

2008

Fair Circumvention

Timothy K. Armstrong

Follow this and additional works at: <https://brooklynworks.brooklaw.edu/blr>

Recommended Citation

Timothy K. Armstrong, *Fair Circumvention*, 74 Brook. L. Rev. (2008).
Available at: <https://brooklynworks.brooklaw.edu/blr/vol74/iss1/1>

This Article is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Law Review by an authorized editor of BrooklynWorks.

ARTICLES

Fair Circumvention

Timothy K. Armstrong[†]

I. INTRODUCTION

When copyrighted works are published in digital form, publishers may seek to prevent copyright infringements by embedding technological protections into the published content. Publishers have a statutory incentive to deploy such technological protection measures (commonly referred to as “digital rights management” or “DRM” systems), for if they do, they may avail themselves of the protections of the Digital Millennium Copyright Act of 1998 (“DMCA”).¹ The DMCA forbids circumventing, or trafficking in devices that circumvent, technological measures that protect copyrighted works.² This statutory prohibition on circumventing technological protection measures supplies

[†] Assistant Professor of Law, University of Cincinnati College of Law. B.A. 1989, M.P.Aff. 1993, J.D. 1993, The University of Texas at Austin; LL.M. 2005, Harvard Law School. I presented earlier versions of this paper at the 2008 Intellectual Property Scholars Roundtable at Drake University Law School and in a faculty colloquium at the Chicago-Kent School of Law. For helping me improve my thinking about the subjects considered herein, I am indebted to Derek Bambauer, William McGeeveran, and Wendy Seltzer, none of whom bears responsibility for any errors in my analysis. Research support from the Harold C. Schott Foundation is gratefully acknowledged, as is the research assistance of Jeffrey Nye and Christopher St. Pierre.

Copyright © 2008, Timothy K. Armstrong. This work is licensed under the Creative Commons Attribution-Share Alike 3.0 United States license. To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/3.0/us/>, or send a letter to Creative Commons, 171 2nd Street, Suite 300, San Francisco, California, 94105, USA. For purposes of Paragraph 4(c) of said license, proper attribution must include the name of the original author and the name of the *Brooklyn Law Review* as publisher, the title of the Article, the Uniform Resource Identifier, as described in the license, and, if applicable, credit indicating that the Article has been used in a derivative work.

¹ Pub. L. No. 105-304, 112 Stat. 2360 (1998) (codified as amended in scattered sections of 17 U.S.C.).

² 17 U.S.C. § 1201(a)(1)(A), (a)(2), (b)(1) (2006). *See infra* notes 17-32 and accompanying text. Such legal protections against circumvention are conventionally believed to be necessary because of the impossibility of engineering technological protection measures that are strong enough to withstand attack by sophisticated users in all cases. *See, e.g., Competition, Innovation, and Public Policy in the Digital Age: Hearing Before the S. Comm. on the Judiciary, 107th Cong. 2* (statement of Edward W. Felten, Associate Professor of Computer Science, Princeton University), available at http://felten.com/felten_testimony.pdf (declaring “unbreakable” technological protections to be “as implausible to many experts as a perpetual motion machine”); Pamela Samuelson, *DRM {and, or, vs.} the Law*, COMM. OF THE ACM, Apr. 2003, at 41, 42-43.

rights holders with an additional cause of action that they may elect to pursue instead of, or in addition to, the ordinary remedies for copyright infringement.³

In a number of recent cases, however, courts have permitted defendants to circumvent DRM measures or to traffic in circumvention devices, finding no violation of the DMCA.⁴ The courts in these cases offered a number of reasons for rejecting the plaintiffs' claims, including (1) that the technological subject matter of the parties' dispute was not within the scope of the DMCA; (2) that plaintiffs were attempting to apply the DMCA in circumstances not contemplated by Congress at the time it passed the statute; (3) that the plaintiffs were abusing the DMCA as a means of gaining improper advantage over a competitor in the marketplace; and (4) that the plaintiffs should be required to demonstrate an underlying act of copyright infringement by the defendant as a necessary element of any DMCA claim. The first two of these arguments rest on inferences and suppositions about legislative intent in the face of minimally illuminating statutory text. The latter two are essentially policy arguments that, whatever their persuasive appeal, are even less readily grounded in the language of the DMCA as passed.

These recent decisions gain persuasive force, however, if contextualized within the long history of judge-made exceptions to the general provisions of federal copyright law. The common-law doctrine of fair use, for example, began—and, even after receiving express statutory recognition in the Copyright Act of 1976,⁵ continues to evolve—as a judge-made exception to the statutory exclusive rights of copyright holders.⁶ So viewed, recent decisions may be creating what amounts to a judge-made exception to the liability rules of the DMCA—what is in

³ The causes of action are not, however, coextensive. To be sure, the DMCA's anti-circumvention rule applies only to copyrighted works. *See* 17 U.S.C. § 1201(a)(1)(A) (prohibiting circumvention of "a technological measure that effectively controls access to a work protected *under this title*," that is, a copyrighted work); *Id.* § 1201(a)(2)(A), (B), (C) (employing similar language in terms prohibiting trafficking in circumvention devices); *Id.* § 1201(b)(1)(A), (B), (C) (employing similar language in terms prohibiting trafficking in devices that circumvent copyright protections). Thus, neither a copyright infringement claim nor a claim alleging violation of the DMCA may be premised upon a user's accessing a work in the public domain. *Cf.* *Assessment Techs. of WI, LLC v. WIREdata, Inc.*, 350 F.3d 640 (7th Cir. 2003) (embedding public domain data in copyrighted software program gave rise to no claim for copyright infringement against party who sought only to copy the raw data itself). Nevertheless, even actions that do not constitute copyright infringement may run afoul of the DMCA's anti-circumvention and anti-trafficking provisions. To take only one obvious example, merely distributing a circumvention tool suffices on its face to violate § 1201(a)(2) irrespective of whether that tool is ever actually employed in a manner that results in copyright infringement.

