularly useful for Internet monitoring schemes. For a sample and evaluation of several currently available PC programs that can embed information within JPEG images, see Neil Johnson, *History and Steganography*, at <http://www.jjtc.com/stegdoc/sec202.html> (last visited Sept. 1, 2001).

37. *See* DIGITAL DILEMMA, *supra* note 1, at 167.

38. Microsoft has developed an “aggressive Internet monitoring program” that has been implemented by the Association of American Publishers (AAP). This “intelligent . . . tool searches for pirated eBook content twenty-four hours a day, seven days a week.” Association of American Publishers and Microsoft Corp., *Protecting Against ePublishing Piracy*, at <http://www.microsoft.com/piracy/epub/enforcement.asp> (last visited Sept. 1, 2000). The program is also designed to seek out “unauthorized distribution of information or programs that help to break security technologies.” *Id.*

39. Web-crawlers can be countered, though, by password protection of web sites. Infringements in the body of or attached to e-mails will also be immune. Nevertheless,

technology, therefore, further reduces the gap in technical protection targeted by the DMCA, and increases companies' capability to effectively restrict users' rights.

Finally, the most developed and controversial form of access control is "trusted systems."⁴⁰ Though they are not yet used widely by content owners,⁴¹ "trusted systems" offer a vision of where TPSs may be headed. The strength of protection and use control they offer make them appealing to content owners. They involve hardware, software, or a combination of both, and can be quite difficult to crack.

"Trusted" means the system will not allow any unauthorized action. In open-ended systems (e.g., programmable devices like home computers), designers use cryptography to authenticate each end user's system as trusted,⁴² and the transaction will take place only when the system's identity is verified.⁴³ The systems also understand digital rights language—software code that allows price discrimination in digital billing.⁴⁴ Content owners can use digital rights language to configure the system so that each type of use costs a certain amount for a certain user.⁴⁵ Therefore, it is pos-

they will still have a significant effect on the ability to publish allegedly infringing materials on public web sites.

40. *See generally* Stefik, *supra* note 30.

41. Even if consumers are willing, there are still strong market and technological barriers to the trusted systems vision. Currently systems in development are proprietary and incompatible. *Id.* at 157. They are extremely expensive to design and manufacture, and they face a barrier to entry in a market where one operating system, Windows, exercises tremendous market power. *See* *United States v. Microsoft*, 87 F. Supp. 2d 30 (D.D.C. 1999); DIGITAL DILEMMA, *supra* note 1, at 168. The need for specialized hardware could make entry into the established PC market quite difficult, but the recently formed Trusted Computing Platform Alliance may change that need. The Alliance, whose 145 members include Microsoft, Intel, Hewlett-Packard, Compaq, and IBM, has developed a general purpose trusted subsystem targeted at the PC. Version 1.0 of the system's specification became available in early 2001. *See* Press Release, Trusted Computer Platform Alliance, Trusted Computing Platform Alliance Announces v.1.0 Specifications for Trusted Computing (Jan. 30, 2001), *available at* <http://www.trustedpc.org/press/pdf/TCPA%20Final.pdf> (last visited Sept. 1, 2001). The emergence of industry groups like the Alliance indicates that the trusted systems regime is coming.

42. Closed systems, like the DVD player, present fewer authentication problems, since the licensed system must merely be compatible with the licensed media it plays. They rely on symmetric-key cryptography. *See* *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 317-18 (S.D.N.Y. 2000).

43. *See* Stefik, *supra* note 30, at 139-40.

44. *Id.* at 140.

45. *See id.* at 141.

sible for a work to have different versions of the same kind of right, each with different fees and conditions.⁴⁶

In addition to offering price discrimination capabilities, trusted systems can track the number of existing copies of digital media, where they are located, and how they are being used.⁴⁷ Combined with web crawlers, one could conceivably use trusted systems to electronically cut off access to works on users' systems that the web crawler has detected on the Internet in unauthorized form. Because their protections are extensive and reliable, trusted systems need the least legal backup, and provide the greatest ability to limit and control information use. The DMCA, however, affords them the same protection as weak forms of encryption.

It is difficult, if not impossible, to predict where computer code will lead the protection of digital media on the Internet. As a result, it is difficult to determine the appropriate legal protections. Nevertheless, the information presented in this Comment should be particularly useful in illustrating the systems currently protected by the DMCA and helping to illuminate what will likely be protected in the future.

The need for a legal safety net decreases as technical protections get stronger. Additionally, the strength of copyright owners' claims that digital media cannot be safeguarded on the Internet is not equally compelling for all TPSs.⁴⁸ The ability of strong TPSs to prevent illegal uses is an undisputed benefit. But with strength comes a threat: the potential risks of

46. Perhaps most interestingly, trusted systems allow a technically sound method for *transfer* of a work—that is, the media effectively becomes unusable on the sender's system when received and used by the receiver's system. Because the original becomes unusable on the sender's system, there is no additional copy created. *See id.* at 145-46; *see also* Mark Stefik and Alex Silverman, *The Bit and the Pendulum: Balancing the Interests of Stakeholders in Digital Publishing*, 16 *COMPUTER LAW* 1, 7 (1997). A technical ability to transfer works between users in this manner might ease some of the content industry's concern that copies will proliferate on the Internet without payment and authorization. Unfortunately, the creation of this capability requires the use of trusted systems, which allows for tracking and requiring payment for any type of use at all. Though a transfer right may be developed, it would most likely not lead content owners to ignore the other pay-per-use capabilities of trusted systems. Its possibility, therefore, does lessen the importance of legal scrutiny of the scope of TPSs, particularly ones as strong as trusted systems.

47. For example, digital billing systems keep track of what works a user has and how many times she has printed them. Each user has a software- or hardware-encoded identity necessary for authentication with the trusted system, making the location of the works known, as well. Stefik, *supra* note 30, at 141-42.

48. *See infra* Part IV.A.

extensive—and unconstitutional—use restrictions become more of a possibility than previously seen. Where users face the greatest limitations on their uses, TPSs and the DMCA anti-circumvention provisions become particularly problematic.

B. The Benefits and Drawbacks of TPSs

TPSs can be beneficial for content owners, and even for users. Foremost, TPSs prevent—or at least to some extent control—the illegal and unauthorized use of digital media. This in turn allows creators to exact payment for access to their content, thereby increasing their incentive to create works and put them on the Internet.⁴⁹ After all, creation takes work and requires resources; owners may fairly expect some remuneration. Moreover, a lower risk of media theft should lower the price at which creators can offer media to the public. TPSs also stand to increase efficiency in information access and distribution dramatically. With TPSs, the Internet has the potential to be an extremely efficient network that allows users to access larger amounts of better organized, authenticated data than they ever could offline.⁵⁰

Not only might the Internet contain more data, it may also be cheaper to access. TPSs, like trusted systems, allow for price discrimination in media access. Content owners can charge more for a right to print than merely a right to download; users, in turn, can pay less for media of which they wish to make fewer uses. This may increase the breadth of media available to a given user with a fixed budget. Even if TPSs allow a content owner to charge a fee to obtain information over the Internet that would not require payment in the real world, it is wrong to assume that digital information will always cost more with TPSs.⁵¹ This is true because transactions in real-world media, even those that do not require the user to pay a fee to the owner, are not costless. Thumbing through magazines requires going to the store. Getting information in a library requires travel and sometimes a laborious search in a card catalog.⁵² Photocopying a book requires time, a photocopier, paper, and ink. Notwithstanding users' unfamiliarity and difficulties with the technology, the Internet drastically reduces these transaction costs.

49. Note, though, that an increased benefit conferred upon creators does not have an established relationship with increased creative production.

50. See Bell, *supra* note 15, at 581.

51. See *id.*

52. See *id.* at 580.

TPSs also increase certainty in both bilateral contracts and unilateral actions. Authentication is, of course, crucial to almost any utilization of information; for example, users will be able to know who the author of the piece is, and whether it has been modified by anyone since its digital publication.⁵³ Identification of users,⁵⁴ on the other hand, can help content owners regulate uses and engage in price discrimination because they know who will be using their media and how.⁵⁵ Digital rights languages could be used to make transaction negotiations easier, thereby empowering users by allowing individualized bargaining.⁵⁶ Furthermore, enumeration of authorized uses eliminates uncertainty on the part of both parties to the transaction; valuation of media becomes easier.⁵⁷ This is also true for unilateral actions by users; in tangible media, persons looking to reuse protected works must evaluate the risk of infringement or consult fair use experts.⁵⁸ TPSs, in contrast, allow the owner of the media to be contacted with relative ease.

Some aspects of TPSs redound primarily to the benefit of content owners. For instance, technological fences provide a two-fold boon by making unauthorized uses easier to track down and punish, which consequently deters those uses.⁵⁹ Microsoft's web crawler, for example, seeks out eBook piracy and programs designed to circumvent TPSs twenty-four

53. See DIGITAL DILEMMA, *supra* note 1, at 154. Identification of authors and authentication of works can also serve moral rights goals, including attribution and integrity. See also Kenneth W. Dam, *Self-Help in the Digital Jungle*, 28 J. LEGAL STUD. 393, 405 (1999).

54. Identification of users raises several privacy issues that are beyond the scope of this paper. Beneficial identification is used to mean the minimum required to conduct an online transaction. For an excellent discussion of this issue, see Jerry Kang, *Information Privacy in Cyberspace Transactions*, 50 STAN. L. REV. 1193 (1998).

55. See Stefik, *supra* note 30, at 141-43; see also Stefik and Silverman, *supra* note 46, at 7.

56. See Stefik and Silverman, *supra* note 46, at 8; but see Niva Elkin-Koren, *Copyrights in Cyberspace—Rights Without Laws*, 73 CHI.-KENT L. REV. 1155, 1180-81 (1998) (arguing that terms of mass-market digital contracts, even though they theoretically allow for individualized bargaining and consent, reflect only market power in practice).

57. See Stefik and Silverman, *supra* note 46, at 8.

58. See Bell, *supra* note 15, at 587.

59. But see Tom R. Tyler, *Compliance with Intellectual Property Laws: A Psychological Perspective*, 29 N.Y.U. J. INT'L L. & POL. 219, 224 (1997) (arguing that the deterrent function, particularly in the context of intellectual property, has almost no effect on behavior).

hours a day.⁶⁰ Knowledge of potentially constant observation is a significant deterrent to unauthorized activity. Less ominously, however, TPSs may simply serve to keep honest people honest.⁶¹ They may have an effect on public mores in two ways: first, fences, digital or chain-link, make people aware that entry is not allowed; second, since TPSs might make a good deal of media cheaply and easily available, most people will probably prefer to buy it than steal it.⁶² Finally, technological protections will eventually be able to prevent all uses content owners find objectionable. With the advent of trusted systems, a content owner who detects an unauthorized use by a web crawler could engage in electronic self-help and unilaterally remove all usage rights from the user's computer.⁶³ Content owners could even automate the process, suspending usage rights until the user defends her actions to the content owner.

The above examples imply, however, that some of the benefits enjoyed by content owners will come at the expense of users' interests. On a basic level, these result from the transfer of control over use of the content from the user to the distributor. TPSs allow content owners to restrict access in ways not possible in the physical world.⁶⁴ Price discrimination, for example, may allow a broader group of users to access works in some ways, but it may make some uses so expensive as to become effectively unavailable.

In addition, electronic self-help repossession and "regulation of performance" can sharply intrude into users' spatial privacy rights and restrict their autonomy.⁶⁵ Software applications are a good example; disablement of a program crucial to a user's business can cause catastrophic losses.⁶⁶ TPSs also rely upon real-world notions of property that might, from a user's perspective, best be left behind in the move to the digital environment. The attempt to categorize intangible media as real-world products may deny consumers the benefits innovative business models would cre-

60. *See supra*, note 46 and accompanying text.

61. *Cf.* Litman, *Copyright Noncompliance*, *supra* note 8, at 239.

62. *See* Dam, *supra* note 53, at 409-10.

63. *See* Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L. J. 1089, 1106 (1998). Julie Cohen offers a colorful analogy for future digital self-help capabilities: "Imagine, for example, that a team of high-tech repo men [could use] a transporter device to 'beam' your sofa out of your living room and back to the furniture store." *Id.*

64. *See* DIGITAL DILEMMA, *supra* note 1, at 104.

65. Cohen, *supra* note 63, at 1108.

66. Courts, accordingly, have uniformly required contractual notice in self-help repossession of computer software. *See id.* at 1112 n.81 (collecting cases).

ate.⁶⁷ Finally, TPSs facilitate a license-based business model rather than a real-world sale model—a change that potentially allows greater restriction of usage rights.

The greatest threat posed to users by TPSs, however, is the overprotection of creative and informational digital media through use restrictions. Real-world media is protected primarily by the Copyright Act, which strikes a delicate, constitutional balance between the interests of creators and the interests of users of media.⁶⁸ Copyright law, through the fair use doctrine and various exceptions to the exclusive rights it affords, allows some reuse of expression in an otherwise protected work.⁶⁹ TPSs, however, do not recognize the fair use doctrine or these exceptions.⁷⁰ When the copyright term expires, for example, the work falls into the public domain and becomes freely usable.⁷¹ TPSs do not have to expire. Similarly, copyright does not protect facts, ideas, or functional principles; it instead commits them to the public domain and preempts state laws that would do otherwise.⁷² TPSs, on the other hand, can potentially protect any use on the Internet of copyrighted works, uncopyrightable works, or works that have fallen into the public domain.

From the perspective of users, this is bad news. The advent of strong TPSs can greatly restrict the uses and access currently available in the real world and on the Internet. Further, the DMCA reinforces any technical

67. See DIGITAL DILEMMA, *supra* note 1, at 177. Some alternative business models include: giving away the information product to sell an auxiliary product or service, giving away the initial product and selling upgrades, giving away media that complements a real-world product, custom-tailoring for individual users such that no other user would want the product, providing the product for free but charging for software that increases usability, giving away one digital product that creates a market for another, or allowing free distribution but requesting payment. See *id.* at 181-82.

68. The balance derives from the Intellectual Property clause itself: “The Congress shall have the Power To . . . promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST. art. I, § 8, cl. 8.

69. 17 U.S.C. §§ 107, 109-112, 117 (Supp. 2000) (detailing fair use and limitations on exclusive rights).

70. The first sale doctrine, *id.* at § 109(c), implicates TPSs only in the sense that they help facilitate the paradigm shift from sale to license on the Internet. The exception applies only to owners of copies of copyrighted works, so licensees do not enjoy its benefits. A real-world example is software purchases; since they are technically shrinkwrap licenses, purchasers are not owners and therefore are not protected by section 109(c).

71. *Id.* at §§ 302-305.

72. *Id.* at § 301; H.R. REP. NO. 94-1476, at 129-133 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, *129-33.

protection that effectively protects a work with some copyrighted element, but does not limit liability to circumvention aimed to infringe a valid copyright. This means that TPS users can bootstrap unprotectible material, or material that receives a “thin” copyright,⁷³ onto a fully enforceable legal right to prevent access. The capability to enclose the public domain and restrict fair use by employing advanced TPSs—reinforced by the DMCA—is unprecedented in intellectual property law.

C. Constitutional Information Use Rights

Copyright law, previously the sole legal protection for creative and informational works, grants only limited rights.⁷⁴ Congress’s power to create the right derives from Article I, Section 8, Clause 8 of the Constitution (the “Intellectual Property Clause”). The Intellectual Property Clause provides that Congress shall have Power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”⁷⁵ The statutory monopoly must, under the Constitution, be designed to further this “Progress.” Courts consequently have excluded aspects of works crucial for future creation, e.g., ideas,⁷⁶ methods,⁷⁷ facts,⁷⁸ utilitarian objects,⁷⁹ titles,⁸⁰ plots,⁸¹ and style,⁸² from this monopoly.⁸³ These building blocks lay the subconscious foundation for communicative proc-

73. Thin copyright works consist primarily of public domain matter unprotected by copyright, but incorporate some copyrightable element that confers some protection to the work as a whole. Databases, for example, may be protected by virtue of the selection and arrangement of unprotectible material. See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,566 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201).

74. 17 U.S.C. § 107 (Supp. 2000); see also *id.* at §§ 109-112, 117.