⁴ *See, e.g., Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc.*, 431 F.3d 1374 (Fed. Cir. 2005) (permission to copy plaintiff's software was implicit in the licensing agreement); *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004) (finding no proof of connection between the circumvention device and the protections afforded by copyright law); *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004) (Copyright Act provided implied authorization for users to copy unencrypted program code). *See infra* Part II.B.2.

⁵ *See* 17 U.S.C. § 107 (2006).

⁶ *See infra* notes 230-244 and accompanying text.

substance, even if it has not been so labeled by the courts, an emerging doctrine of “fair circumvention.”

My aims herein are both descriptive and normative. As to the former, I believe that the reference to an emerging judge-made common law of fair circumvention more accurately describes *what the courts are doing in fact* when confronted with cases that test the limits of the statutory ban on circumventing or trafficking in circumvention devices. To decide DMCA disputes, the courts are borrowing—sometimes expressly, sometimes not—from copyright law principles, including fair use. As to the latter, I conclude that further development of legal doctrine in this area *ought* to rest on the forthright acknowledgment and evolution of an express judge-made “fair circumvention” exception to the DMCA through the ordinary means of case-by-case adjudication. As I will discuss below, acknowledging the link between the existing fair use doctrine and the emerging “fair circumvention” doctrine would offer a far more robust analytical toolset than exists under the courts’ current approach, which involves divining (or, more accurately, imputing) legislative intent in the face of statutory silence. Indeed, several of the factors the courts have seized upon as most salient, such as the nature of the underlying expressive work and the threat of economic harm to the plaintiff, are as clearly encompassed within the historical contours of copyright’s fair use doctrine as they are detached from the actual statutory text of the DMCA.

An analytical caveat is in order, however: it is not my contention that the courts have imported copyright’s fair use exception wholesale into the DMCA. Although the statute states Congress’s intention to preserve fair use,⁷ the anti-circumvention provisions of the DMCA make no express exceptions for fair uses,⁸ and some courts have rejected the notion that a party accused of a DMCA violation may interpose a fair use defense.⁹ Although some language in more recent court decisions is more hospitable to the possibility that a fair use defense may exist in the DMCA context,¹⁰ no court has yet gone so far as to hold that circumventing a technological protection measure is permissible under the DMCA in order to make a fair use of the underlying copyrighted work.¹¹ My contention, rather, is that courts are borrowing (and should

⁷ See 17 U.S.C. § 1201(c)(1), discussed *infra* notes 29, 62-65 and accompanying text.

⁸ See, e.g., David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 727-39 (2000) (demonstrating that DMCA’s purported safeguards for users fail to accommodate existing fair use doctrine); *id.* at 739 (“The result of these juxtapositions seems to be a conscious contraction of user rights.”).

⁹ See, e.g., *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 321-24 (S.D.N.Y. 2000) (analyzing the doctrine of fair use), *aff’d sub nom.* *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001). See *infra* Part II.B.1.

¹⁰ See, e.g., *infra* note 153 and accompanying text.

¹¹ I have previously suggested that such a decision would represent only a modest extension of currently existing doctrine and would be potentially desirable insofar as it would eliminate the discrepancy that presently exists between the extent of lawful fair uses of works that

borrow) factors and criteria that have developed under fair use en route to creating what I have labeled a separate doctrine of “fair circumvention” under the DMCA. Continued borrowing of the same sort may, in time, blur or even eliminate the distinction that presently exists between the scope of copyright’s fair use exception and the narrower, but growing, DMCA exception for fair circumvention. The fact that the borrowing is as yet incomplete, however, should not obscure the substantial amount that has already occurred or preclude further expansions of the fair circumvention doctrine in the future as an ordinary adjunct of the courts’ common-law powers to interpret and apply federal copyright law.

Part II of this Article briefly surveys the enactment and text of the DMCA before turning to a detailed consideration of several cases that have given the statute either a conspicuously broad, or a conspicuously narrow, reading. My review suggests that courts on both sides of the divide over the proper reading of the DMCA are issuing opinions that are difficult to square with the statutory text they purport to construe. Because the text alone appears inadequate to explain the actual results in DMCA cases, the inquiry expands in Part III of this Article to consider whether other principles can be invoked to support the courts’ decisionmaking. My principal conclusions here are that (1) courts may, and properly should, draw upon the broader corpus of federal copyright law to illuminate the meaning of the DMCA; (2) partly for historical reasons and partly because of the particular terms of the copyright statutes, federal copyright law leaves a comparatively broad domain available for judicial policymaking; and (3) the development of copyright’s fair use doctrine provides a useful model for the courts to follow in crafting exceptions to liability under the DMCA. This analysis also suggests that one of the criticisms leveled against some of the courts in DMCA cases—to wit, that the courts are substituting their own policy preferences for Congress’s—is ill-founded in view of the courts’ prominent historical role in the development of copyright law. Part IV seeks to guide further judicial development of the emerging fair circumvention doctrine by analogizing, first, to principles of fair use, and second, to policy distinctions that have been made in the DMCA cases to date. The goal here is to suggest that the courts should make explicit a debate that is currently occurring *sotto voce* under the surface of their DMCA opinions. To foster development of a coherent body of doctrine

are protected by DRM mechanisms and those that are not. See Timothy K. Armstrong, *Digital Rights Management and the Process of Fair Use*, 20 HARV. J.L. & TECH. 49, 114-16 (2006). As suggested in the remainder of this paragraph, however, my goal in this Article is somewhat broader and is not limited to ensuring adequate protection for fair use of copyrighted works that exist in digital form. Cf., e.g., Robert D. Denicola, *Access Controls, Rights Protection, and Circumvention: Interpreting the Digital Millennium Copyright Act to Preserve Noninfringing Use*, 31 COLUM. J.L. & ARTS 209, 220-32 (2008) (arguing that courts should interpret the DMCA with specific focus on preserving fair uses); YiJun Tian, *Problems of Anti-Circumvention Rules in the DMCA & More Heterogenous Solutions*, 15 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 749, 779-81 (2005) (same).