75. U.S. CONST. art. I, § 8, cl. 8.

76. See *Baker v. Selden*, 101 U.S. 99 (1879).

77. See *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff’d by an equally divided court*, 516 U.S. 233 (1996).

78. See *Feist Publ’ns, Inc. v. Rural Tel. Serv.*, 499 U.S. 340 (1991).

79. See *Mazer v. Stein*, 347 U.S. 201 (1954).

80. See, e.g., *Weissman v. Radio Corp of Am.*, 80 F. Supp. 612 (S.D.N.Y. 1948); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 993 n.169 (1990).

81. See *Nichols v. Universal Pictures Corp.*, 45 F.2d 119 (2d Cir. 1930).

82. See, e.g., *Franklin Mint Corp. v. Nat’l Wildlife Art Exch.*, 575 F.2d 62 (3d Cir. 1978), *cert. denied*, 439 U.S. 880 (1978); Litman, *supra* note 80, at 993 n.175.

83. Litman, *supra* note 80, at 1016.

esses; they make up the experience of the speaker and are inextricably tied to the thought processes involved in the production of speech.⁸⁴

Despite this tailoring of the copyright monopoly to maximize production of new works, courts have been loath to give any explicit content to the term “Progress.” Nevertheless, constitutional principles other than those present in the Intellectual Property Clause have guided the courts in drawing the boundaries of copyright law. For example, the First Amendment has played an important, but mostly implicit role in carving out areas of the monopoly. As the DMCA places fair use and the public domain in jeopardy, identifying the constitutional core of these doctrines becomes imperative. A better understanding of the interaction between the Intellectual Property Clause and the First Amendment is therefore necessary in any constitutional analysis of intellectual property rights.

1. *Copyright and the First Amendment*

Creation of new works is of course expression and therefore implicates the First Amendment.⁸⁵ Copyright law silences an infringer’s speech through legislative mandate by compelling courts to intervene to suppress a work that infringes any of the statutory rights of the author.⁸⁶ Accordingly, even though the First Amendment does not explicitly override copyright law,⁸⁷ the legislature and the judiciary have designed limitations on

84. *See id.* at 1010-11.

85. Julie Cohen has articulated a compelling argument that there is a First Amendment “right to read anonymously” implicated by the development of TPSs. Julie Cohen, *A Right to Read Anonymously: A Closer Look at “Copyright Management” in Cyberspace*, 28 CONN. L. REV. 981 (1996). Her argument flows partly from the blurred boundary between speaking and reading in cyberspace, since reading is an active, constructive process on the web. *Id.* at 1005-06. In this sense, it is similar to the argument presented here. A major part of her analysis, however, relies on the chilling effect on speech created by the disclosure of reading preferences and on freedom of association. *Id.* at 1003-19. The ultimate target of her paper is the ability of TPSs to disclose information about consumers’ content choice and uses. *Id.* at 981-82. Although this is clearly an important point, it is somewhat tangential to the argument the Comment makes here—that TPSs, and the DMCA’s reinforcement of them, may impermissibly limit fair use and the public domain.

86. Benkler, *supra* note 28, at 393. Benkler also notes that the important copyright scholars of the 1970s, Melville Nimmer, Paul Goldstein, and Robert Denicola, all understood the scope of the public domain to raise constitutional questions under the First Amendment. *Id.* at 390.

87. *See Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 560 (1985) (declining to create a fair use defense to infringement of subject matter that holds great public interest).

authors' rights: "copyright laws are not restrictions on freedom of speech . . . copyright protects only form[s] of expression and not the ideas expressed."⁸⁸

The Supreme Court's most extensive foray into the conflict between the First Amendment and copyright law came in the *Nation* case, which involved the unauthorized publication of quotes from President Ford's memoirs.⁸⁹ Defendants argued that the First Amendment permitted this publication as a fair use because the story was in the public interest. The Court declined to create such an exception, however, noting that:

It should not be forgotten that the Framers intended copyright itself to be the engine of free expression. . . . The [basis of the Intellectual Property Clause] is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts."⁹⁰

Deeming this particular use fair did not, in the Court's judgment, promote "Progress" because it would decrease incentives to create the very works the public wants.⁹¹ This was a sufficient basis from which the Court could dispose of the case, so it did not have to specify explicitly how copyright law satisfies First Amendment requirements.

Nevertheless, the Court identified and addressed, however briefly, a possible vehicle for intratextual interaction between the First Amendment and the Intellectual Property Clause: the word "Progress."⁹² This interac-

88. *Id.* at 556 (citing *New York Times Co. v. United States*, 403 U.S. 713, 726 (1971) (Brennan, J., concurring)).

89. *Id.*

90. *Id.* at 558 (internal citation omitted). How the Court divined such an intent for the Framers is unclear. The ratification debates in the Federal Convention offer no guidance in the few places the Copyright Clause is even mentioned. *See* 5 JONATHAN ELLIOT, DEBATES ON THE ADOPTION OF THE FEDERAL CONSTITUTION 440, 511, 561 (William S. Hein 1996) (1891). Madison's comments in the *Federalist* were only slightly more enlightening:

The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged in Great Britain, to be a right of common law. The right to useful invention seems with equal reason to belong to the inventors. The public good fully coincides in both cases with the claims of individuals.

THE FEDERALIST NO. 43 (James Madison).

91. *Nation*, 471 U.S. at 557.

92. "Intratextualism" has recently been postulated as a way of reading the Constitution by analyzing words and phrases as they appear in one part in light of how those

tion has two layers. The first is that the First Amendment is itself an explicit limitation on Congress's power to pass laws abridging the freedom of speech. Copyright, in tension with this limitation, gives authors an enforceable right to restrict others' expression. This interaction is not very helpful though; under this argument, only in the extreme case of an unlimited copyright can one say confidently that the First Amendment would be a bar to statutory speech restrictions. Statutory copyright has never been perpetual,⁹³ and even the new rights under the DMCA are not unlimited. The second layer of the interaction is more interesting: the First Amendment itself may help define "Progress." Unfortunately, the text of the amendment defies clause-bound interpretation,⁹⁴ and originalist arguments are generally unavailing since the text is singularly unhelpful and evidence of intent is scant.⁹⁵ The principles underlying First Amendment law, however, offer guidance as to what "Progress" means (and also what it does not mean).

Although there are several understandings of the First Amendment, the one that has had the most influence in shaping the American doctrine relies on democratic theory, which has two formulations.⁹⁶ First, the act of speaking is necessary for the participation in public discourse by which

same or similar words appear in another part. See Akhil Reed Amar, *Intratextualism*, 112 HARV. L. REV. 747 (1999). The Copyright Clause and First Amendment offer little in terms of linguistic parallels. This analysis derives more from John Hart Ely's treatment of Constitutional clauses which "cannot intelligibly be given content solely on the basis of their language and surrounding legislative history . . . certain of [which] seem on their face to call for an injection of content from some source beyond the provision." JOHN HART ELY, *DEMOCRACY AND DISTRUST* 12 (1980).

93. American courts first had occasion to interpret the "limited Times" language of the Intellectual Property Clause with regard to copyright when the first Copyright Act was passed in 1790. Act of May 31, 1790, ch. 15, 1 Stat. 124 (repealed 1834). Common law copyright then existed in perpetuity, which was deemed inconsistent with the text of the Constitution. The Supreme Court therefore held that all literary rights previously held in works but not expressed in the 1790 Act passed into the public domain upon vesting of federal statutory copyright. See *Wheaton v. Peters*, 33 U.S. (8 Pet.) 220 (1834); Howard B. Abrams, *The Historic Foundation of American Copyright Law: Exploding the Myth of Common Law Copyright*, 29 WAYNE L. REV. 1119 (1983); Litman, *supra* note 80, at 978.

94. ELY, *supra* note 92, at 13.

95. Originalist arguments are uncommon in First Amendment jurisprudence. See, e.g., 44 *Liquormart, Inc. v. Rhode Island*, 517 U.S. 484, 517 (Scalia, J., concurring) (suggesting the parties and amici should have offered evidence as to the state legislative practices regarding commercial speech at the time the First and Fourteenth Amendments were adopted).

96. Robert Post, *Lectures in Constitutional Law III*, University of California, Berkeley, Boalt Hall (Spring 2001) (on file with author).

individuals mediate their interaction with collective government.⁹⁷ This is the participatory theory, or the public discourse model.⁹⁸ Second, speech is necessary to give individuals all the information they need to be autonomous in public decisionmaking.⁹⁹ This is the audience-centered theory.¹⁰⁰

The former rationale has been dominant, ultimately finding expression in *New York Times Co. v. Sullivan*.¹⁰¹ In *New York Times*, the Supreme Court held that speech could not be regulated without regard to the underlying value of the speech, as it previously had been in common-law libel. Criticism of public officials is crucial to the purpose of speech under this formulation of the democratic theory, as a vehicle to bring about political change. The fundamental value of political speech in our society therefore trumps public officials' privacy interests.

This participatory democratic theory shows some of what the word "Progress" does *not* mean. It cannot mean the furtherance of a certain set of community norms, like privacy, dignity, and protection from offense, at the expense of others.¹⁰² Copyright cannot, for example, allow an author of a book to "maintain a monopoly of sentiment and opinion respecting it."¹⁰³ Nor can it allow Howard Hughes to purchase a series of articles written about him in order to ensure, through suits for copyright infringe-

97. *Id.*

98. *Id.*

99. *Id.*

100. *Id.*

101. 376 U.S. 254 (1964).

102. Robert Post notes:

The specific 'outrageousness' standard at issue in [*Hustler Magazine v. Falwell*, 485 U.S. 46 (1988),] for example, can have meaning only within the commonly accepted norms of a particular community. . . . [T]he constitutional concept of public discourse forbids the state from enforcing such a standard within the 'world of debate about public affairs,' because to do so would privilege a specific community and prejudice the ability of individuals to persuade others of the need to change it. . . . [A]n 'outrageousness' standard is unacceptable . . . because it would enable a single community to use the authority of the state to confine speech within its own notions of propriety.

Robert Post, *The Constitutional Concept of Public Discourse: Outrageous Opinion, Democratic Deliberation, and Hustler Magazine v. Falwell*, 103 HARV. L. REV. 603, 631-32 (1990); see also *Boos v. Barry*, 485 U.S. 312 (1988); *Cohen v. California*, 403 U.S. 15 (1971); *Cantwell v. Connecticut*, 310 U.S. 296 (1940).

103. *Carr v. Hood*, 170 Eng. Rep. 985 (K.B. 1808) (Lumbard, J., concurring).

ment, that “nothing was written about [him], the publication of which he could not control.”¹⁰⁴ Thus, the First Amendment offers not just a limitation on the scope of the Intellectual Property Clause, as in the unlimited copyright example, but also on the purpose the monopoly may serve.

The second formulation of democratic theory—the audience-centered theory—has played a somewhat less important role in shaping First Amendment doctrine. Alexander Meiklejohn, the leading authority advocating this theory, conceptualizes freedom of speech as a vehicle for political self-government: “the point of ultimate interests is not the words of the speakers, but the minds of the hearers. The final aim is . . . the voting of wise decisions.”¹⁰⁵ Courts rely upon this theory primarily in the commercial speech cases, where they seek not to protect the act of speaking, but societies’ “interest in the free flow of . . . information.”¹⁰⁶

This audience-centered democratic theory of the First Amendment shows some of what “Progress” *does* mean. Courts should interpret the Intellectual Property Clause with reference to information’s central purpose in self-government. Meiklejohn points out that legislation to enlarge and enrich freedom of speech is by no means prohibited by the First Amendment:

The freedom of mind which befits the members of a self-governing society is not a given and fixed part of human nature. It can be increased and established by learning, by teaching, by the unhindered flow of accurate information . . . by bringing them together in activities of communication and mutual understanding. And the federal legislature is not forbidden to engage in that positive enterprise of cultivating the general intelligence upon which the success of self-government so obviously depends.¹⁰⁷

104. *Rosemont Enters., Inc. v. Random House, Inc.*, 366 F.2d 303, 313 (2d. Cir. 1966) (finding defendant’s biography a fair use); Benkler, *supra* note 28, at 388 n.149; Paul Goldstein, *Copyright and The First Amendment*, 70 COLUM. L. REV. 983 (1970) (quoting *Rosemont Enters.*, 366 F.2d at 313).

105. ALEXANDER MEIKLEJOHN, *POLITICAL FREEDOM: THE CONSTITUTIONAL POWERS OF THE PEOPLE* 26 (1948).

106. *See, e.g., Zauderer v. Office of Disciplinary Counsel*, 471 U.S. 626, 651 (1984) (“[T]he extension of First Amendment protection to commercial speech is justified principally by the value to consumers of the information such speech provides . . .”); *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 764 (1975) (striking down a state statute prohibiting advertising of prices for prescription drugs).

107. MEIKLEJOHN, *supra* note 105, at 19-20.

Copyright law, bound by its constitutional commitment to “promote the Progress of Science and useful Arts,” is, at least vis-à-vis the First Amendment, such legislation. This is likely what the Supreme Court intended when it said in *Nation* that the Framers intended copyright to be the engine of free expression.¹⁰⁸ Copyright promotes the production of creative and informational works by giving incentives to authors to create those works. When James Madison wrote, “[t]he public good fully coincides in [the copyright of authors] with the claims of individuals,” the public good to which he referred was likely the furtherance of self-governance.¹⁰⁹

The Meiklejohnian theory provides a description of what might be considered the primary purpose of copyright and the core definition of “Progress.” Although it is difficult to articulate the principle as a positive requirement, it provides a guideline for how Congress may or may not structure copyright law. The law must further the constitutional purpose of “Progress,” making legislation aimed at restricting the flow of information impermissible. As the Comment demonstrates below, the fair use doctrine is indispensable, as it provides the only vehicle under copyright law that can ensure that monopoly does not restrict information flow.

2. *The (Non) Constitutional Doctrine of Fair Use*

Courts have developed the copyright fair use doctrine as a non-constitutional expression of First Amendment principles. No finding of fair use relies on the First Amendment as its source of authority, yet the doctrine is driven to a great extent by the First Amendment’s interaction with the Intellectual Property Clause. This is not surprising, since the Constitution seems as good a place as any other to look for foundations of new

108. *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 558 (1985).

109. THE FEDERALIST NO. 43 (James Madison). The Preamble to the Constitution supports this inference:

We, the People of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution of the United States of America.

U.S. CONST. pmbl. The overriding purpose of the document is to establish and maintain a system of self-government. *See* MEIKLEJOHN, *supra* note 105, at 18 (“All other purposes, whether individual or social can find their legitimate scope and meaning only as they conform to the one basic purpose that the citizens of this nation shall make and shall obey their own laws, shall be at once their own subjects and own masters.”).

new legal doctrines.¹¹⁰ Such nonconstitutional development, however, may lead to at least two problems, the resolution of which demands recognition of the constitutional bases of the fair use doctrine itself.

The first of these problems provokes a conventionalist response: because the doctrine lacks a core theoretical definition, it is difficult for judges to make good decisions on seemingly easy questions.¹¹¹ For example, courts have difficulty applying fair use doctrine to unpublished works. The *Nation* opinion observed that the unpublished nature of a work is a “key, though not necessarily determinative factor” in the fair use decision, “tending to negate the defense.”¹¹²

Authors have a legitimate interest in preventing the publication of their works insofar as it decreases the incentive granted under the Intellectual Property Clause to create the works in the first place.¹¹³ But a ban on fair use of unpublished documents, which the Court’s language suggests might be acceptable, would limit historians, who wish to quote from the unpublished papers of a deceased public figure, to the whims of that person’s heirs, as enforced by a federal court.¹¹⁴ This cannot be right. Insulation of public figures from criticism is an unacceptable purpose for copyright.¹¹⁵ The Court seems to have understood this principle in its reasoning; the critical element in *Nation* was that President Ford wrote his memoirs for publication.¹¹⁶ Thus, the holding balanced the legitimate copyright concern of the author with the ultimate value of the work intended for publication. Nevertheless, subsequent decisions have read the *Nation* decision much more broadly.¹¹⁷ A more clearly articulated understanding

110. Goldstein, *supra* note 104, at 1001.

111. This argument is analogous to David Strauss’s conventionalist justification for why text matters in his common law account of constitutional interpretation. There, interpreters, though not bound by the text, do not abandon it because it provides a set of societal ground rules for what is out of bounds to argue. “[N]ot accepting that answer has costs—in time and energy spent on further disputation, in social division, and in the risk of a decision that (from the point of view of any given actor) will be even worse than the constitutional decision.” David Strauss, *Common Law Constitutional Interpretation*, 63 U. CHI. L. REV. 877, 907-08 (1996).