under the DMCA, the courts should engage in a forthright balancing of the interests at stake in DMCA cases. The courts should not discount copyright holders' interests in protecting their works, nor knowledgeable consumers' interests in making ordinary uses of lawfully acquired electronics products, but should simply make explicit the factors they employ in declaring one or the other set of interests to predominate in a given case.

II. JUDICIAL CONSTRUCTIONS OF THE DMCA

Because the courts in DMCA cases have declared repeatedly that their decisions rest solely on a consideration of the statute's literal text, it is pertinent to begin by reviewing the circumstances that led Congress to enact the statute and the language it selected to effectuate its intent. The sections that follow will summarize the background and text of the statute's anti-circumvention provisions before turning to a critical review of some of the key cases that have arisen under the DMCA to date.

A. *Statutory Background*

In 1996, at the urging of the Clinton Administration,¹² the World Intellectual Property Organization ("WIPO") promulgated two new treaties dealing, among other issues, with what was perceived as a growing threat of copyright infringement in the digital arena. The treaties proposed to authorize content owners to deploy technological measures that could effectively prevent such infringements from occurring by limiting users' practical ability to access or copy the protected works, except upon terms specified by the content owners. It was broadly understood, however, that such access and copying controls could never be designed to be perfectly effective in all circumstances—sufficiently sophisticated users could circumvent the protections and access or copy the work.¹³ To forestall this outcome, the 1996 WIPO treaties required

¹² A three-year study by a White House working group culminated in the 1995 publication of Intellectual Property and the National Information Infrastructure, known as the "White Paper." BRUCE A. LEHMAN, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995) [hereinafter "White Paper"], available at <http://www.uspto.gov/go/com/doc/ipnii/ipnii.pdf>. The White Paper recommended that Congress adopt new legislation

to prohibit the importation, manufacture or distribution of any device . . . the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without authority of the copyright owner or the law, any process, treatment, mechanism or system which prevents or inhibits the violation of any of the exclusive rights under Section 106 [of the Copyright Act].

Id. at 230. When initial efforts to adopt legislation enacting the White Paper's recommendations encountered resistance in Congress, however, the Administration turned to the WIPO process instead. See JESSICA LITMAN, DIGITAL COPYRIGHT 122-30 (2001).

¹³ See *supra* note 2.

signatory nations to adopt new legislation punishing circumvention of access and copy control technologies.

First, Article 11 of the WIPO Copyright Treaty required as follows:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.¹⁴

The contemporaneous WIPO Performances and Phonograms Treaty imposed a similar obligation, directing in Article 18 as follows:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law.¹⁵

Title I of the DMCA, captioned the “WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998,” was enacted to implement both of these treaty requirements.¹⁶

The relevant provisions of the DMCA define three distinct offenses, one of which forbids circumvention of a technological measure while the other two forbid trafficking in circumvention devices. The statute’s *anti-circumvention* provision provides that: “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.”¹⁷ The statute’s two *anti-trafficking* provisions are each directed against different types of prohibited devices. The DMCA first forbids the making of or trafficking in devices that circumvent the same sort of access controls that are the subject of the anti-circumvention clause:

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;

¹⁴ WIPO Copyright Treaty, art. 11, Dec. 20, 1996, S. TREATY DOC. NO. 105-17, 2186 U.N.T.S. 121.

¹⁵ WIPO Performances & Phonograms Treaty, art. 18, Dec. 20, 1996, S. TREATY DOC. NO. 105-17, 2186 U.N.T.S. 203.

¹⁶ Digital Millennium Copyright Act, Pub. L. No. 105-304, tit. I, § 101, 112 Stat. 2860, 2861 (1998).

¹⁷ 17 U.S.C. § 1201(a)(1)(A) (2006).

(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.¹⁸

The other provision forbids making or trafficking in devices that circumvent copy control technologies:

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 protection afforded by a technological measure that *effectively protects a right of a copyright owner* under this title in a work or a portion thereof;

(B) has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; or

(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.¹⁹

As drafted, there is a certain lack of parallelism in the statute: the provision forbidding trafficking in copy control circumvention devices is not matched, as the access control trafficking provision is, by a separate clause outlawing the *use* of such a device, although this is perhaps explainable by the fact that circumventing a copy control measure may be separately punishable as copyright infringement.²⁰

The DMCA provided definitions of two of the key phrases employed in the statute's liability provisions. First, Congress defined what it meant by "circumvention":

[T]o "circumvent a technological measure" means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove,

¹⁸ *Id.* § 1201(a)(2) (emphasis added).

¹⁹ *Id.* § 1201(b)(1) (emphasis added).

²⁰ See *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1195 (Fed. Cir. 2004) (quoting S. Rep. No. 105-90, at 12 (1998)). This is not, of course, to say that copyright liability necessarily follows any time a copy control mechanism is circumvented; the courts would be left in each such case to determine whether the circumvention was excused under other provisions of copyright law, such as fair use. See, e.g., Michael Landau, *Has the Digital Millennium Copyright Act Really Created a New Exclusive Right of Access?: Attempting to Reach a Balance Between Users' and Content Providers' Rights*, 49 J. COPYRIGHT SOC'Y U.S.A. 277, 288 & nn.52-53 (2001).

deactivate, or impair a technological measure, without the authority of the copyright owner²¹

Congress next provided an explanation of the requirement that an access control measure “effectively control access” to a copyrighted work:

[A] technological measure “effectively controls access to a work” if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.²²

As will be seen below, these definitional provisions have caused their own share of difficulty for courts called upon to construe the DMCA.²³

Congress contemplated three broad types of exemptions from the DMCA’s liability provisions. First, the statute includes a number of provisions excusing certain *types of users* from the statute’s liability provisions, including nonprofit libraries, archives, and educational institutions;²⁴ law enforcement and intelligence agents;²⁵ competing developers of interoperable computer software;²⁶ and encryption and security researchers.²⁷ Second, Congress provided a mechanism by which certain *types of works* would be exempted from the DMCA’s liability provisions by means of a triennial administrative rulemaking conducted by the Library of Congress upon the recommendation of the Register of Copyrights.²⁸ Finally, Congress sought to guide judicial constructions of

²¹ 17 U.S.C. § 1201(a)(3)(A) (2006).

²² *Id.* § 1201(a)(3)(B).

²³ *See, e.g., infra* notes 141-145 and accompanying text. On the textual infirmity of the DMCA’s definitional provisions, see generally *infra* notes 211-224 and accompanying text.

²⁴ *See* 17 U.S.C. § 1201(d) (2006). These users are exempt only from the statute’s anti-circumvention provision, not its ban on trafficking in access or copy control devices. *See id.* § 1201(d)(4). They may circumvent the access controls “solely in order to make a good faith determination of whether to acquire a copy of that work” for noninfringing purposes. *Id.* § 1201(d)(1). Other limitations in the DMCA’s exception for nonprofit libraries, archives, and educational institutions generally parallel the language used elsewhere in the Copyright Act excusing libraries and archives from liability for copyright infringement under similar circumstances. *Compare id.* § 1201(d)(5) with *id.* § 108(a)(2) (2006).

²⁵ *See id.* § 1201(e).

²⁶ *See id.* § 1201(f).

²⁷ *See id.* § 1201(g), (j).

²⁸ *See id.* § 1201(a)(1)(B)-(D). The results of the Librarian’s most recent triennial rulemaking are available in the Federal Register. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 71 Fed. Reg. 68,472, 68,479-80 (Nov. 27, 2006) [hereafter “2006 Final Rule”]. I have previously suggested that the Librarian of Congress’s triennial rulemaking proceedings have been comparatively narrow and technical in scope and that the rulemaking proceedings are unlikely to supply broad, robust immunity from DMCA liability for acts of circumvention undertaken for lawful purposes. *See* Armstrong, *supra* note 11, at 117 n.274; *cf. also infra* note 270 and accompanying text (offering an illustrative example of circumvention undertaken for noninfringing purposes that nevertheless falls outside the exemption of the 2006 Final Rule). Although the 2006 Final Rule does excuse certain classes of uses from DMCA liability, the Librarian has consistently rebuffed requests to promulgate broader rules exempting most or all circumventions undertaken for noninfringing purposes. *See, e.g.,* 71 Fed. Reg. at 68,479 (proposed exemption #8); Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 68 Fed. Reg. 62,011, 62,014-15 (Oct. 31, 2003) (especially proposed exemptions #1, #2, and #4); Exemption to Prohibition on Circumvention

the statute's liability provisions by listing a number of countervailing policies and rights with which it disclaimed any intention to interfere, including fair use²⁹ and freedom of expression.³⁰ Congress similarly stated that it did not intend the DMCA to alter the traditional judge-made contours of secondary liability³¹ or to force technology manufacturers to include any particular form of technological protection measure in their products.³²

B. *The DMCA in the Courts*

The cases that have delineated the boundaries of the anti-circumvention cause of action may be divided, without undue oversimplification, into two categories. On one side fall the cases that have construed the DMCA broadly, enlarging its remedial reach by construing uncertainties in the statutory text against accused violators. On the other side are the cases that have given the statute a narrow reading, enunciating principles that support limits on the scope of DMCA liability. Both sets of cases, however, give the statute a reading that is at once rigidly formalistic and highly selective—that is, the courts simultaneously insist that their interpretations are commanded by the statutory text while disregarding or construing away other provisions that actually appear in the DMCA.

1. The DeCSS Case

One of the earliest judicial applications of the DMCA, and still the high-water mark of the expansive view of the statute, was the so-called “DeCSS” litigation.³³ DeCSS was a computer program written to enable users to decode the audiovisual content of DVD-Video discs

of Copyright Protection Systems for Access Control Technologies, 65 Fed. Reg. 64,556, 64,571-72 (Oct. 27, 2000) (rejecting proposed exemption for “‘fair use’ works”). In view of this history, some commentators have concluded that “the rulemaking process faces limitations that render it incapable of fully resolving the DMCA’s adverse effect on noninfringing uses.” Aaron K. Perzanowski, *Evolving Standards and the Future of the DMCA Anticircumvention Rulemaking*, 10 J. INTERNET L. 1, 1 (2007).

²⁹ 17 U.S.C. § 1201(c)(1) (“Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.”).

³⁰ *Id.* § 1201(c)(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.”).

³¹ *Id.* § 1201(c)(2) (“Nothing in this section shall enlarge or diminish vicarious or contributory liability for copyright infringement in connection with any technology, product, service, device, component, or part thereof.”).

³² *Id.* § 1201(c)(3) (“Nothing in this section shall require that the design of, or design and selection of parts and components for, a consumer electronics, telecommunications, or computing product provide for a response to any particular technological measure, so long as such part or component, or the product in which such part or component is integrated, does not otherwise fall within the prohibitions of subsection (a)(2) or (b)(1).”).