112. *Nation*, 471 U.S. at 554 (internal citation omitted).

113. Judge Leval has already identified the disconnect between copyright’s goals and the interest in preventing publication except as it relates to maintaining the incentives to create in the first place. He, like courts interpreting fair use, relies implicitly—but strongly—on First Amendment principles. See Pierre N. Leval, *Commentary: Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1117-22 (1990).

114. *Id.* at 1118.

115. See *supra* notes, 101-04 and accompanying text.

116. *Nation*, 471 U.S. at 555; see also Leval, *supra* note 113, at 1120.

much more broadly.¹¹⁷ A more clearly articulated understanding of how fair use accommodates First Amendment concerns about copyright would have allowed the Court to provide a proper and easily understood directive to the lower courts.

A second, more serious problem is that nonconstitutional development obscures what is a constitutionally necessary role of the fair use doctrine in the current statutory framework. The question of whether Congress can legislate section 107 fair use out of existence is a difficult one because its constitutional core is largely undefined. An evaluation of the doctrine in light of the constitutional interaction between the Intellectual Property Clause and the First Amendment¹¹⁸ shows that much of it is constitutionally based, and indeed some of it is constitutionally required.

Fair use consists of four doctrinal factors, the first of which requires the court to examine the purpose and character of the secondary use.¹¹⁹ The Supreme Court's most coherent articulation of this factor came in the *Campbell* case:

The central purpose of this investigation is to see. . . whether the new work merely “supersede[s] the objects” of the original creation. . . or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is “transformative.”¹²⁰

The transformative use inquiry is at the heart of the fair use doctrine. Although a nontransformative use may be considered fair, this occurs only when the plaintiff cannot show any economic harm caused by the use, i.e., when the use does not reduce the incentive to create.¹²¹ Absent those circumstances, a secondary use will only be deemed fair to the extent that the quoted matter is transformed in the creation of “new information, new aesthetics, new insights and understandings.”¹²²

117. See, e.g., *New Era Publications Int'l v. Henry Holt & Co.*, 884 F.2d 659 (2d. Cir. 1989); *Salinger v. Random House, Inc.*, 811 F.2d 90 (2d. Cir. 1987), *cert. denied*, 484 U.S. 890 (1987); Leval, *supra* note 113, at 1117-22.

118. See *supra* Part II.C.1.

119. 17 U.S.C. § 107 (Supp. 2000).

120. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) (citing *Folsom v. Marsh*, 9. F. Cas. 342, 348 (C.C.D. Mass. 1841) (No. 4,901) and Leval, *supra* note 113, at 1111).

121. *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417, 456 (1984).

122. Leval, *supra* note 113, at 1111.

This is entirely consonant with the Meiklejohnian theory of “Progress.” He writes:

If, for example, at a town meeting, twenty like-minded citizens have become a “party,” and if one of them has read to the meeting an argument which they have all approved, it would be ludicrously out of order for each of the others to insist on reading it again.¹²³

Protection of duplicative information in the town meeting wastes time that should be available for free discussion. A finding of noninfringement for nontransformative use stalls “Progress” because it removes copyright’s monetary incentive to create without any addition to the flow of information to the public. Conversely, courts should almost always deem a highly transformative use fair because it increases the flow of valuable nonduplicative information to the public.¹²⁴ Thus, the transformative use inquiry should be based in the First Amendment’s commitment to maintaining the production and distribution of information necessary for democratic decisionmaking.¹²⁵

123. MEIKLEJOHN, *supra* note 105, at 26.

124. This is not the first time that a Meiklejohnian analysis of the interface between copyright and the First Amendment has been suggested. Paul Goldstein’s “first accommodative principle,” that “copyright infringements must be excused if the subject matter of the infringed material is relevant to the public interest and the appropriator’s use of the material independently advances the public interest,” reflects in part the Meiklejohnian audience-centered theory. Goldstein, *supra* note 104, at 988-89. In Goldstein’s view, fair use’s “paramount objective is to broaden public access to expression.” *Id.* at 1015. This would call for an evaluation of the original work’s public interest value—an inquiry rejected by the Court in *Nation* 15 years after Goldstein’s article was published: “It is fundamentally at odds with the scheme of copyright to accord lesser rights in those works that are of greatest importance to the public. Such a notion ignores the major premise of copyright and injures author and public alike.” *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 559 (1985). In contrast, this Comment’s view of the First Amendment’s role of the transformative use inquiry focuses solely on the use itself and whether it can be said to contribute non-duplicative information to the public discourse—that is, not whether it broadens public access to expression, but whether it broadens the expression to which the public has access.

125. However, this is not the whole of the justification for transformative fair use. Meiklejohn himself noted “that the people do need novels and dramas and paintings and poems, ‘because they will be called upon to vote.’” MEIKLEJOHN, *supra* note 105, at 263. Thus democratic theory is informed by another First Amendment value—self-expression. Martin H. Redish, *The Value of Free Speech*, 130 U. PENN. L. REV. 591, 607, 627 (1982); see also *Whitney v. California*, 274 U.S. 347, 375 (Brandeis, J., concurring) (“Those who won our independence believed that the final end of the State was to make

The second fair use factor, the nature of the copyrighted work, recognizes “a greater need to disseminate factual works than works of fiction or fantasy.”¹²⁶ Accordingly, if the original work is of the former rather than latter type, a court is more likely to find that the secondary use is fair.¹²⁷ This valuation of works is an offshoot of another accommodation between copyright and the First Amendment, the idea/expression distinction, which limits protection to the author’s expression, not the underlying ideas or facts.¹²⁸

This interaction is also consistent with the Meiklejohnian theory of the First Amendment; self-government requires that all the facts and ideas are available for public use.¹²⁹ It does not matter whether everyone gets to speak, only that “everything worth saying shall be said.”¹³⁰ Under this theory, courts do not protect expression for its own sake, but rather for the sake of those who hear it. Where it is not clear whether the information presented in the secondary use is duplicative, courts can more easily presume the use to be fair if the primary work is predominantly factual; the secondary work more likely presents information worthy of First Amendment protection. Where the primary work is predominantly fanciful, it is further from the core of information necessary to public decisionmaking. Therefore, a secondary use is less likely to present information of public value. It will accordingly be harder to call it a fair use.

Ultimately though, the second factor is rarely dispositive, and is often of little help in the fair use determination. In fact, it has only proven criti-

men free to develop their faculties; and that in its government the deliberative forces should prevail over the arbitrary. They valued liberty both as an end and as a means.”). The combination of the two protects any information necessary for the individual’s formation of a public persona. The powerful role advertisements play in popular culture and accordingly, people’s sense of self, is an example of this phenomenon. And of course advertisements are protected under the commercial speech doctrine without serious inquiry into whether the particular information conveyed is necessary for voting. *Cf.* *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council*, 425 U.S. 748, 787 (Rehnquist, J., dissenting) (dissenting on grounds that First Amendment protection of information necessary to public decisionmaking does not extend to decisions about which type of shampoo to use). *See also* Goldstein, *supra* note 104, at 989.

126. *Nation*, 471 U.S. at 563.

127. *Id.*

128. *Id.* at 556. The idea/expression dichotomy has been the primary tool of harmonization of copyright and the First Amendment. *See, e.g.*, *New York Times, Inc. v. United States*, 403 U.S. 713, 726 (Brennan, J., concurring). However, the idea/expression dichotomy is not sufficient. Sometimes the use of someone else’s expression is necessary to the exercise of First Amendment rights.

129. MEIKLEJOHN, *supra* note 105, at 26.

130. *Id.*

cal in cases concerning the fair use of unpublished works, as discussed above.¹³¹ And there, the public discourse theory of the First Amendment provides a direct limitation on the purposes of the copyright monopoly.¹³²

The third factor, the amount and substantiality of the material taken in relation to the copyrighted work as a whole, is basically a tool to aid in the evaluation of factors one and four.¹³³ If a work takes more of the original than is necessary to its purpose, a court is less likely to find fair use.¹³⁴ Similarly, if a work takes a substantial amount from the original, it is more likely to affect the market for the original.¹³⁵

The fourth factor requires a court to look at this market effect.¹³⁶ A use that diminishes the market for a work decreases incentives to produce it; accordingly, courts are less likely to find any use that decreases these incentives to be fair. Notably, unless the use is transformative under the first factor, an effect on the market for the original will almost certainly result in a determination that the use was not fair.¹³⁷ If the secondary use merely wastes public resources by contributing nothing new, and does so at the expense of the system that ensures the flow of creative and informational works, it would undermine this entire system to exempt the secondary user from liability. Under the Meiklejohnian metaphor, the citizens at the town meeting would waste their valuable time, time that could instead be devoted to hearing all possible information.¹³⁸ Under copyright law, the analogous threatened resource is the incentive structure of the statutory monopoly.

Another crucial aspect of the fourth factor is that certain market effects do not matter. The doctrine distinguishes between a market effect caused by displacement and one that is caused by disparagement.¹³⁹ Displacement occurs when a secondary work fills the same niche as the primary work, and thereby diminishes the market for the latter. Disparagement decreases the market for the work by making it less attractive through criticism.

131. Leval, *supra* note 113, at 1116-17; *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994).

132. *See supra* notes 114-15 and accompanying text.

133. Leval, *supra* note 113, at 1122-23.

134. *Id.*

135. *Id.*

136. 17 U.S.C. § 107 (Supp. 2000).

137. Leval, *supra* note 113, at 1116.

138. MEIKLEJOHN, *supra* note 105, at 26.

139. *See, e.g., Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 591-92 (1994) (citing *Fisher v. Dees*, 794 F.2d 432, 437-38 (9th Cir. 1986)).

Only displacement counts against the secondary user, but the cases do not explain why.¹⁴⁰ Participatory democratic theory, however, provides an explanation. Published works are part of the public discourse, and therefore must freely be subject to criticism. As discussed earlier in connection with the unpublished memoirs cases, a court could not allow copyright to shield against quotation for the purposes of a critical review under the First Amendment.

In sum, the First Amendment has a twofold relevance to nonconstitutional fair use doctrine. First, it helps explain the purposes of the doctrine's focus on transformative use and the factual/fanciful nature of the original copyrighted work. The Meiklejohnian account of the First Amendment, as it interacts with "Progress" in the Intellectual Property Clause, also explains much of the shape and goals of fair use doctrine. It provides an understanding of what is not a transformative use, and what, therefore, courts should not deem fair. More importantly, it provides a limit on the scope of the copyright monopoly: where the secondary use is highly transformative, a court must deem it fair. To do otherwise would restrict the flow of information. Admittedly, the boundaries of this limitation are hard to define. Nevertheless, it establishes an important constitutional restriction on the scope of the copyright monopoly—one that only the fair use doctrine is capable of enforcing under the current statutory framework.

Second, the dominant public discourse model of the First Amendment requires restrictions on the scope of the copyright monopoly. Copyright law cannot be used to protect privacy or dignity, or to prevent offense to authors.¹⁴¹ The second and fourth fair use factors accommodate this requirement. The unpublished nature of a work can prevent fair use only to the extent that the work is on its way toward publication, and the secondary use would diminish the copyright incentives to create in the first place. Thus, for example, copyright cannot protect memoirs of a public figure from criticism.¹⁴² Additionally, only certain diminutions of copyright incentives matter in the fair use determination. Fair use allows quotation for the purposes of disparaging a work because published works are part of the public discourse. As with the Meiklejohnian restriction on injunctions against transformative works, the facilitation of criticism of published and unpublished works comes solely through the fair use doctrine.

140. *Id.*

141. *See supra* notes 101-04 and accompanying text.

142. Leval, *supra* note 113, at 1122.

As lawmakers restrict fair use, they also restrict the ability to create new works because many works necessarily draw on previous works. Thus, the fair use doctrine is not merely a subsidy to users, but is a constitutionally required element of information regulation and promotion in our society.¹⁴³ Conferring greater rights to exclude uses of informational and creative media to authors necessarily limits free speech. Judicial interpretations of the DMCA thus far have not adequately taken this principle into account. Accordingly, lawmakers and courts have poorly served the constitutional mandate of “Progress.” As discussed more fully in Part III, the right to sue to enforce the legal protection of TPSs created by the DMCA—at least as courts currently interpret it—is perpetual and fails to maintain users’ rights.

D. Enclosure of the Public Domain and Restriction of Information Use Rights by TPSs

Restricting use of public domain materials through TPSs has a similarly deleterious effect on the production of new works. Yochai Benkler has offered a functional analysis of how the enclosure of the public domain threatens free speech.¹⁴⁴ Although he addresses the effect of statutes that fence off the public domain,¹⁴⁵ his analysis is also applicable to the independent effect of fencing by TPSs on the constitutional rights of users.

Benkler shows how enclosure, and information producers’ corresponding reliance on the sale of rights to attain profits, affects different types of information outputs differently.¹⁴⁶ The core of the problem is that information producers who use business strategies that do not incorporate the benefits of increased protection will suffer.¹⁴⁷ These producers derive value through alternative means to sale or licensing, such as free distribution of their content to maximize effect on a correlated market (as in the case of the noncommercial development of the Linux operating system) or free exchange of ideas (as in the academic setting).¹⁴⁸ These information

143. See Benkler, *supra* note 28, at 363 n.33 (collecting articles arguing that the public domain is merely a redistribution of value of copyright to users or a subsidy in favor of uses with public benefits).

144. See Benkler, *supra* note 28.

145. The state action doctrine is obviously implicated with regard to TPSs, since the First Amendment is generally thought to apply only to government actions that restrict free speech. See *infra* Part IV.C for further discussion of this problem.

146. See Benkler, *supra* note 28, at 400-08.

147. *Id.*

148. *Id.* at 404.

producers must face the increased costs of purchasing rights to information inputs not previously enclosed, without an offsetting increase in benefits.¹⁴⁹ Furthermore, forms of speech valued under statutory fair use—criticism, comment, reporting, teaching, scholarship and research—may suffer the most, since they are less frequently undertaken for monetary gain than other content creation. As the public domain is enclosed, producers of information particularly valued under the Copyright Act, according even to Congress,¹⁵⁰ thus face the largest obstacles to creation of new works.

The result is that the disparate impact felt by these organizations will cause a concentration of information production in large commercial organizations that vertically integrate the sale and management of owned inventory with the creation of new information.¹⁵¹ In other words, large profit-maximizing companies with vast internal libraries of content at their disposal will increasingly be the ones best able to produce content. Greater limitation of fair use and the public domain with TPSs will not necessarily lead, as some commentators contend, to greater production and dissemination of information.¹⁵² Instead, diversity of content will decrease and large companies will become the locus of production.¹⁵³ And as an added detriment to media users, quality may decrease as well, because large content producers relying on a broad audience will produce what will sell the most to the greatest number of people, regardless of quality.¹⁵⁴

A related effect TPSs may have on the production of new media works is the creation of an “anticommons . . . a property regime in which multiple owners hold effective rights of exclusion in a scarce resource.”¹⁵⁵ When too many individuals have rights of exclusion to a scarce resource, rational individuals, acting separately, may collectively underuse the resource.¹⁵⁶ If all authors must seek permission for every use from each of

149. *See id.* at 409.

150. “Fair use, thus, provides the basis for many of the most important day-to-day activities in libraries, as well as in scholarship and education. It is also critical to advancing the personal interests of consumers. Moreover . . . it is no less vital to American industries, which lead the world in technological innovation.” H.R. REP. NO. 105-551, pt. 2, at 25-26 (1998).

151. *See* Benkler, *supra* note 28, at 410.

152. *Cf.* Bell, *supra* note 15.

153. *See* Benkler, *supra* note 28, at 411.

154. *Id.*

155. Michael Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 668 (1998).

156. *Id.* at 677.

their predecessors, fewer new works are likely to appear.¹⁵⁷ Some commentators argue that TPSs will have the opposite effect on the production of new works.¹⁵⁸ It is unclear, however, even where licensing transactions are costless, how allowing protection of media will make using these protected types of media *easier* than in their currently unprotectible state.