³³ *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000), *aff’d sub nom.* *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001).

(more colloquially, “DVDs”) which had been scrambled using a rudimentary form of digital encryption known as the “Content Scramble System,” or “CSS.”³⁴ DeCSS made it possible for users to decrypt (and thereafter to view or copy in unencrypted form) the content of a CSS-encrypted DVD even if the user had not paid a licensing fee to the DVD Copy Control Association (“DVDCCA”), an industry group, for an authorized decryption key.³⁵

Set-top DVD players produced by consumer electronics manufacturers included lawful, DVDCCA-licensed decryption keys.³⁶ Jon Johansen, a Norwegian teenager, acting in concert with unidentified others, obtained such a licensed DVD player³⁷ and “reverse engineered” it to discover the algorithm employed by the CSS encryption system.³⁸ The practical necessity of designing DVD players to be able to play back encrypted DVD discs effectively ensured that such reverse engineering would be successful—that is, that it would be possible from studying the input (an encrypted DVD) and the output (the decrypted video content) to draw correct inferences about the decryption algorithm that was being employed.³⁹ The result of Johansen’s work was the DeCSS program,

³⁴ See *Reimerdes*, 111 F. Supp. 2d at 308 (describing CSS). The weak form of encryption employed by CSS led some cryptographic experts to express skepticism as to “[w]hether CSS is a serious cryptographic cipher. . . .” Frank A. Stevenson, *Cryptanalysis of Contents Scrambling System* (Nov. 8, 1999), <http://www.cs.cmu.edu/~dst/DeCSS/FrankStevenson/analysis.html>.

³⁵ See *Reimerdes*, 111 F. Supp. 2d at 310-11 & n.60; see also *DVD Copy Control Ass’n Inc. v. Bunner*, 10 Cal. Rptr. 3d 185, 188 (Cal. Ct. App. 2004) (explaining content industry’s reliance on exclusive licensing scheme to limit dissemination of decryption keys).

³⁶ See *Reimerdes*, 111 F. Supp. 2d at 310.

³⁷ *Id.* at 311. The court’s reference to “a licensed DVD player,” *id.*, presumably signifies either a hardware or software DVD player that Johansen and his collaborators had purchased. Although the district court remarked that “[n]either Mr. Johansen nor his collaborators obtained a license from the DVD CCA[,]” *id.*, the significance of this finding is unclear; having lawfully purchased a licensed DVD player, the parties surely had no reason to think themselves obliged to purchase a *second* license to make use of their purchased player. *Cf. infra* notes 132-135 and accompanying text.

³⁸ *Reimerdes*, 111 F. Supp. 2d at 311. “Reverse engineering”—ascertaining the likely content of a computer program based on inferences from studying its inputs and outputs—has been commonly recognized not to present a copyright problem, even where some intermediate copying of copyrighted works occurs, particularly where the effect of the “reverse engineering” is to aid in the development of new platforms for the use of copyrighted content and thereby to foster competition. See, e.g., *Sony Computer Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596, 602-08 (9th Cir. 2000) (finding reverse engineering of plaintiff’s copyrighted software code lawful under fair use doctrine notwithstanding possible losses to plaintiff due to competition with defendant’s unlicensed platform for its software); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1523-24 (9th Cir. 1992) (rejecting plaintiff’s claim that defendant’s reverse engineering infringed its copyright, and observing that “an attempt to monopolize the market by making it impossible for others to compete runs counter to the statutory purpose of promoting creative expression and cannot constitute a strong equitable basis for resisting the invocation of the fair use doctrine”); *cf. Vault Corp. v. Quaid Software, Ltd.*, 847 F.2d 255, 270 (5th Cir. 1988) (finding state statute authorizing contractual prohibitions on reverse engineering preempted as incompatible with purposes of the Copyright Act). *But cf. Atari Games Corp. v. Nintendo of Am. Inc.*, 975 F.2d 832, 844 (Fed. Cir. 1992) (noting limits on lawful reverse engineering); see also *infra* notes 129-131 (noting courts’ concern with interpreting the DMCA to avoid harm to competition).

³⁹ See, e.g., Cory Doctorow, *Microsoft Research DRM Talk*, June 17, 2004, <http://craphound.com/msfdrm.txt> (“At the end of the day, all DRM systems share a common vulnerability: they provide their attackers with ciphertext, the cipher and the key. At this point, the

which was posted on Johansen's web site and quickly spread to hundreds of other sites worldwide.⁴⁰

Journalist Eric Corley copied the DeCSS program to his web server and made it available for readers to download.⁴¹ This prompted a DMCA lawsuit against Corley and his publishing company. Corley removed DeCSS from his web site following the district court's grant of a preliminary injunction to the movie studio plaintiffs,⁴² but maintained hyperlinks from his site to other sites that "purport[ed] to offer [the software] for download."⁴³ The district court found that both Corley's original posting of the DeCSS program and his posting of hyperlinks to other web sites where the program had been made available violated Section 1201(a)(2)'s prohibition on trafficking in access control circumvention technologies.⁴⁴

The court reasoned that CSS was a "technological measure that effectively controls access to" a copyrighted work—to wit, the movie contained on a DVD disc. It rejected the defendants' arguments that CSS could not be said to "effectively control access to" the copyrighted content of a DVD because it was a minimal form of encryption.⁴⁵ The court reasoned that because CSS, "in the ordinary course of its operation, requires the application of information or a process or a treatment, with the authority of the copyright owner, to gain access to a work,"⁴⁶ it satisfied the statutory definition of "effectively control access." The protections of the DMCA, in other words, did not turn upon whether the measure was actually "effective"—that is, whether it functioned in such a way as to frustrate unauthorized attempts to access the work.⁴⁷ Rather, the court reasoned, the dispositive question was whether the copyright owners had granted express *permission* for the

secret isn't a secret anymore."). Princeton University computer scientist Edward Felten made the same point during the *Bunner* litigation over the trade secret status of CSS:

Because so many people have the skills and tools to reverse-engineer programs, [DVDCCA's] decision to authorize the release of CSS in software form made it virtually inevitable that somebody, somewhere, would reverse engineer it. . . . Once CSS became public knowledge, its keys inevitably also would have become public knowledge. . . . It is common knowledge that use of a forty-bit key allows an easy brute-force search to determine the key, given a sample of encrypted material (e.g., a DVD movie disk).