TPSs are capable of creating an anticommons because they control access and track similarities between works—even those based on material that the law cannot directly protect. Because the protected media can contain public domain material to which nobody previously had a legal claim under copyright, there will be many overlapping claims. Further, TPSs will make these claims easily detectable and provable. Multiple owners will hold effective rights of exclusion in a scarce resource,¹⁵⁹ creating an anticommons. The public domain building blocks will be underused because of these potential claims, and fewer works will be created. The effect of TPSs and the DMCA on speech is twofold: not only will content owners easily be able to prevent objectionable uses of previously legally unprotectible works by preventing fair use, they will also be able to limit *creation* of future works by enclosing the public domain.

The public domain and fair use are not merely vestigial tails of copyright that exist because of market inefficiency; they are fundamental to information production. The Supreme Court has interpreted its free speech cases to stand for the proposition that “the State may not, consistently with the spirit of the First Amendment, contract the spectrum of available knowledge.”¹⁶⁰ The DMCA’s invocation of governmental machinery to enforce restrictive TPSs¹⁶¹ threatens the amount, diversity, and quality of

157. See Litman, *supra* note 80, at 1019.

158. See Bell, *supra* note 15. Bell argues that the efficient usage rights system resulting from TPSs will make it easier for authors to create new works. See also *supra* notes 49-53 and accompanying text.

159. Heller, *supra* note 155, at 668.

160. *Griswold v. Conn.*, 381 U.S. 479, 482-83 (1965) (citing a collection of First Amendment “peripheral rights,” without which “the specific rights would be less secure”); *Sweezy v. N.H.*, 354 U.S. 234 (1957) (finding a freedom of the university community); *Wieman v. Updegraff*, 344 U.S. 183 (1952) (upholding the freedom to teach); *Martin v. City of Struthers, Ohio*, 319 U.S. 141 (1943) (finding a right to read); *Pierce v. Soc’y of Sisters*, 268 U.S. 510 (1925) (upholding a right to educate one’s children); *Meyer v. Neb.*, 262 U.S. 390 (1923) (finding a right to study as one chooses).

161. Notwithstanding the state action doctrine, constraint of the public domain and free speech by TPSs alone is analytically identical to constraint by a statute conferring an indiscriminate right to legal reinforcement of them. More narrowly, the fact that TPSs constrain constitutional rights of users does not necessarily mean the statute granting

information production. In doing so, the DMCA contracts the amount of current and future knowledge. Because the public domain and fair use are grounded in the constitutional commitment to free speech, any legal constraint upon them must have more than a merely plausible justification. Claims that reinforcement of TPSs by the DMCA is necessary must be “real, not merely conjectural,” and the reinforcement must further these goals in a “direct and material way.”¹⁶² As the following section shows, the legislature has not made its case for indiscriminate protection of TPSs.

III. JUSTIFYING RESTRICTIONS ON SPEECH? THE CONSTITUTIONALITY OF BROAD READINGS OF THE DMCA’S ANTI-CIRCUMVENTION PROVISIONS

Given the numerous benefits of TPSs, it was certainly rational for Congress to choose to promote them. Strong TPSs in particular will be quite useful in preventing illicit uses of copyrighted material. The DMCA as currently drawn, however, creates a right to legal reinforcement without regard to potentially serious drawbacks for users.¹⁶³ Were these drawbacks simply an inconvenience to users, the statute might be justified on its evaluation of TPSs’ desirability in general. Congress’s reliance on such a broad generalization to justify the DMCA is insufficient, however, because the legislation impinges upon users’ constitutional rights. The new right provided by the DMCA protects even overly restrictive TPSs, and therefore implicates constitutional concerns underlying information use and the public domain. Thus, one may bring a constitutional challenge against the DMCA where the statute compels a court to legally reinforce a TPS that prevents fair use of media a user has lawfully acquired or encloses public domain materials.

The question of whether the DMCA would compel violation of users’ constitutional rights turns on judicial and administrative¹⁶⁴ interpretation

legal reinforcement constrains equivalently if the statute can be given a limiting interpretation. I turn to the matter of interpreting the DMCA in Part III.B. Part IV.C, which discusses direct judicial regulation of TPSs, addresses the state action question.

162. *Turner Broad. Sys., Inc. v. FCC*, 512 U.S. 622, 664 (1994) (“When the Government defends a regulation on speech as a means to redress past harms or prevent anticipated harms, it must do more than simply posit the existence of the disease sought to be cured. It must demonstrate that the recited harms are real, not merely conjectural, and that the regulation will in fact alleviate these harms in a direct and material way.”) (internal citations omitted); *see also* Benkler, *supra* note 28, at 423.

163. *See supra* notes 68-73 and accompanying text.

164. Section 1201(a)(1)(C) requires a rulemaking procedure be undertaken by the Librarian of Congress on the recommendation of the Register of Copyrights two years

of the statute. As the Comment discusses in Parts III.B and III.C, current judicial and administrative interpretations of the DMCA—the anti-circumvention provisions in particular—may lead to violations of users’ constitutional rights. Given this potential, the legislature should revisit these provisions.¹⁶⁵ Until the legislature revises these provisions, the courts should hold them unconstitutional.

A. Constitutional Imbalance: Indiscriminate Reinforcement of TPSs vs. Restriction of Users’ Rights

Justification for the DMCA stems primarily from the idea that legal protection is necessary to reinforce available technical protection. No technical protection protects fully; therefore TPSs alone cannot provide adequate protection to copyright owners. Three arguments made to Congress by the motion picture and musical recording industries¹⁶⁶ reflect this premise: first, without adequate protection, content will not be made available;¹⁶⁷ second, copyright industries are an important sector of the domestic economy that should be protected;¹⁶⁸ and, third, the DMCA must prohibit circumvention without regard to infringing activity because legal enforcement of copyright is more difficult than using TPSs.¹⁶⁹ These arguments influenced Congress to pass a statute which, if read broadly, pro-

after the DMCA’s passage and every three years thereafter. 17 U.S.C. § 1201(a)(1)(C) (Supp. 2000). This procedure is designed to identify whether any exceptions to the anti-circumvention provisions are warranted. The first rulemaking was issued on October 27, 2000. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201). This rulemaking is discussed in detail in section III.C.

165. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. at 64,556.

166. *See Hearing on H.R. 2281, supra* note 28 at 56 (statement of Steven J. Metalitz, on behalf of Motion Picture Association of America) (defending provisions as necessary for robust electronic commerce); *see also id.* at 45 (statement of Hilary B. Rosen, President and CEO, Recording Industry Association of America, supporting the provision); Benkler, *supra* note 28, at 422 n.264.

167. *See Hearing on H.R. 2281, supra* note 28, at 36 (statement of Robert W. Holleyman, II, President and CEO, Business Software Alliance, noting that software piracy costs the industry almost \$13 billion each year); *id.* at 43 (statement of Hilary B. Rosen: “Copyrighted works will not have a business online unless copyright owners. . .are convinced that their products are secure.”); Benkler, *supra* note 28, at 423 n.266.

168. *See Hearing on H.R. 2281, supra* note 28, at 36-37 (statement of Robert W. Holleyman, II, suggesting that eliminating piracy will create jobs); Benkler, *supra* note 28, at 423 n.267.

169. *See Hearing on H.R. 2281, supra* note 28, at 106 (testimony of Steven J. Metalitz, discussing limitations of linking act of circumvention to infringement); Benkler, *supra* note 28, at 423 n.268.

fects any TPS that “effectively protects” digital media regardless of its actual restriction of users’ rights.¹⁷⁰ Currently, it is assumed that the anti-circumvention provisions must be read broadly—a proposition supported by judicial interpretations.¹⁷¹ Accordingly, one must weigh the above justifications for the provisions against the greatest restrictions of which TPSs are capable—prevention of all unauthorized use of protected materials, some of which may be part of the public domain.¹⁷²

None of the justifications for the statute are compelling in the face of the statute’s impairment of users’ constitutional rights. The first justification, that content will not be produced without legal backup, is undermined by the breadth and depth of content already available on the Internet. So far, Internet entrepreneurs have managed to adopt business models to account for the lack of legal backup of technical measures. Thousands of web sites use advertising revenue-based business models, giving their content away for free.¹⁷³ These have, in recent days, been less than a shining example, but other innovative models exist and surely more will be

170. *See, e.g.*, H.R. REP. NO. 105-551, pt. 2, at 9 (1998). Congress stated:
SEC. 107. DEVELOPMENT AND IMPLEMENTATION OF TECHNOLOGICAL PROTECTION MEASURES. (a) STATEMENT OF CONGRESSIONAL POLICY AND OBJECTIVE: It is the sense of the Congress that technological protection measures play a crucial role in safeguarding the interests of both copyright owners and lawful users of copyrighted works in digital formats, by facilitating lawful uses of such works while protecting the private property interests of holders of rights under title 17, United States Code. Accordingly, the expeditious implementation of such measures, developed by the private sector through voluntary industry-led processes, is a key factor in realizing the full benefits of making available copyrighted works through digital networks, including the benefits set forth in this section.

Id.

171. *See infra* Part III.B.

172. There is not a ready example of such a TPS, and one might not even exist yet. However, if the anti-circumvention provisions are to be successfully challenged, it will most likely be by users who have had their desire to make fair use of copyrighted materials or to use public domain materials frustrated by such a restrictive digital fence.

173. These range from online newspapers, like the *New York Times*, to humor magazines like *The Onion*. *See* N.Y. Times Co., *New York Times Online*, at <http://www.nytimes.com> (last modified Sept. 1, 2001); Onion, Inc., *The Onion*, at <http://www.theonion.com> (last modified Aug. 29, 2001).

created.¹⁷⁴ Without legal backup, content owners will not allow the value of the Internet to go unexploited; they will simply find other ways to do it.

In addition, the industry's claim for the need of TPSs diminishes in force as the strength of TPSs increases. TPSs will guard media from all but an extremely small fraction of individuals, so the need for legal protection is not as dire when, as here, we are discussing the strongest TPSs. This is not to say the DMCA should not protect powerful TPSs; in fact, strong TPSs are desirable because they will be the best safeguards against illegal uses. This obvious point that theft should be discouraged does not, however, support the DMCA's broad approach, because the desire to promote strong fencing does not necessitate or justify indiscriminate protection of all TPSs. Strong digital fences have a great capacity to impinge upon users' rights and thus need the least legal reinforcement. The theft-reduction rationale for reinforcing even powerful, overly restrictive TPSs is extremely dubious in the face of a legal right to restrict users' speech.

Ultimately, the copyright industry's argument—that content cannot be provided—is a claim that the law should protect brick and mortar business models in the digital environment. In this regard, their claims eerily echo the motion picture industry's attempt to maintain the status quo by making claims—which ultimately proved mistaken—that the VCR would destroy the movie business.¹⁷⁵ Government assertions that legal facilitation of old business models will enable the Internet to realize “its full potential” therefore seem disingenuous (unless “full potential” means unregulated control by the industry).¹⁷⁶ It is impossible, however, to predict how industry control will affect the market. Because it is not axiomatic that such a policy would have a positive effect for consumers,¹⁷⁷ the claim is at best “conjectural,” to use the language of the Court, and cannot pass First Amendment muster.

The second argument, that the copyright industry—the makers of movies, music, and books—is an important sector of the domestic econ-

174. See *supra*, note 67, listing models based on giving away the initial digital media in order to sell auxiliary products, upgrades, or other real-world products.

175. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 454 (1984).

176. See *Joint Hearing on S. 1284 and H.R. 2441 Before the Subcommittee on Courts and Intellectual Property of the House Comm. on the Judiciary and the Senate Comm. on the Judiciary*, 104 Cong. 35 (1995) (testimony of Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks).

177. Cf. Benkler, *supra* note 28, at 424 (arguing that certain types of producers that do not derive monetary benefits from increased propertization are also likely to suffer); see also *supra* notes 141-49 and accompanying text.

omy, is more convincing. The industry employs many Americans, and producers in this particular industry are more often domestically based than are their consumers.¹⁷⁸ Thus, Congress could have been legitimately concerned by an ultimatum from the copyright industries. This concern does not, however, militate in favor of indiscriminately protecting TPSs under the law. The copyright industry has never been dependent on an undifferentiated right to control its media. Copyright in tangible media, with all its exceptions, has been more than adequate to allow the industry to grow and provide thousands of jobs in this country. There is no evidence that the industry will suffer if the law forces strong TPSs to maintain fair use and the public domain. The point that the copyright industry provides many jobs is of course real and verifiable, but the illogical extension of that fact—that it will no longer be able to do so without indiscriminate protection of TPSs—is conjecture at this stage.

The copyright industries' third argument—that the DMCA must prevent all circumvention, not just that undertaken for the purposes of infringement—also fails to justify the DMCA's broad provisions. The industries claim that if the law recognizes circumvention as a legitimate way to make protected uses of media, the industries' only remaining option would be to sue distributors of circumvention devices for contributory infringement.¹⁷⁹ This claim is unattractive for two reasons. First, they would have to prove the underlying infringement by users, which requires tracking of actual media uses. Although this is possible on the Internet,¹⁸⁰ it is more difficult than simply showing that a device can circumvent a TPS. Second, contributory infringement is itself a limited claim. Under the *Sony* decision, providers of anti-circumvention devices are not liable for contributory infringement of copyright—and, by logical extension, the DMCA—if their devices are merely capable of a substantial noninfringing use.¹⁸¹ Facilitating fair use and access to public domain materials would almost surely qualify under this standard.¹⁸² Thus, the *Sony* rule would shift the burden of proof of

178. *See id.* at 425.

179. A party “who, with knowledge of the infringing activity, induces, causes, or materially contributes to the infringing conduct of another, may be held liable as a ‘contributory infringer.’” 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 12.04 (citing *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971)).

180. *See supra* notes 36-40 and accompanying text.

181. *See Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984).

182. *See Benkler, supra* note 28, at 426.

rule would shift the burden of proof of showing substantial noninfringing uses to the plaintiff.¹⁸³ The plaintiff, therefore, would have to prove underlying infringement for a court to find the distributors of circumvention devices liable under section 1201(a)(2) of the DMCA. The copyright industry convinced Congress that this is problematic because infringement is particularly difficult to track down and prove on the Internet.¹⁸⁴ The result is that the DMCA makes it easier for plaintiffs to legally reinforce their TPSs by effectively presuming that circumvention is illegitimate. This presumed illegitimacy contradicts the reality that in some cases, circumventing TPSs is the only way for users to make constitutionally protected uses of media. The DMCA's presupposition that circumvention and devices that facilitate circumvention are always illegitimate—especially in light of their necessity to fair use—is at best conjecture.

Lastly, some commentators have argued that the increased efficiency afforded by TPSs will not only outweigh the burdens to users, but may also increase content production.¹⁸⁵ According to this view, TPSs actually promote speech. This efficiency argument relies on the premise that “[b]ecause automated rights management creates well-defined and readily transferable property rights to information, it puts the power of the market in the service of consumer demand.”¹⁸⁶ Although this is true for content that can be accurately valued, it fails to account for the loss of content from producers who do not rely on sale or licensing to derive value from their products.¹⁸⁷ Because of the decrease in that type of content production,¹⁸⁸ the claim that greater rights in information leads to an increased amount or diversity of creative output is open to challenge and is at least, in part, conjecture.

If the DMCA affords legal reinforcement to TPSs that protect digital media to a greater extent than is possible under copyright or other intellec-

183. 17 U.S.C. §§ 1201(a)(2)(A)-(B) (Supp. 2000) (exempting circumvention devices not “primarily designed or produced for the purpose of circumvent[on]” and having more than “limited commercially significant purpose or use other than to circumvent.”). Presumably where a device can circumvent plaintiff’s TPS, the burden would be on the defendant to prove it was exempt under these sections. *Cf. Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 318-19 (S.D.N.Y. 2000) (finding that a device was designed primarily to circumvent is prima facie evidence that it lacks other commercially significant purpose).

184. See *supra* notes 6-13 and accompanying text.

185. See Bell, *supra* note 15, at 585-89.

186. *Id.* at 589; see also *supra* notes 53-58 and accompanying text.

187. See *supra* note 148 and accompanying text.

188. See *supra* notes 141-45 and accompanying text.

tual property law, then the courts should do one of three things. Each option requires sensitivity to the constitutional problem that arises when users' rights are restricted. First, courts should read the statute narrowly—though in line with legislative intent—to avoid the constitutional problem.¹⁸⁹ If it is not susceptible to such a limiting interpretation, then the courts should address directly whether the interests furthered by the statute outweigh the limitations it imposes on speech. As discussed above, a court making such a determination should find that the justifications do not warrant the constitutional infirmities. Accordingly, the last step for the courts is to strike down the DMCA's anti-circumvention provisions on the ground that Congress's creation of a legal right to enforcement of all TPSs exceeded its power under the Intellectual Property Clause and impermissibly restricted speech in violation of the First Amendment.