Decl. of Prof. Edward W. Felten in Supp. of Def.'s Mot. for Summ. J., part V ¶¶ 5-6 (Nov. 28, 2001), available at http://w2.eff.org/IP/Video/DVDCCA_case/20011128_felten_decl.html.

⁴⁰ *Reimerdes*, 111 F. Supp. 2d at 311.

⁴¹ *Id.* at 312.

⁴² See *Universal City Studios, Inc. v. Reimerdes*, 82 F. Supp. 2d 211 (S.D.N.Y. 2000) (granting preliminary injunction).

⁴³ *Reimerdes*, 111 F. Supp. 2d at 311, 312-13 & n.98.

⁴⁴ *Id.* at 316-24 (finding violation of Section 1201(a)(2) based on Corley's posting of DeCSS program), 324-25 (finding violation based on posting of hyperlinks to other web sites where DeCSS was available for download); see also *supra* note 18 and accompanying text.

⁴⁵ See *Reimerdes*, 111 F. Supp. 2d at 317 (internal quotation marks omitted).

⁴⁶ *Id.* (quoting 17 U.S.C. § 1201(a)(3)(B) (2006)).

⁴⁷ See *id.* at 318 ("CSS 'effectively controls access' to copyright DVD movies. It does so, within the meaning of the statute, whether or not it is a strong means of protection.").

creation of the circumvention tool at issue: DeCSS circumvented what was “effectively” an access control mechanism because the copyright holder had provided an avenue for *authorized* decryption of the protected content (to wit, purchase of a license from the DVDCCA) with which the designers of DeCSS had failed to comply.⁴⁸ Because there was no “authority of the copyright owner” for the creation of such a tool, the court reasoned, the dissemination of DeCSS by the defendants necessarily violated the DMCA.⁴⁹

The court rejected the defendants’ argument that circumvention of a technological measure for the purpose of making a fair use of the underlying copyrighted work would be permissible under the DMCA.⁵⁰ The court’s reasoning began with the truism that copyright infringement and violations of the anti-circumvention provisions of the DMCA are distinct offenses.⁵¹ A defense to the former, accordingly, was not automatically a defense to the latter. The statutory text, however, was silent on the question whether fair use could be raised as a defense to a claim under the DMCA. The court construed this silence as an implicit legislative rejection of the fair use defense, reasoning that “[i]f Congress had meant the fair use defense to apply to such [DMCA] actions, it would have said so.”⁵² Rather than “saying so,” however, Congress gave indications that the court found adequate to conclude that fair use of the underlying copyrighted work could not immunize a party from liability for circumventing an access control mechanism. The court pointed, first, to the fact that authorization by the copyright holder was a complete defense to a DMCA violation; second, to the fact that Congress delayed the statute’s effective date; and third, to the enumeration of some exceptions to liability in the DMCA itself.⁵³ The court found the DMCA “crystal clear” in providing no fair use defense to a trafficking claim⁵⁴ and refused any suggestion that it should construe the statute in favor of such an exception. “In such circumstances,” the court concluded, “courts

⁴⁸ See *id.* at 317-18.

⁴⁹ See *Reimerdes*, 111 F. Supp. 2d at 317 (quoting 17 U.S.C. § 1201(a)(3)(B)) (“[A] technological measure ‘effectively controls access to a work’ if the measure, in the ordinary course of its operation, requires . . . the authority of the copyright owner, to gain access to [the] work.”).

⁵⁰ *Id.* at 321-24. The defendants raised this argument in an ultimately unsuccessful effort to bring DeCSS within the “safe harbor” announced in *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984), for technologies “capable of substantial noninfringing uses.” See *Reimerdes*, 111 F. Supp. 2d at 323-24. In general, the courts have resisted importing the *Sony* analysis, which arose originally in the context of a claim for contributory copyright infringement, as a defense to claims under the DMCA. See, e.g., *RealNetworks, Inc. v. Streambox, Inc.*, No. 2:99CV02070, 2000 WL 127311, at *8 (W.D. Wash. Jan. 18, 2000).

⁵¹ *Reimerdes*, 111 F. Supp. 2d at 322. But see *infra* Part III.A.

⁵² *Reimerdes*, 111 F. Supp. 2d at 322.

⁵³ *Id.* at 323.

⁵⁴ *Id.* at 324.

may not undo what Congress so plainly has done by construing the words of the statute to accomplish a result that Congress rejected.”⁵⁵

The persuasive force of *Reimerdes* is occasionally impaired by the heated—at times, borderline intemperate—rhetoric of the court’s opinion. For example, the court seemed to insinuate that the DeCSS technology was guilty by association with various sordid topics also covered in the defendants’ magazine.⁵⁶ The court apparently found it damning that the defendants had previously published “a guide to the federal criminal justice system for readers charged with computer hacking.”⁵⁷ Elsewhere, the court likened the defendants to political assassins and the DeCSS code to a virus.⁵⁸ It painted the authors of DeCSS, who plausibly claimed to be motivated by the desire to play their lawfully purchased DVD discs on computers running the Linux operating system,⁵⁹ essentially as anarchists, describing them as “adherents of a movement that believes that information should be available without charge to anyone clever enough to break into the computer systems or data storage media in which it is located.”⁶⁰ The effect is to make it difficult to tell whether, and to what extent, the court’s sweeping reading of the DMCA’s liability provisions, and its denial that copyright’s fair use doctrine was relevant to the reach of the

⁵⁵ *Id.* (quotation marks omitted); see also *RealNetworks, Inc. v. Streambox, Inc.*, No. 2:99CV02070, 2000 WL 127311, at *8 (W.D. Wash. Jan. 18, 2000) (reasoning that accused producer of circumvention tool may not defend against DMCA claim based on its customers’ fair uses of the tool).

⁵⁶ *Reimerdes*, 111 F. Supp. 2d at 308-09 (“Not surprisingly, 2600: *The Hacker Quarterly* has included articles on such topics as how to steal an Internet domain name, access other people’s e-mail, intercept cellular phone calls, and break into the computer systems at Costco stores and Federal Express.”) (footnotes omitted); see also *id.* at 343 (“Defendants are in the business of disseminating information to assist hackers in ‘cracking’ various types of technological security systems.”). The court’s repeated use of the words “hacker” and “hacking” as pejorative epithets—a usage at odds with the generally accepted meaning of those terms among technologically sophisticated computer users, for whom the word “hacker” connotes skill and competence rather than malicious intent—also suggests a certain visceral dislike of the defendants. *Cf., e.g.*, LAWRENCE LESSIG, *CODE: VERSION 2.0* 8 (2006) (“Our government has already criminalized the core ethic of this movement, transforming the meaning of *hacker* into something quite alien to its original sense.”); ERIC S. RAYMOND, *THE CATHEDRAL AND THE BAZAAR* 231-32 (1999) (explaining terminological distinctions between skillful “hackers” and malicious “crackers”). See generally SAM WILLIAMS, *FREE AS IN FREEDOM: RICHARD STALLMAN’S CRUSADE FOR FREE SOFTWARE* app. B (2002).

⁵⁷ *Reimerdes*, 111 F. Supp. 2d at 309. Creating such a guide, one might presume, could as readily be portrayed as a form of public service. *Cf., e.g.*, United States Dep’t of Justice, National Criminal Justice Reference Service, <http://www.ncjrs.gov/>.

⁵⁸ *Reimerdes*, 111 F. Supp. 2d at 304.

⁵⁹ See *id.* at 311.

⁶⁰ *Id.* at 346. The court’s comparison of the free and open-source software movement to destructive anarchism, already a strained analogy at the time of its decision, became wholly insupportable in the years following *Reimerdes*. See, e.g., DON TAPSCOTT & ANTHONY D. WILLIAMS, *WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING* 92 (2006) (“No longer just an ad-hoc collection of individual volunteers, most of the participants in the Linux ecosystem are paid employees of Fortune 100 tech firms.”).

DMCA, truly rest upon a careful construction of the statute rather than on the judge's manifest visceral dislike of the defendants.⁶¹

That the court's hostile rhetoric provides the key to understanding its analysis is further evidenced by the fact that, considered on its own terms, *Reimerdes* articulates a facially dubious construction of the statutory text. Section 1201(c)(1) of the DMCA, for example, states Congress's intention not to constrict the scope of the fair use doctrine.⁶² According to the *Reimerdes* court, this provision signified only that fair use remained a defense to a claim for copyright infringement but did not provide a defense to a claim arising under the DMCA.⁶³ As so construed, however, Section 1201(c)(1) is mere surplusage, adding nothing to the statutory fair use defense to copyright infringement already provided in Section 107 of the Copyright Act.⁶⁴ Settled principles of interpretation counsel against a construction that renders statutory language superfluous.⁶⁵

Still more troubling is the tension between the court's interpretation of the text of the DMCA and the provisions of the copyright treaties that the DMCA was enacted to implement. As the *Reimerdes* court noted,⁶⁶ Congress passed the DMCA to implement the United States' obligations under the WIPO Copyright Treaty.⁶⁷ Article 11 of that Treaty requires signatory nations to prohibit circumvention of technological measures "that restrict acts . . . which are not authorized by the authors concerned *or permitted by law*."⁶⁸ Fair use of copyrighted

⁶¹ See also Mark Deffner, Note, *Unlawful Linking: First Amendment Doctrinal Difficulties in Cyberspace*, 3 MINN. INTELL. PROP. REV. 111, 133-34 (2002) (noting that "[e]lements of the *Reimerdes* court's opinion would seem to point towards picking a conclusion first and then finding reasons to support it" and identifying other "aspects of the court[']s decision" that "also suggest a predisposition against the defendant").

⁶² 17 U.S.C. § 1201(c)(1) (2006) ("Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.").

⁶³ See *supra* notes 51-55 and accompanying text. The court of appeals also read § 1201(c)(1) in a similar fashion. See *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 443 (2d Cir. 2001).

⁶⁴ See 17 U.S.C. § 107 (2006); see also Landau, *supra* note 20, at 299-300 ("If fair use only applied to acts of copying once access was authorized, the language under section 107 would cover the defendant's activities. Adding a fair use provision in section 1201 shows that fair use was meant to be considered in situations involving circumvention technologies.").