B. Judicial Interpretations of the Anti-Circumvention Provisions

The previous section evaluated the constitutionality of the DMCA anti-circumvention provisions based on the assumption that they would be read broadly to protect TPSs that restrict constitutionally protected users' rights. As described below, that is exactly what courts have done. Courts need not, however, read the statute so broadly. Concerned that TPSs would shift us towards a “pay-per-use” society,¹⁹⁰ Congress incorporated a detailed set of exceptions to the DMCA's bans on circumvention and devices to circumvent.¹⁹¹ Although the exceptions are numerous and complex, they do not cover all types of fair use.¹⁹² In order to determine the status of uses not specifically provided for in the exceptions, one must turn to the separate fair use and free speech provisions in the statute.¹⁹³

189. *See* *Miller v. French*, 530 U.S. 327, 341 (2000) (“And while this construction raises constitutional questions, the canon of constitutional doubt permits us to avoid such questions only where the saving construction is not plainly contrary to the intent of Congress.”) (internal citation omitted).

190. 144 CONG. REC. S11887, S11888 (daily ed. Oct. 8, 1998) (statement of Sen. Ashcroft).

191. For a discussion of how these exceptions interact with each of the bans on circumvention, see Nimmer, *supra* note 18, at 700-02; *see also*, Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised*, 14 BERKELEY TECH. L.J. 519, 537-43 (1999).

192. *See* Nimmer, *supra* note 18, at 738-39.

193. There is no public domain exception. The statute affords access protection to “a work protected under [the Copyright Act],” whether the user wishes to make unauthorized use of protected expression or unprotectible material. 17 U.S.C. § 1201(a)(1)(A) (Supp. 2000). However, a proper fair use exception should take care of this problem. Use

The DMCA contains three provisions dedicated to protecting fair use and free speech. Section 1201(c) states the first two: “(1) Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title. . . . (4) Nothing in this section shall enlarge or diminish any rights of free speech or the press for activities using consumer electronics, telecommunications, or computing products.” The remaining provision, 1201(a)(1), requires the Register of Copyrights to conduct an administrative rulemaking procedure to exempt classes of works with regard to which the DMCA has adversely affected users ability to make noninfringing uses. Courts, however, have failed to consider adequately the importance of these sections to the protection of First Amendment rights.

In *Universal City Studios v. Reimerdes*,¹⁹⁴ the federal court for the Southern District of New York decided a claim by a group of movie studios against Eric Corley and his company, 2600 Enterprises, Inc.¹⁹⁵ Defendants posted a copy of DeCSS—a decryption program designed to break CSS, the TPS used by DVD players to prevent home users’ access to DVDs on nonlicensed systems—on their web site.¹⁹⁶ The program’s creator claimed he created it so he could play his lawfully purchased DVDs on his home computer, which ran an operating system incompatible with CSS.¹⁹⁷ Plaintiffs claimed that by posting DeCSS on <http://www.2600.com>, the defendants violated section 1201(a)(2) of the DMCA by distributing a circumvention device.¹⁹⁸ The court held in favor of the plaintiffs and enjoined the defendants from posting DeCSS or linking to sites posting it.¹⁹⁹

of public domain materials is generally considered a noninfringing use. *See, e.g.*, *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49 (2d Cir. 1936); *Nichols v. Universal Pictures Corp.*, 45 F.2d 119 (2d Cir. 1930). Fair use, on the other hand, is a defense to infringement. *See* 17 U.S.C. § 107 (Supp. 2000). The distinction matters little, however, as far as protecting access to public domain materials is concerned. In a typical suit, the defendant either claims “I have a right to use this” (fair use) or “you have no right to sue me” (public domain). Substantively, the former can include the latter, so adequate provision for fair use in the DMCA should suffice to protect users’ rights without explicit reference to the public domain.

194. 111 F. Supp. 2d 294 (S.D.N.Y. 2000).

195. 2600 Enterprises, Inc. publishes *2600: The Hacker Quarterly* and maintains a web site devoted to hacker issues. 2600 Enters., Inc., *2600: The Hacker Quarterly*, at <http://www.2600.com> (last visited Sept. 1, 2001).

196. *See Reimerdes*, 111 F. Supp. 2d at 309.

197. *See id.* at 310.

198. 17 U.S.C. §1201(a)(2) (Supp. 2000).

199. *Reimerdes*, 111 F. Supp. 2d at 345.

The court rejected defendants' statutory fair use claim, holding that one violates the DMCA even if the circumvention measures are absolutely necessary to facilitate fair use.²⁰⁰ The effect of this holding is that even if users have a constitutionally protected right to make certain uses of protected media, they will lack the means to exercise their right unless they are technically capable of circumventing the TPS themselves. The court did not mention Congress's explicit recognition in section 1201(c)(1) that "[n]othing in this section shall affect rights, remedies, limitation, or defenses to copyright infringement, *including fair use*, under this title."²⁰¹ Nor did it point out section 1201(c)(4)'s commitment to maintaining the status quo of free speech involving telecommunications or computers.²⁰² Rather than considering the implications of these statements, which might militate in favor of a narrow reading of 1201(a)(2),²⁰³ the court ignored them entirely. Instead of relying on the language of the statute, the court relied on the legislative history suggesting that fair use is limited to situations in which "access is authorized."²⁰⁴ Thus, untroubled by the question that section 1201(c) raises as to whether Congress intended to limit fair use rights to the technically savvy,²⁰⁵ the court broadly interpreted the statute to prohibit all circumvention devices covered by section 1201(a)(2), regardless of their necessity to speech rights.²⁰⁶

Admirably, the court acknowledged the serious question as to whether courts should interpret the DMCA to make any fair use of plaintiff's copyrighted works difficult or impossible.²⁰⁷ It ultimately deferred to Con-

200. *Id.* at 323-24.

201. 17 U.S.C. §1201(c)(1) (Supp. 2000) (emphasis added).

202. 17 U.S.C. §1201(c)(4) (Supp. 2000).

203. *Cf.* Samuelson, *supra* note 191, at 551.

204. *Reimerdes*, 111 F. Supp. 2d at 323 (quoting H.R. REP. NO. 105-551, pt. 2, at 18 (1998)).

205. *See* Samuelson, *supra* note 191, at 551; *but see* Nimmer, *supra* note 18, at 738 (arguing that Congress's half-hearted effort at protecting users' rights, in comparison with the detailed exceptions for other uses in sections 1201(d)-(j), indicates the intent not to protect them is relatively clear); *see also supra* note 24.

206. The facts of the *Reimerdes* case, at least from the court's perspective, gave little reason to be careful with language. The court obviously thought Johansen's claim that he made DeCSS to circumvent CSS primarily for fair use of the protected material was a ruse. *See Reimerdes*, 111 F. Supp. 2d at 320. A more sympathetic case might at least have prompted an acknowledgment that the DMCA might leave open some possibility of distribution of circumvention devices necessary to fair use. As a precedent, *Reimerdes* leaves little room for such a defense. For a hypothetical example of a sympathetic case, *see* Samuelson, *supra* note 191, at 551-52.

207. *Reimerdes*, 111 F. Supp. 2d at 322.

gress's determination that the law could maintain the intellectual property balance without a fair use exception to circumvention.²⁰⁸ The court made three points in support of its decision. First, Congress left fair use fully applicable to all uses of works obtained with authorization.²⁰⁹ Second, Congress provided for administrative rulemaking in section 1201(a)(1) to determine whether users' rights were being adversely affected.²¹⁰ And third, the DMCA includes a detailed set of exceptions to the circumvention ban "for certain uses Congress thought 'fair.'"²¹¹

The problem with the court's approach is that these limitations do not completely eliminate the possibility of unconstitutional restrictions on speech. On the first point, fair use of TPS-protected works will always depend on access, which, because of the anti-circumvention provisions, requires authorization. However, although the DMCA contains several exceptions for particular types of uses, it lacks a specific exception to make fair use possible without authorization or circumvention. Thus, under the court's interpretation, only the rulemaking provision can save fair use. The rulemaking provision, as discussed in Part III.C, is not up to the task. Thus, the *Reimerdes* court's statutory construction places the DMCA within the constitutionally problematic zone identified above in Part III.A.²¹²

The only other case that deals with the DMCA's anti-circumvention provisions in detail comes from the Western District of Washington. In *RealNetworks, Inc. v. Streambox Inc.*,²¹³ plaintiff, RealNetworks claimed defendant, Streambox impermissibly developed and distributed a device to circumvent the TPS protecting RealNetworks' media delivery service, RealServer/RealPlayer.²¹⁴ Essentially a software-based trusted system, the service allows content owners to stream media using RealServer to users using RealPlayer and to technologically control whether or not the user

208. *Id.*

209. *Id.*

210. *Id.*

211. *Id.*

212. *See supra* notes 163-75 and accompanying text.

213. No. C99-2070P, 2000 WL 127311 (W.D. Wash. Jan. 18, 2000). One other court dealt specifically with the DeCSS controversy, but considered only a trade secret misappropriation claim and did not address any questions under the DMCA. *See DVD Copy Control Ass'n, Inc. v. McLaughlin*, No. CV786804, 2000 WL 48512 (Cal. Sup. Ct. Jan. 21 2000).

214. *Id.* at *1.

can make an unauthorized copy.²¹⁵ Streambox's product, the "VCR," spoofed the authentication program and appeared to the RealServer as if it were a RealPlayer. The VCR also ignored the technical control signal from RealServer that prevented unauthorized copying on a RealPlayer.²¹⁶

Streambox defended its action on the grounds that the VCR allowed consumers to make fair use of files available only through RealServer.²¹⁷ The defendants apparently limited their argument to a claim that under *Sony* they could not be liable for contributory infringement because the VCR was "capable of substantial noninfringing uses."²¹⁸ The court, noting that a claim under the DMCA's anti-circumvention provisions is not a suit for copyright infringement, held that the question of the defendants' liability for contributory infringement was irrelevant.²¹⁹

This holding is reasonable, but had the court considered section 1201(c)(1) of the DMCA protecting fair use,²²⁰ it should have noticed that the question of whether *users'* fair use rights are being restricted is not so easily dismissed. Instead it dismissed the claim, stating that here, unlike in *Sony*—where many copyright holders either authorized or did not object to the home use—content owners attempted to prevent the use.²²¹ Fair use, however, has nothing to do with whether or not the content owner authorizes the use.²²²

The end result of overlooking this crucial issue was the court's unqualified assertion that "[u]nder the DMCA, product developers do not have the right to distribute products that circumvent [TPSs] that prevent consumers from gaining unauthorized access to or making unauthorized copies of works protected by the Copyright Act."²²³ In other words, the DMCA prohibits even circumvention measures necessary to enable the exercise of free speech rights. Again, the court placed the anti-circumvention provisions into a constitutionally suspect zone.

215. *Id.* at *2.

216. *Id.* at *4.

217. *Id.* at *8.

218. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984).

219. *See RealNetworks*, 2000 WL 127311 at *8.

220. The opinion makes no reference to either section 1201(c)(1) or 1201(c)(4).

221. *RealNetworks*, 2000 WL 127311 at *8.

222. "If the use is otherwise fair, then no permission need be sought or granted. Thus, being denied permission to use a work does not weigh against a finding of fair use." *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 585 (1994).

223. *RealNetworks*, 2000 WL 127311 at *8.

Whether Congress intended to limit speech and fair use when it drafted the DMCA is open to debate. The care taken to make sure other exemptions were viable, such as reverse engineering and encryption testing, suggests that Congress may have realized the importance of its actions for users' rights.²²⁴ If it intended this limitation, the *Reimerdes* and *Streambox* courts were right not to read the statute narrowly. This Comment has argued, however, that the exceptions in sections 1201(c)(1) and (c)(4) might militate in favor of a more limited reading,²²⁵ particularly since the courts' broad reading of the statute creates a questionable legal right to prevent others' speech. Courts, on the other hand, have relied on the section 1201(a)(1) administrative rulemaking provision to protect users' rights. As the Comment discusses below, the rulemaking provision is inadequate to protect users' rights because it is severely limited in two important ways.

C. A “Fail-Safe” Mechanism? The Section 1201(a)(1) Rulemaking Provision

After the DMCA was reported out of the House Judiciary Committee, it was referred to the House Committee on Commerce. The Commerce Committee expressed some reservations that the DMCA might undermine Congress's commitment to fair use.²²⁶ These concerns led the Committee to propose a “fail-safe” mechanism—one that would allow the Librarian of Congress, upon recommendation by the Register of Copyrights, to selectively waive the enforceability of the prohibition against circumvention if it was necessary to maintain the availability of a particular category of copyrighted materials.²²⁷ That mechanism is the rulemaking process laid out in section 1201(a)(1).²²⁸

224. See Nimmer, *supra* note 18, at 738-39.

225. One possible limited reading is offered by Jane Ginsburg. See Ginsburg, *supra* note 19. She asserts that the syntax of section 1201(c)(1) permits an argument that “including fair use,” as set off in commas, modifies not the immediately preceding phrase “or defenses to copyright infringement,” but “limitations . . . under this title.” *Id.* at 15. The interpretation finds support in fair use's original judicial nature, its applicability to other areas of intellectual property law, such as trademark, and Congress's disavowal of any intent to “freeze” the judge-made doctrine by codification in 17 U.S.C. § 107.

226. See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,557 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201).

227. See *id.* at 64,558.

228. The section provides in full:

§ 1201. Circumvention of copyright protection systems

(a) Violations regarding circumvention of technological measures.

(1) (A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title. The prohibition contained in the preceding sentence shall take effect at the end of the 2-year period beginning on the date of the enactment of this chapter [enacted Oct. 28, 1998].

(B) The prohibition contained in subparagraph (A) shall not apply to persons who are users of a copyrighted work which is in a particular class of works, if such persons are, or are likely to be in the succeeding 3-year period, adversely affected by virtue of such prohibition in their ability to make noninfringing uses of that particular class of works under this title, as determined under subparagraph (C).

(C) During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works. In conducting such rulemaking, the Librarian shall examine—

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and
- (v) such other factors as the Librarian considers appropriate.

(D) The Librarian shall publish any class of copyrighted works for which the Librarian has determined, pursuant to the rulemaking conducted under subparagraph (C), that noninfringing uses by persons who are users of a copyrighted work are, or are likely to be, adversely affected, and the prohibition contained in subparagraph (A) shall not apply to such users with respect to such class of works for the ensuing 3-year period.

(E) Neither the exception under subparagraph (B) from the applicability of the prohibition contained in subparagraph (A), nor any determination made in a rulemaking conducted under subparagraph (C), may be used as a defense in any action to enforce any provision of this title other than this paragraph.

Put simply, the rulemaking is designed to publish a class of copy-righted works, the fair use of which the DMCA has adversely affected.²²⁹ The Register of Copyrights is to make determinations two years after the statute became effective, and every three years thereafter.²³⁰ The first rulemaking decision issued on October 27, 2000, one day before the 1201(a)(2) anti-circumvention regulation went into effect.²³¹

The first problem with the “fail-safe” mechanism arises out of the structure of the statute itself: the exemption only applies to the statute’s prohibition of circumvention.²³² The statute still prohibits manufacturing and distributing devices to circumvent TPSs, even those specifically designed to facilitate the narrow exemption granted in the rulemaking.²³³ Therefore, even if the Register of Copyrights finds that the DMCA adversely affects users’ rights, users get an exemption in name only.

The upshot is that the fail-safe mechanism protects only the constitutional rights of users capable of circumventing TPSs on their own. This group is already an extremely small one. As TPSs become more advanced, even fewer people will possess the programming skills required to crack TPSs in order to exercise their constitutional use rights. That these hackers’ rights are not diminished is irrelevant: restriction of some users’ rights is not any more constitutional by virtue of the fact that other users’ rights are not restricted.²³⁴ Thus, unless future courts utilize the section 1201(c) limitations to reach a narrower reading of the statute, the presence of the statutory rulemaking provision cannot make the anti-circumvention provisions constitutional.

229. 17 U.S.C. § 1201(a)(1)(D) (Supp. 2000).

230. *Id.* § 1201(a)(1)(C).

231. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201). That decision exempted compilations of web sites blocked by filtering software applications and literary works, including computer programs and databases, protected by TPSs that fail to permit access because of malfunction, damage or obsolescence. 37 C.F.R. § 201.40 (2001).

232. *See* Nimmer, *supra* note 18; *see also* Samuelson, *supra* note 191.

233. *See* Nimmer, *supra* note 18, at 736-37. Nimmer argues that there is good reason not to allow manufacture and distribution of circumvention devices that could be used to facilitate more than just exempted circumvention. The exception would swallow the rule.

234. *See* Planned Parenthood of Southeastern Penn. v. Casey, 503 U.S. 833, 894 (1992) (“Legislation is measured for consistency with the Constitution by its impact on those whose conduct it affects The proper focus of constitutional inquiry is the group for whom the law is a restriction, not the group for whom the law is irrelevant.”).

Congress could lessen the problem with the rulemaking provision by amending it so that exemptions it grants would also extend to the circumvention devices capable only of facilitating those exemptions. This would make the exemptions meaningful for all users regardless of technical skill. This also might mitigate the constitutional problem presented by limiting lawful use rights, but it would most likely not solve it because of the second problem with the rulemaking provision: the framework of the provision itself is not able to produce exemptions sufficient to protect users' rights.

Section 1201(a)(1)(C) requires the Register of Copyrights to determine whether noninfringing use of a particular *class of works* is, or is likely to be adversely affected by the DMCA.²³⁵ “Class of works,” as interpreted by the Register of Copyrights, means a “narrow and focused subset of the broad categories of works of authorship . . . identified in section 102 [of the Copyright Act].”²³⁶ A class can include works from more than one category of works, but is necessarily narrower in scope than any single category.²³⁷ Thus, if users of law casebooks or computer games generally find their uses restricted on the Internet, the Register of Copyrights may exempt those classes of works in a future rulemaking.²³⁸ The legislative history supports this interpretation of “class of works.”²³⁹

In the rulemaking issued on October 27, 2000, the Register argued that though a reference to the medium of work or the TPS applied could narrow the class, the statute does not permit classifying a work solely by reference to the type of use or users.²⁴⁰ Indeed, Congress could have written

235. 17 U.S.C. §§ 1201(a)(1)(B), (a)(1)(C) (Supp. 2000).

236. See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. at 64,560. Section 102 includes but is not limited to: literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial, graphic and sculptural works, motion pictures and other audiovisual works, sound recordings, and architectural works. 17 U.S.C. § 102 (1994).

237. See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. at 64,560.

238. See NIMMER & NIMMER, *supra* note 179, § 12A.03[A][2][b] (Copyright Protection Systems and Management Information, Special Pamphlet).

239. See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. at 64,560-64,561 (citing H.R. REP. NO. 105-551, pt. 2, at 36-38 (1998); and STAFF OF HOUSE COMM. ON THE JUDICIARY, 105TH CONG., SECTION-BY-SECTION ANALYSIS OF H.R. 2281 AS PASSED BY THE UNITED STATES HOUSE OF REPRESENTATIVES ON AUGUST 4, 1998, at 7 (Comm. Print 1998) (Rep. Coble)).

240. *Id.*

section 1201(a)(1) not to rely upon types of works but upon types of uses. It instead chose to advert to language in the Copyright Act itself.²⁴¹ This creates an odd juxtaposition.

Congress deliberately wrote the DMCA to provide a separate cause of action from those provided by the Copyright Act.²⁴² The DMCA premises liability on access and the means by which it is achieved, regardless of the content protected.²⁴³ Copyright law, in contrast, protects certain expressive content from unauthorized use.²⁴⁴ Given their respective purposes, the predicate for liability in each of these statutes makes sense. Whether copyright law protects a work should turn on the nature of the work itself, not how users access it. Conversely, the DMCA seeks to provide legal reinforcement to digital fences; accordingly, it should generally focus liability on bypassing fences without regard to what they protect. But by using copyright language in the DMCA's rulemaking provision, Congress provided an incongruous content-limited fair use exemption to a content-neutral cause of action. It is the only exception to the DMCA not based on the type of use for which a user accesses a work.²⁴⁵

The end result is that exemptions will only protect users of specific types of works, like law textbooks or computer games. This fact highlights the constitutional problem with the limited definition of a "class of works." The fit between what the provision seeks to protect (fair use) and the provision's criterion for protecting it (the DMCA's adverse effect on the use of a class of works) is a poor one. Fair use is usually determined

241. *See supra* note 236.

242. In the amendments proposed by the Committee on Commerce, the DMCA was to be a free-standing set of provisions. Proposed section 102(c)(1), the analogous provision to enacted section 1201(c)(1), read: "[n]othing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, *under title 17, United States Code.*" H.R. REP. NO. 105-551, pt. 2, at 3 (1998), (emphasis added). As enacted, the provision is the same except for the italicized portion above, which reads: "under this title [17]." 17 U.S.C. 1201(c)(1) (Supp. 2000).

243. *See supra* notes 17-22 and accompanying text.

244. *See* 17 U.S.C. § 102 (1994).

245. *See* 17 U.S.C. § 1201(d) (Supp. 2000) (access for nonprofit library's determination of whether to purchase a work); *id.* § 1201(e) (access for law enforcement purposes); *id.* § 1201(f) (access to reverse engineer in order to achieve interoperability of programs); *id.* § 1201(g) (access to conduct encryption research); *id.* § 1201(h) (access to produce technology with the sole purpose of limiting access of minors to material on the Internet); *id.* § 1201(i) (access to identify and disable a TPS's ability to collect and disseminate personal identifying information about a natural person); *id.* § 1201(j) (access for security testing purposes).

without reference to the type of work used—except in the very broad sense of whether the work is factual or fanciful.²⁴⁶ It turns, instead, on how the user uses the work and the type of use to which the user puts the work.²⁴⁷ Under the Register’s interpretation of the statute, however, there is no room for acknowledgment of the types of uses users wish to make under the rulemaking analysis.²⁴⁸

Under the rulemaking procedure, the Register is to consider public comments, including possible exemption classes. The proposed “Fair Use Works” exemption illustrates the difficulty of the content-based definition of “class of works.”²⁴⁹ Proponents of the exemption class defined it as the types of works most likely to be used by libraries and educational institutions for purposes of fair use.²⁵⁰ The problem with drawing the boundaries of such a proposal—and in part the reason the Register rejected it—is that it is too broad unless it can be limited to access for fair use or by certain users (e.g., public libraries).²⁵¹ As the exemption’s proponents recognized, it is wrong to presume that every circumvention is fair just because the

246. *Id.* § 107(2); *see* *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994) (“Th[e second statutory fair use] factor calls for recognition that some works are closer to the core of intended copyright protection than others, with the consequence that fair use is more difficult to establish when the former works are copied. *See, e.g.,* *Stewart v. Abend*, 495 U.S. [207,]237-38 (1990) (contrasting fictional short story with factual works); *Harper & Row [Publishers, Inc. v. Nation Enters.]*, 471 U.S. [539,]563-64 (1985) (contrasting soon-to-be-published memoir with published speech); *Sony [Corp. of Am. v. Universal City Studios]*, 464 U.S. [417,]455 n.40 (1984) (contrasting motion pictures with news broadcasts); *Feist [Publ’ns, Inc. v. Rural Telephone Service]*, 499 U.S. [340,]348-51 (1991) (contrasting creative works with bare factual compilations).”).

247. 17 U.S.C. § 107 (Supp. 2000).

248. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,566-64,573 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201) (rejecting for failure to describe a statutory “class of works” proposed exemptions for “Sole Source Works”); *id.* at 64,567 (“Computer Programs and Other Digital Works for Purposes of Reverse Engineering”); *id.* at 64,570 (“Fair Use Works”—rejecting proposal to extent it sought to limit applicability to certain classes of users or uses); *id.* at 64,571 (“Material that Cannot be Archived or Preserved”); *id.* at 64,572 (“Works Embodied in Copies Which Have Been Lawfully Acquired by Users Who Subsequently Seek to Make Non-infringing Uses Thereof”).

249. *See id.* at 64,571-64,572.

250. *See id.* at 64,571.

251. *Id.* (noting that witnesses testifying on behalf of the proposed exemption explained that the works should be exempted when the purpose of use was fair use, and that the exemption should also be limited to a specific class of persons who were likely to be fair users).

types of works cited are often put to fair use.²⁵² It is for this reason the approach taken by the proponents of the exemption here, though laudable, will probably never work under the statute. Once one defines a class of content by actual or likely uses, taking away the criteria used to define the class makes it unreasonably large.

Notwithstanding the language of the statute, relying on use in defining the class is logically the best way to protect fair use. This approach could ensure congruence between fair uses prevented by the anti-circumvention provisions and fair uses protected by the rulemaking provision. A use-based approach would also alleviate a related problem the rulemaking provision creates: by using a content-based definition of an exempted class, it necessarily must rely on aggregate, rather than individual cases of attempted fair use. If the Register of Copyrights granted a content-based exemption because of a single owner's restriction of fair use,²⁵³ all owners of a particular type of content would be unable to prevent circumvention. This would be unfair, so the standard must aggregate frustrated attempts at fair use for the entire class of content.

The resulting standard is that users of a class of works must have experienced "distinct, verifiable, and measurable impacts" on lawful use of the entire class of works before the Register will grant them an exemption.²⁵⁴ "[M]ere inconveniences, or individual cases" do not warrant an exemption.²⁵⁵ This standard limits the right of fair use to the rare situation²⁵⁶ in which a substantial number of people wishing to make fair use of a particular type of work have had that right restricted by TPSs and the DMCA. Not surprisingly, the Register struck down many proposals for lack of evidence of adverse effect in the aggregate.²⁵⁷

252. *Id.*

253. *See id.* at 64,560: "For example, if a showing had been made that users of motion pictures released on DVDs are adversely affected in their ability to make noninfringing uses of those works, it would be unfortunate if the Librarian's only choice were to exempt motion pictures."

254. H.R. REP. NO. 105-551, pt. 2, at 37 (1998).

255. STAFF OF HOUSE COMM. ON THE JUDICIARY, 105TH CONG., SECTION-BY-SECTION ANALYSIS OF H.R. 2281 AS PASSED BY THE UNITED STATES HOUSE OF REPRESENTATIVES ON AUGUST 4, 1998, at 6 (Comm. Print 1998) (Rep. Coble).

256. This was explicitly contemplated by Congress: "In any 3-year period, it may be determined that the conditions for the exemption do not exist." H.R. REP. NO. 105-551, pt. 2, at 36.

257. *See* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,566-64,573 (Oct. 27, 2000) (to be codified at 37 C.F.R. pt. 201), rejecting for failure to establish substantial

Ultimately, the substantial effect requirement may be susceptible to constitutional challenge because it mistakenly treats information as a fungible commodity. In essence the provision states that if a user cannot use a particular law text or computer game, she must go out and make use of another. Only if a TPS shields all law texts or computer games from fair use will an exemption lie under section 1201(a)(1). Fair use, however, is not merely a general right to use information; it exempts lawful use of information the user actually chooses to use. This reflects the First Amendment right to acquire knowledge of one's choice.²⁵⁸ Thus the rulemaking provision fails to protect the constitutional right to make fair use of a particular lawfully acquired work by limiting relief to those situations in which lawful use of a whole class of works has been substantially affected.

Overall, the rulemaking provision is unlikely to help those wishing to make fair use of digital works. Even if Congress amends it to extend exemptions to circumvention devices capable of facilitating only protected uses, the exemptions themselves do not adequately protect fair use. The rulemaking provision does not narrow courts' broad readings of the anti-circumvention provisions enough to protect constitutional speech rights. Where the statute reinforces overly restrictive TPSs, it fosters only protection, not "Progress," because it limits the protected speech of users. Accordingly, the broad reading of the DMCA is constitutionally unsound.

Nevertheless, the broad reading is not inescapable. Courts have yet to acknowledge the section 1201(c) fair use and free speech safeguards. One commentator, for example, interpreted section 1201(c)(1) to mean that fair use must be an available defense to all challenges under the anti-circumvention provisions.²⁵⁹ As yet, however, no court has hinted at any similarly limiting approach. If courts cannot come to a narrower interpretation of the anti-circumvention device provision—one which protects us-

adverse effect proposed exemptions for "Thin Copyright Works," *id.* at 64,566, "Sole Source Works," *id.* at 64,567, "Audiovisual Works on Digital Versatile Discs (DVD)," *id.* at 64,567-64,570, "Video Games in Formats Playable Only on Dedicated Platforms," *id.* at 64,570, "Computer Programs and Other Digital Works for Purposes of Reverse Engineering," *id.* at 64,570, "Encryption Research Purposes," *id.* at 64,571, "Fair Use Works," *id.* at 64,571, "Material that Cannot be Archived or Preserved," *id.* at 64,572, and "Works Embodied in Copies Which Have Been Lawfully Acquired by Users Who Subsequently Seek to Make Non-infringing Uses Thereof," *id.* at 64,572-64,573.

258. *See Meyer v. Neb.*, 262 U.S. 390, 390 (1923) (striking down as inconsistent with the First Amendment a statute that prohibited teaching of German, but not ancient Greek, to a minor).

259. *See supra*, note 225.

ers' free speech rights—courts should hold this section of the DMCA unconstitutional.

IV. BEYOND THE DMCA: PRIVATE AND JUDICIAL ORDERING OF TPSs

Even if courts declare the DMCA's anti-circumvention provisions unconstitutional, this would not directly affect the technology they protect. A court is most likely to find the statute unconstitutional where an especially restrictive TPS is challenged by people who have lawfully acquired digital media but are unable to make fair use of it. The court, if it perceives itself to be bound by the language, legislative history, and prior judicial interpretation of the DMCA, may strike down the anti-circumvention provisions as unconstitutionally conveying a right to restrict users' speech by use of this particular TPS. It would be unnecessary, however, for the court to rule on the right of the content owner to use the TPS itself to reach its holding. Thus, even if a court struck down the challenged statutory provisions, access to protected works will still depend on availability of technical circumvention means. As a practical matter, this will probably foreclose some legitimate uses.²⁶⁰

In Part II, this Comment argued that the scope of the anti-circumvention provisions depends on the strength and restrictiveness of the TPSs they reinforce. This section addresses the potentially problematic TPSs themselves. The concern with TPSs is the same as the one that motivated the analysis of the DMCA: content owners should not be able to restrict constitutionally protected user rights by using TPSs to protect digital media.

As this Comment has indicated throughout, however, TPSs are important to digital content development and can be extremely beneficial to both producers and users. TPSs offer benefits to owners and users, such as

260. TPSs offer protection from all but a tiny fraction of users. Of the fifty percent of Americans on the Internet today, very few have the technical skills necessary to break through even simple digital fences. Despite the ease with which Jon Johansen cracked the DVD protection code CSS, it had been around for three years before he broke it. *See Universal City Studios v. Reimerdes*, 111 F. Supp. 2d 294, 311 (S.D.N.Y. 2000). Assuming anyone previously thought to break it in those three years, easy as it may have been for Johansen to do, it was apparently beyond other people's limited capabilities. Furthermore, hackers are still a fringe element in society, and given that the very word has become a pejorative epithet in judicial use, there is reason to believe they will be relegated further from the mainstream in the future.

reduced media theft, potential increases in access and distribution, authentication and certainty in uses and transactions, and facilitation of streamlined negotiations. Most importantly, TPSs will allow content owners to capture value previously unavailable from their works without recourse to copyright law. Given the difficulties of enforcing copyright law on the Internet, TPSs are necessary to media production. The music and movie industries, for example, have claimed that they will not produce content on the Internet without them.²⁶¹ Thus, the law should permit, and even encourage, the development of TPSs.

The stronger the TPS, the easier it is to recognize these potential boons. Unfortunately, the most powerful TPSs also pose the greatest threat to users' rights. Thus, the law must balance the rights of users and the needs of copyright owners. The legal system's goal, then, should be a legal and judicial environment in which content owners can develop TPSs extensively but carefully.

A. The Problem with Private Ordering by TPSs

The current statutory and judicial framework places TPSs outside the scope of direct regulation. This is troubling because copyright owners' overriding concern is to derive the most value from their media. In addition, the DMCA's current indiscriminate reinforcement of TPSs encourages the creation of the strongest, most restrictive protection systems. Even without the DMCA, content owners would have a powerful incentive to create strong TPSs: if a TPS failed without the DMCA, there would be no legal recourse for the copyright owner. This incentive structure suggests the need for legislative or judicial regulation, because preservation of user interests is unlikely to occur under a system of private ordering through the market. As this Comment has already discussed the problems with the current legislative scheme,²⁶² it now explores the likelihood that the private market will produce TPSs that preserve fair use rights and the public domain, before turning to judicial options.

So far, commentators have discussed technical protections primarily in the context of their facilitation of electronic contracts.²⁶³ The main point

261. See *supra* notes 173-77.

262. See *supra* Part III.

263. See Bell, *supra* note 15; Cohen, *supra* note 63; Julie E. Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management,"* 97 MICH. L. REV. 462 (1998) [hereinafter Cohen, *Lochner in Cyberspace*]; Elkin-Koren, *supra* note 56; Fisher, *supra* note 301; David Friedman, *In Defense of Private Orderings: Comments on Julie Cohen's "Copyright and the Jurisprudence of Self-Help,"* 13 BERKELEY TECH L. J. 1151 (1998); Michael J. Madison, *Legal-Ware: Contract and*

of contention in these discussions is whether a private ordering system, through contract, will adequately protect the public domain.²⁶⁴ Proponents of the private exchange view maintain that rational parties do not participate in transactions that are not beneficial to them.²⁶⁵ They also believe that because contracts express autonomous choices and accurately reflect the intent of the parties, they are more legitimate than rules made by centralized bodies.²⁶⁶ This belief, however, assumes that the contracting parties know the terms of the contract and give their meaningful assent to the terms.²⁶⁷ When these assumptions break down, the private exchange view loses much of its bite.

The main problem with the private exchange view is that, while individuals may have knowledge of the terms of, and give meaningful assent to, individually negotiated transactions, this is not the case with mass-market contracts.²⁶⁸ In mass-market contracts, terms are standardized. A market governed by these standard contracts is likely to produce little competition, leaving users no choice among terms.²⁶⁹ Further, even assuming that a user could negotiate any terms, this model ignores the fact that non-price terms are more difficult to negotiate than price.²⁷⁰ Yet another problem with the private exchange view is that users cannot easily predict the value that they will derive from future uses of media.²⁷¹ In con-

1151 (1998); Michael J. Madison, *Legal-Ware: Contract and Copyright in the Digital Age*, 67 *FORDHAM L. REV.* 1025 (1998).

264. *See supra* note 263.

265. *See* Elkin-Koren, *supra* note 56, at 1166.

266. *See id.* at 1172.

267. *See* Cohen, Lochner in *Cyberspace*, *supra* note 263, at 482.

268. The market for creative and informational works on the Internet is generally governed by standardized form contracts, which offer the consumer no opportunity to negotiate terms. *See* Elkin-Koren, *supra* note 56, at 1182-83. For example, an eBook version of Lewis Carroll's *Alice in Wonderland*, published by VolumeOne for the Adobe Acrobat eBook Reader comes with the following use restrictions attached:

COPY: No text selections can be copied from this book to the clipboard.

PRINT: No printing is permitted on this book.

LEND: This book cannot be lent to someone else.

GIVE: This book cannot be given to someone else.

READ ALOUD: This book cannot be read aloud.

eVIL, HARPER'S, Mar. 2001, at 18.

269. *See* Elkin-Koren, *supra* note 56, at 1183.

270. *See* Cohen, Lochner in *Cyberspace*, *supra* note 263, at 488.

271. It is difficult to predict future uses because creative and informational works can be used in so many ways. Since many of the definitions of these uses rely on obscure legal terms—like fair use—restrictions may not be easy for purchasers to understand.

trast, content owners, who engage in many transactions, are better able to predict value than single-exchange users and therefore have a bargaining advantage.²⁷² Thus, in the mass-market contract context, users frequently have few options and inadequate knowledge to make an informed choice among them. The private ordering rationale for contract-based transactions in intellectual property fails in this context because the contract does not reflect the will of both of the parties.

The use of TPSs to order information transactions implicates all of the same concerns that arise in the mass-market contract context, and in addition, a few others. TPSs are never negotiable; instead, they are product-defining. They need not be transparent either: they can define products vis-à-vis their uses without telling the user that she will not be able to make fair use quotations or use public domain aspects of the work. In the alternative, content owners could design TPSs to provide this information to the user at the onset. In fact, this would ensure that both parties have full knowledge of the terms of the transaction and therefore would facilitate fair negotiation of terms. In contrast to contracts, however, there are no laws or regulations requiring copyright owners relying on TPSs to make these disclosures.²⁷³ Ultimately the dispute need not reach the courts because content owners can engage in electronic self-help without relying on legal reinforcement.

In sum, the very nature of TPSs undermines the assumptions made by the private exchange view of market transactions. In addition, the fact that TPSs do not enjoy the system of oversight in place for contracts further limits the applicability of the private exchange view to TPSs. Therefore, it is dangerous to unquestioningly relegate the control of TPSs to private ordering.

Apart from questions of information and assent, private ordering of information markets threatens the production of benefits that the market is unable to value. Julie Cohen has provided a devastating critique of private ordering of intellectual property rights on the Internet.²⁷⁴ Of particular relevance is her inquiry into the relationship between information and so-

Finally, information on the cost and benefit of each use is likely to be difficult to obtain. See Elkin-Koren, *supra* note 56, at 1181-82.

272. *Id.*

273. Enforcement of contracts, at least, is subject to judicial inquiry for notice, assent, and unconscionability. The UCC also contains consumer protections, such as implied warranties and remedies. These are on the decline even for digital contracts, however. The Uniform Computer Information Transactions Act, which limits these protections, has been adopted by at least two states.

274. See Cohen, Lochner in *Cyberspace*, *supra* note 263.

cial welfare.²⁷⁵ Cohen argues that information is inherently transformative because its shared benefits are central to the social self-definition of individuals.²⁷⁶ Information use creates ancillary social value by shaping public opinion, interactions, and political participation, and provides a feedback circuit for further information production and receipt.²⁷⁷ The current real-world common ownership model—the public domain—facilitates this cross-pollination, amplifying information’s transformative effects.²⁷⁸

These ancillary social benefits require a network of information users to achieve their value, which raises a collective action problem.²⁷⁹ From the perspective of an individual user, the ability to share information with others is of uncertain value since it involves hypothetical future uses.²⁸⁰ Accordingly, users undervalue the right to take part in this sharing of information. From the owner’s perspective, this same uncertainty causes them to overvalue a right to share because they want to collect on every potential use.²⁸¹ An individual user is therefore unlikely to value privileges provided for future uses highly enough to pay the price the owner demands for them. The result is that, in a purely market-driven system where TPSs control all types of use, uses of information that are particularly valuable in the aggregate will not occur because individual users will not pay owners for those rights. Allowing content owners to use TPSs to control access to their works will not only give owners benefits previously unavailable to them because of real-world market inefficiency, it will also qualitatively change the nature of information use.²⁸² Media will no longer play the socially beneficial role it has in the past because the market cannot capture the uses of media that accomplish that function.

This is not to say that the market should not play a part in the regulation of information production in our society. Congress created copyright law in part as a response to the market failure arising from the public goods aspect of creative and informational works.²⁸³ Without a system of exclusive rights, some authors will not be able to capture the value of the works they create. However, since TPSs may be unilaterally imposed by

275. *See id.* at 538-59.

276. *See id.* at 544-47.

277. *Id.*

278. *See id.* at 547.

279. *See id.* at 544-46.

280. *See id.* at 547.

281. *See id.* at 549.

282. *See id.* at 550.

283. *See id.* at 471.

content owners and do not require informed consent, leaving their regulation to the market is cause for concern.

Content owners have little reason to avoid infringing users' rights. Copyright owners, motivated by payment for access to, and use of, copyrighted materials are unlikely to favor careful development and implementation of TPSs. Therefore, courts should scrutinize TPSs that come before them. If a TPS expands the owner's intellectual property rights to limit the user's constitutional use rights, courts should refuse to give it effect. Finally, as the Comment describes in Parts IV.C and IV.D, below, courts should seek to create an incentive scheme that favors development of strong, carefully implemented TPSs.

B. Judicial Delineation of the Public Domain and Fair Use

Although Congress has played a major role in shaping copyright law, judicial opinions have always defined its contours. American courts began defining the public domain shortly after Congress passed the first Copyright Act in 1790.²⁸⁴ In *Wheaton v. Peters*, the Supreme Court held that the common law copyright—which then existed in perpetuity—was inconsistent with the “limited Times” language of the Intellectual Property Clause.²⁸⁵ The Supreme Court therefore held that all previous literary rights not expressed in the 1790 Act passed into the public domain upon vesting of federal statutory copyright.²⁸⁶ Since then, the federal courts have defined the public domain by holding that the copyright grant does not protect ideas, systems,²⁸⁷ methods,²⁸⁸ facts,²⁸⁹ utilitarian objects,²⁹⁰ titles,²⁹¹ plots,²⁹² style,²⁹³ or federal government works.²⁹⁴ They have similarly delineated the fair use doctrine.²⁹⁵

284. Act of May 31, 1790, ch. 15, 1 Stat. 124 (repealed 1834); *see also* Litman, *supra* note 80, 978 n.76.

285. *See* *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591 (1834); Howard B. Abrams, *Exploding the Myth of Common Law Copyright*, 29 WAYNE L. REV. 1119 (1983). *See also* Litman, *supra* note 80, at 978. Litman has closely traced the judicial development of the public domain; many cases she relies on are noted in this part of the discussion.

286. *Peters*, 33 U.S. (8 Pet.) at 591.

287. *Baker v. Selden*, 101 U.S. 99 (1879).

288. *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff'd by an equally divided court*, 516 U.S. 233 (1996).

289. *Feist Publ'ns, Inc. v. Rural Tel. Serv.*, 499 U.S. 340 (1991).

290. *Mazer v. Stein*, 347 U.S. 201 (1954).

291. *See, e.g., Weissman v. Radio Corp. of Am.*, 80 F. Supp. 612 (S.D.N.Y. 1948); Litman, *supra* note 80, at 993 n.169.

292. *Nichols v. Universal Pictures Corp.*, 45 F.2d 119 (2d Cir. 1930).

In subsequent versions of the Copyright Act, Congress has frequently followed the courts' rulings on the limitations imposed on copyright by the public domain and fair use.²⁹⁶ Courts, then, have been the primary delineators of the scope of the public domain and fair use doctrine. As discussed previously in Part III.A, these aspects of informational and creative works comprise the building blocks of authorship, and consequently speech. Thus, even if the federal judiciary has never explicitly acknowledged this role (or arguably even been aware of it²⁹⁷), the courts have always been a primary forum for the shaping of the intersection between intellectual property rights and free speech. In the real world, courts have been responding to a statutory monopoly. However, the limitations they have placed on that monopoly derive not from statutory language, but from concerns about continued creative and informational output and the constitutionally limited nature of intellectual property.²⁹⁸ Courts must continue to address these concerns as protection of intellectual property shifts from law to technology. In the following sections the Comment offers two approaches the courts should take: first, direct regulation of TPSs on constitutional grounds; second, indirect regulation through the copyright misuse doctrine.

293. *See, e.g.*, *Franklin Mint Corp. v. Nat'l Wildlife Art Exch.*, 575 F.2d 62 (3d Cir.), *cert. denied*, 439 U.S. 880 (1978); Litman, *supra* note 80, at 993 n.175.

294. *See, e.g.*, *Scherr v. Universal Match Corp.*, 417 F.2d 497 (2d Cir. 1969), *cert. denied*, 397 U.S. 936 (1970); Litman, *supra* note 80, at 993 n.176.

295. *See, e.g.*, *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994); *Alfred Bell & Co. v. Catalda Fine Arts*, 74 F. Supp. 973, 977 (S.D.N.Y. 1947).

296. *See* 17 U.S.C. § 102(b) (1988) (ideas, systems); 17 U.S.C. §§ 101, 113 (Supp. 2000) (useful articles); 17 U.S.C. § 105 (1994) (federal government works); Litman, *supra* note 80, at 992 n.163.

297. *See generally*, Litman, *supra* note 80.

298. *See, e.g.*, *Baker v. Selden*, 101 U.S. 99, 104 (1879) (“[T]he teachings of science and the rules and methods of useful art have their final end in application and use; and this application and use are what the public derive from the publication of a book which teaches them. But as embodied and taught in a literary composition or book, their essence consists only in their statement. This alone is what is secured by the copyright.”); *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 122 (2d Cir. 1930) (“[G]ranting that the plaintiff’s play was wholly original, and assuming that novelty is not essential to a copyright, there is no monopoly in such a background [‘a quarrel between a Jewish and an Irish father, the marriage of their children, the birth of grandchildren and reconciliation’]. Though the plaintiff discovered the vein, she could not keep it to herself; so defined, the theme was too generalized an abstraction from what she wrote. It was only a part of her ‘ideas.’”); *Feist Publ’ns, Inc. v. Rural Tel. Serv.*, 499 U.S. 340, 346 (1991) (“[T]he Court made it unmistakably clear that [the terms “authors” and “writings”] presuppose a degree of originality The originality requirement is constitutionally mandated for all works.”).

C. Direct Judicial Regulation of TPSs

A court directly regulating TPSs would enjoin the use of a particular TPS if it impermissibly restricts users' rights. The constitutional analysis of the TPS would rely on the same facts about available access and use as a court would in evaluating the broad reading of the DMCA.²⁹⁹ There, the propriety of the anti-circumvention provisions was a function of whether the technology they protected was overly restrictive of users' rights. Here, if a TPS prevents fair use and access to the public domain, the effect on speech rights of users is no less significant. Therefore, the judiciary must protect the public domain and fair use, whether impinged upon by technology-derived statutory rights or the technology itself. Injunctions against the use of particular TPSs—notwithstanding the possible state action objections discussed below—would be an appropriate means for the courts to preserve users' rights.

The constitutional question in these cases differs slightly from that in the DMCA cases. The justifications discussed in Part III.A for TPS-based restrictions of fair use and the public domain³⁰⁰ are all diminished for individual content owners in comparison to the government, because the magnitude of each concern is smaller where only single producers are concerned. On the other hand, they still can rely on the argument that producers of intellectual property have a right to protect it. The underlying sense that people's product is their own, that intellectual property is its owner's to do with as he pleases, has much intuitive appeal.³⁰¹ It may in fact be one consideration keeping courts from squarely addressing the implications of TPSs for users' rights.

It is the scope of that intellectual property, however, that is the issue here, not the ownership. Once an author publishes a work, the law has always implied consent to reasonable use as necessary for constitutional promotion of "Progress."³⁰² TPSs can prevent this reasonable use. But a content owner should not receive a stronger right to monopolize published media simply because he has published his work in a digital environment.

299. *See supra* Part III.

300. These justifications were: unwillingness to produce content on the Internet, the importance of the copyright industry to the domestic economy, and the difficulties of tracking copyright infringement on the Internet. *See supra* Part III.A.

301. *Cf.* William W. Fisher III, *Property and Contract on the Internet*, 73 Chi.-Kent L. Rev. 1203 (1998) (discussing the Lockean justification for intellectual property as a natural property right to the fruits of one's labors).

302. *See Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 549 (1985).

The desire and newfound ability to adopt overly restrictive fencing of published material does not justify restriction of users' constitutional rights. TPSs cannot stand where they impermissibly restrict users' rights.

The state action doctrine presents the most serious obstacle to direct regulation of TPSs. This doctrine holds that the Constitution's limitations apply only to government conduct.³⁰³ TPSs, as private digital fences, are arguably beyond the reach of the courts because the government is not intervening on content owners' behalf. Paul Schiff Berman has recently discussed the particular state action issues raised by constitutional discourse in cyberspace.³⁰⁴ The typical criticisms of the doctrine focus on the pervasive part played by law in every aspect of public and private lives.³⁰⁵ Negative decisions to allow behavior, i.e., the absence of regulation, play as much of a role in shaping society as government intervention to proscribe actions.³⁰⁶ The distinction between legally allowed and prohibited behaviors is a product of state decisionmaking, not an intrinsic characteristic of the behavior itself. It is therefore incoherent to limit constitutional discourse to acts of government intervention.³⁰⁷

With regard to digital fences, it makes little sense to say Congress may not create an unlimited copyright grant, but must allow content owners to do so using TPSs. Government inaction in the face of overly restrictive TPSs shapes our information society just as much as an unlimited legal monopoly in digital media would.

However, there is a strong appeal to the idea that people should be able to control what they produce.³⁰⁸ Even if it is incoherent, the pub-

303. For the genesis of the state action doctrine, see *The Civil Rights Cases*, 109 U.S. 3 (1883). At least one court has applied the doctrine to a question of an Internet service provider limiting its users' speech. See *Cyber Promotions, Inc. v. Am. Online*, 948 F. Supp. 436 (E.D. Pa. 1996) (holding AOL to be a private actor not subject to the First Amendment's strictures); Paul Schiff Berman, *Cyberspace and the State Action Debate: The Cultural Value of Applying Constitutional Norms to "Private Regulation,"* 71 U. COLO. L. REV. 1263, 1283 (2000).

304. Berman, *supra* note 303, at 1266.

305. *Id.* at 1278 (citing Morris Cohen, *Property and Sovereignty*, 13 CORNELL L.Q. 8 (1927)).

306. "[A]ll private actions take place against a background of laws. These laws embody state decisions either to permit or proscribe behavior. For example, legally permitted actions are permitted solely because the state has made a decision not to prohibit those actions. If such actions ultimately cause harm, it is therefore difficult to say the state has played no role." Berman, *supra* note 303, at 1279.

307. *Id.*

308. *Cf. supra* note 301.

lic/private distinction intuitively resonates with notions of freedom in our society. Thus the incoherence argument is not enough to overcome the state action doctrine alone. Nevertheless, fundamental values underlying the limited nature of intellectual property do not cease to be of importance when private action implicates them. Lawrence Lessig has noted:

If code functions as law, then we are creating the most significant new jurisdiction since the Louisiana Purchase, yet we are building it just outside of the Constitution's review. Indeed, we are building it just so that the Constitution will not govern—as if we want to be free of the constraints of value embedded by our traditions.³⁰⁹

As technology supplants law as the primary means of media protection on the Internet, private actors are likely to threaten constitutional values with their actions. Furthermore, the threats will increase not only in number but also in magnitude as new technologies protected by TPSs become a more important source of information in society. Thus, preserving fair use and the public domain against private, not government action, will be of crucial importance in the digital age.

Berman offers a “constitutive constitutionalism” argument to circumvent the state action doctrine. His theory focuses on the symbolic role the Constitution plays in cultural and societal discourse.³¹⁰ Because it is a document constitutive of the people, courts adjudicating constitutional issues write the collective story of the people.³¹¹ The story supplies a structure for citizens to make judgments about the shape of their society.³¹² Society thereby articulates fundamental values through constitutional decisionmaking on a collective level with strong symbolic power.³¹³ A failure to engage in a discussion of fundamental speech values when TPSs implicate them silently writes them out of the story. Conversely, acknowledging the issue triggers the courts’ institutional role as deliberative fora for

309. LESSIG, *supra* note 29, at 217.

310. Berman, *supra* note 303, at 1290; *see also* Reva B. Siegel, *Collective Memory and the Nineteenth Amendment: Reasoning About “The Woman Question” in the Discourse of Sex Discrimination*, in HISTORY, MEMORY, AND THE LAW 131 (Austin Sarat & Thomas R. Kearns eds., 1999); Robert M. Cover, *Nomos and Narrative*, 97 HARV. L. REV. 4 (1983).

311. *See* Siegel, *supra* note 310, at 134; Berman, *supra* note 303, at 1293.

312. *See* Siegel, *supra* note 310, at 134; Berman, *supra* note 303, at 1293.

313. *See* Berman, *supra* note 303, at 1293.

fundamental values.³¹⁴ Constitutional interpretation here can be valuable because it will require courts, through principled decisionmaking, to harmonize the new face of intellectual property law on the Internet with the two-hundred year story of fair use and the public domain.³¹⁵ In other words, it would be best for courts—the primary delineators of the doctrines—to continue the discussion they began in 1790. Constitutional discourse can ensure the choices made are well thought-out and reflect the balance of interests of society as a whole. Reliance on the state action doctrine to take the issue away from courts cuts off a vital forum for formulation of our information law. Furthermore, the fact that the current statutory landscape protects TPSs without regard to their restrictiveness confirms that the public—who stands to lose the most if the public domain is enclosed—cannot expect much from the legislature.³¹⁶ The courts are the public’s only other option.

Apart from the state action doctrine, there is nothing about regulation of TPSs to suggest that the topic is beyond judicial competence. The technical issues raised by TPS regulation are substantially similar to those involved in enforcing the DMCA. Technological restrictions on fair use and enclosure of the public domain are as easily susceptible to evidentiary proof and disproof as circumvention and devices used to circumvent. Further, it is just as much within Congress’s power to regulate locks as lock-picks. Accordingly, it is also within the courts’ power to enforce a hypothetical statute limiting the permissible scope of protection by TPSs. Thus, there is nothing inherent in programs that fence that makes them less regulable than programs that cut fences. If the courts can overcome the state

314. See Owen Fiss, *The Supreme Court, 1978 Term—Foreword: The Forms of Justice*, 93 HARV. L. REV. 1, 10 (1979) (implying that courts are more “ideologically committed [and] institutionally suited to search for the meaning of constitutional values” than legislatures); Berman, *supra* note 303, at 1298.

315. See Ronald Dworkin, *The Moral Reading and the Majoritarian Premise*, in FREEDOM’S LAW: THE MORAL READING OF THE AMERICAN CONSTITUTION 1, 2, 30 (1996) (Courts must seek “the best conception of constitutional moral principles . . . that fits the broad story of America’s historical record;” “Individual citizens may be able to exercise the moral responsibilities of citizenship better when final decisions are removed from ordinary politics and assigned to the courts, whose decisions are meant to turn on principle, not on the weight of numbers or the balance of political influence.”); Berman, *supra* note 303, at 1299.

316. Cf. Litman, *Copyright Noncompliance*, *supra* note 8, at 240-41 (showing that users are not among the represented stakeholders in the creation of laws protecting media).

action obstacle, then there is nothing intrinsic to TPSs that places them outside the purview of the courts.

Should courts decide to address TPSs directly, a ruling that a particular TPS unconstitutionally restricts users' rights would have a significant impact on the direction in which the technology moves. Content owners would face two development paths: either create weak TPSs that do not infringe users' constitutional rights, or opt out of the intellectual property system by relying solely on strong and restrictive TPSs.³¹⁷ The constitutional line drawn by courts would necessarily leave at least a small range of TPSs beyond the protection of law. Because perfect technical protection is impossible, there would be an area of tremendous risk for content owners in which neither law nor technology could reliably guard their media. Therefore the risks inherent in choosing the all-technology route would probably lead most content owners to favor a constitutionally acceptable TPS that can be backed by law. Strong TPSs will be perfectly acceptable, even desirable, as long as they do not overly restrict users' rights. As in the constitutional evaluation of the DMCA in Part III, courts must carefully distinguish between the strength of the TPS and its restrictions on users' rights because only the latter are constitutionally problematic. A well-reasoned ruling would therefore give no disincentives to create TPSs that are extremely difficult to crack, provided they allow for constitutionally protected users' rights.

What such a TPS might look like is still unclear. It is unlikely that the court would provide specific guidelines for what the technology can and cannot do, given the technologies' complexities and the courts' general distaste for judicial legislation. As noted earlier, TPSs will always prevent some noninfringing uses of protected material. Even at their best TPSs designed to allow fair use will only be able to identify those uses which are always or nearly always fair.³¹⁸ Content owners could code a gateway for these limited uses directly into the digital fence. More often, though, fair use requires a complex case-by-case statutory analysis, which will be beyond the capacity of computers until they develop human judgment abilities. It therefore seems likely that to effectively preserve users' rights

317. Those content owners who completely opted out of federal protection could still turn to state contract law, of course. But contracts are subject to preemption under 17 U.S.C. § 301 where they conflict with copyright law. See Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CAL. L. REV. 111, 157 (1999).

318. See *supra*, note 30.

and to maintain the public domain, content owners will have to use a system external to the TPSs. Dan L. Burk and Julie Cohen argue that combined with the limited coded fair use defaults sketched above, an escrow system under which users apply to a trusted third party for keys to circumvent TPSs could help solve the problem.³¹⁹ Whatever the eventual solution, the courts' delineation of fair use and the public domain in the digital environment is an essential first step in resolving the problem of TPSs.

D. Indirect Regulation through the Copyright Misuse Doctrine

Copyright misuse, an issue not yet considered by the courts in the context of TPSs, may provide an effective means for judicial discussion and regulation of TPSs. The doctrine renders a copyright unenforceable if the owner has attempted to extend or broaden the scope of the copyright monopoly in licensing or enforcement.³²⁰ The doctrine developed recently, having only seriously been considered in district courts for the past ten years.³²¹ As such, its boundaries are still fuzzy.³²²

The principle of the doctrine is that courts should not play a role in extending the copyright monopoly beyond its statutory bounds.³²³ Copyright misuse does not require a violation of antitrust laws.³²⁴ Nor does it require the defendant to have actually been subject to or affected by the restriction that exceeded the scope of copyright.³²⁵ So far, courts have found misuse where content owners: 1) used a copyright license clause precluding development of competing software for ninety-nine years;³²⁶ 2) used a li-

319. See Burk and Cohen, *supra* note 30.

320. See Lemley, *supra* note 317, at 151.

321. See *id.* at 152.

322. For example, defendants in the *Napster* case argued the record companies' attempt to enforce their copyrights was misuse on the ground that it would have the effect of controlling what other copyright holders chose to do with their media. Although the argument holds some intuitive appeal, as a matter of law it is hard to see why plaintiffs should be precluded from enforcing their copyrights merely because the technology being used to violate them is incapable of preventing only selected uses. See *A & M Records, Inc. v. Napster, Inc.*, 114 F. Supp. 2d 896, 923 (N.D. Cal. 2000).

323. See Lemley, *supra* note 317, at 153.

324. See *DSC Communications Corp. v. DGI Techs.*, 81 F.3d 597, 601 (5th Cir. 1996).

325. See *Lasercomb Am., Inc. v. Reynolds*, 911 F.2d 970, 979 (4th Cir. 1990). Mark Lemley has criticized such broad remedial application of misuse in the patent context. See Mark A. Lemley, Comment, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 CAL. L. REV. 1599, 1614-20 (1990).

326. See *Lasercomb*, 911 F.2d 970.

cense clause precluding use of a competing work;³²⁷ 3) sued to prevent temporary copying needed to make competing hardware interoperable with plaintiff's copyrighted operating system,³²⁸ and 4) similarly attempted to expand their copyright.³²⁹ Application of the doctrine to TPSs would be simple in principle: use of any technological barrier that effectively broadens the content owner's rights beyond the constitutional balance would render the copyright unenforceable.

Copyright misuse is an appropriate tool for dealing with TPSs for several reasons. Pragmatically, it could address the interests of users without having to deal with collective action problems. It is unlikely that any of the millions of noncommercial home users will have sufficient incentive or capacity to bring a lawsuit. As such, they will probably forego unauthorized uses. If one is sued for infringement, however, copyright misuse can be a powerful defense. Next, because copyright misuse directly implicates questions about the scope of intellectual property, it will highlight the question of what constitutional balance is appropriate for copyright on the Internet. In addition, because it is merely a refusal to set in motion governmental process, rather than action against a private party through direct regulation of TPSs, copyright misuse will allow the court to undertake a constitutionally-grounded analysis without facing the state action dilemma. Finally, copyright misuse will force content owners to choose whether or not to opt out of copyright—the same decision that direct regulation on constitutional grounds forced in the previous section—which may be quite dangerous if TPSs cannot protect works satisfactorily on their own. Content owners would still have recourse to state contract law to reinforce their technological fences, but courts may render the contracts unenforceable on similar facts to those warranting a finding of copyright misuse.³³⁰

The major limitation of copyright misuse is that it is only a threat to content owners who are seeking to safeguard works protected by copy-

327. *See Practice Mgmt. Info. Corp. v. Am. Med. Ass'n*, 121 F.3d 516 (9th Cir. 1997).

328. *See DSC Communications Corp. v. DGI Techs.*, 81 F.3d 597 (5th Cir. 1996).

329. *See Lemley, supra* note 317, at 153 n.195 (collecting cases). One court stated "it is copyright misuse to exact a fee for the use of a musical work which is already in the public domain." *F.E.L. Publ'ns, Ltd. v. Catholic Bishop*, 214 U.S.P.Q. (BNA) 409, 413 n.9 (7th Cir. 1982).

330. *See Lemley, supra* note 317, at 157 (noting that copyright misuse cannot be contractually waived, and so may defeat a copyright claim, but will not of its own force render a contract unenforceable).

right. It will thus have no bearing on the development of TPSs by creators of currently uncopyrightable collections of information. Even holders of thin copyrights would be less deterred than owners of expression entitled to full legal protection. Thus, copyright misuse may be of limited use in preserving the public domain on the Internet. On the other hand, it may be quite valuable as a means of ensuring fair uses of copyrighted works that are available in the digital environment.

The powerful threat of nullifying the content owner's copyright would provide them with a strong incentive to ensure the availability of fair use to users who have lawfully acquired copies. This, however, highlights a problem with the doctrine in general: making the copyright completely unenforceable is a harsh remedy. Judges may therefore be reluctant to apply copyright misuse to TPSs.³³¹

Finally, as with direct judicial regulation, copyright misuse does not address how content owners should develop strong, but not overly restrictive TPSs. As discussed in the previous section, trusted third party involvement will likely be necessary to accomplish this end. Ultimately, like direct regulation, controlling the use of TPSs with the copyright misuse doctrine will not solve the problem of how to preserve fair use and the public domain. It will, however, provide incentives to content owners and the legislature to figure out a better solution than the one currently in place.

V. CONCLUSION

The specter of a "pay-per-use" society has not yet materialized. Informational and creative works that are available in digital form still, for the most part, exist in non-digital form as well. But Congress and the courts have not prepared an adequate framework for dealing with the apparition if and when it becomes a reality. The courts and the Register of Copyrights have read the DMCA to convey a right to enforce any TPS, regardless of how restrictive it is on users' constitutional rights. Development and use of TPSs themselves are currently in the hands of content owners, beyond serious consideration by the legislature or the judiciary. These two problems weave together a welcome mat for ~~restrictions on fair use and foreclosure of the public domain. Society needs~~

331. However, the freedom with which it has been used since its inception may indicate otherwise. *See, e.g.*, *Practice Mgmt. Info. Corp. v. Am. Med. Ass'n*, 121 F.3d 516 (9th Cir. 1997) (finding, without any inquiry into antitrust issues, copyright misuse for inclusion at the plaintiff licensee's request of a contract provision requiring exclusive use of defendant licensor's copyrighted work).

foreclosure of the public domain. Society needs better wards against diminishing access and availability of digital media.

Since the legislature has already spoken, the next step is for the courts to create a better framework to protect users' constitutional rights. If users find their rights dwindling under the current legal regime, they must be able to turn to the judiciary to protect their interests. Courts must recognize that the DMCA—if broad interpretations so far are inevitable—creates, in some cases, a legal right to silence the constitutionally protected speech of others. Content owners' justifications for invoking a governmental process to effect this right are speculative and insufficient. Accordingly, if compelled by the statute to enforce a TPS that restricts users' constitutional rights, courts should refuse to enforce it and strike down the anti-circumvention provisions. Similarly, since the legislature has declined to consider the restrictions on constitutional speech rights that TPSs may create, courts should evaluate and regulate digital fences directly on constitutional grounds or indirectly through the copyright misuse doctrine. Content owners cannot be allowed to expand their monopolies at the expense of the public interest simply because technology is supplanting law as the primary means of protection in the digital environment.

Finally, in judicial decisions and future legislation, lawmakers must provide content owners with proper incentives to develop TPSs that are strong, but not overly restrictive of users' rights. Content owners have not yet created such TPSs, though some commentators have made suggestions as to how more careful fencing might be implemented. In all likelihood, the market will ultimately solve the problem. The key is that unless given proper limitations, the market will not work toward a solution that accounts for users' interests. And, given today's legal landscape, it is clear that judicial acknowledgment and action on the constitutional issues raised by restriction of fair use and enclosure of the public domain on the Internet will be a first crucial step on the path toward the answer.