⁶⁵ See, e.g., *Dole Food Co. v. Patrickson*, 538 U.S. 468, 476-77 (2003) ("Absent a statutory text or structure that requires us to depart from normal rules of construction, we should not construe the statute in a manner that is strained and, at the same time, would render a statutory term superfluous."); *Duncan v. Walker*, 533 U.S. 167, 174 (2001) ("We are thus 'reluctan[t] to treat statutory terms as surplusage' in any setting. . . . We are especially unwilling to do so when the term occupies so pivotal a place in the statutory scheme as does the word 'State' in the federal habeas statute.") (citations omitted); *Bailey v. United States*, 516 U.S. 137, 145 (1995) (relying on "the assumption that Congress intended each of its terms to have meaning").

⁶⁶ See *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 316 (S.D.N.Y. 2000), *aff'd sub nom. Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001).

⁶⁷ See *supra* note 16 and accompanying text.

⁶⁸ WIPO Copyright Treaty, *supra* note 14, art. 11 (emphasis added). The obligation created under Article 18 of the WIPO Performances and Phonograms Treaty is phrased similarly. See *supra* note 15 and accompanying text.

works, however, is expressly “permitted by law” in the United States.⁶⁹ To the extent that the DMCA is interpreted to implement the treaty obligations that prompted its enactment,⁷⁰ accordingly, the statute cannot plausibly be read to forbid circumvention for fair use.⁷¹ Although the *Reimerdes* court recognized that its interpretation of the DMCA “[e]ft] technologically unsophisticated persons who wish to make fair use of encrypted copyrighted works without the technical means of doing so,” it declared that this problem was “a matter for Congress.”⁷² A court less animated by hostility to the defendants in the case at bar might more readily have perceived such an absurd consequence as evidence of error in its interpretation of the statute.⁷³

2. The Durable Goods Cases

In a trio of more recent cases—*Chamberlain Group, Inc. v. Skylink Technologies, Inc.*,⁷⁴ *Lexmark International, Inc. v. Static Control Components, Inc.*,⁷⁵ and *Storage Technology Corporation v. Custom Hardware Engineering & Consulting, Inc.*⁷⁶—two federal courts of appeals refused to apply the DMCA to prevent circumvention of access control mechanisms embedded in durable goods.

⁶⁹ 17 U.S.C. § 107.

⁷⁰ On the general principles applicable to the interpretation of statutes and treaties, see 1A NORMAN J. SINGER, *SUTHERLAND STATUTES & STATUTORY CONSTRUCTION* § 32:6 (6th ed. 2008).

⁷¹ The Clinton Administration’s 1995 White Paper, which also prompted the enactment of the DMCA, suggested this very solution to the possible conflict between copyright’s fair use doctrine and its proposed anti-circumvention law. The White Paper recommended the enactment of legislation prohibiting circumvention of copy controls “without authority of the copyright owner *or the law[.]*” White Paper, *supra* note 12, at 230 (emphasis added). It then reasoned that “if [a] circumvention device is primarily intended and used for legal purposes, such as fair use, the device would *not* violate the provision, because a device with such purposes and effects would fall under the ‘authorized by law’ exemption.” *Id.* at 231.

⁷² *Reimerdes*, 111 F. Supp. 2d at 324.

⁷³ The Second Circuit affirmed the trial court’s decision on appeal. *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001). The appellate court’s decision adds little to our understanding of the DMCA, however, because the appellants elected to rely primarily on constitutional, rather than statutory, arguments. *See id.* at 444-45, 458-59. The appellants first argued that limitations on fair use offended First Amendment principles. U.S. CONST. amend. I. The Court of Appeals reasoned that the functional characteristics of the DeCSS code disentitled it to the full extent of First Amendment protection that attaches to ordinary speech, and that the DMCA was a content-neutral regulation that served a substantial governmental interest unrelated to the suppression of free expression and was not unduly burdensome. *See id.* at 452-54. I have previously expressed doubt as to the ongoing viability of this portion of the court’s analysis. *See Armstrong*, *supra* note 11, at 68 n.87. If we conceptualize fair use as protecting First Amendment values, as the Supreme Court did in *Eldred v. Ashcroft*, 537 U.S. 186, 219-20 (2003), then constructions of the DMCA that work to restrict fair use in practice may become constitutionally suspect. More recent cases may suggest greater judicial willingness to subject copyright legislation to First Amendment scrutiny. *See, e.g., Golan v. Gonzales*, 501 F.3d 1179, 1187-96 (10th Cir. 2007). The Court of Appeals further rejected any argument grounded on the Progress Clause, U.S. CONST. art. I, § 8, cl. 8, rather than the First Amendment. *See Corley*, 273 F.3d at 458-59.

⁷⁴ 381 F.3d 1178 (Fed. Cir. 2004). *See infra* notes 77-104 and accompanying text.

⁷⁵ 387 F.3d 522 (6th Cir. 2004). *See infra* notes 105-145 and accompanying text.

⁷⁶ 421 F.3d 1307 (Fed. Cir. 2005). *See infra* notes 146-154 and accompanying text.

a. Chamberlain v. Skylink

In *Chamberlain v. Skylink*, the plaintiff, Chamberlain, manufactured garage door openers that incorporated what the court presumed to be copyrighted computer software code.⁷⁷ Chamberlain's software was designed to recognize a certain set of transmitted numerical codes as valid commands to open the owner's garage door.⁷⁸ Chamberlain included in its software a separate routine that would "reset" the listing of accepted codes, enabling a user to open their garage door even if the first transmitted code was not recognized as valid.⁷⁹ Skylink, a competitor, produced and sold a "universal transmitter" that was capable of operating with garage door openers sold by many other companies, including Chamberlain's. Skylink's transmitter was designed to transmit a burst of three code sequences in rapid succession that would either be recognized as a correct code, or else trigger the "reset" routine in Chamberlain's software—resulting, in either case, in the opening of the owner's garage door.⁸⁰

Chamberlain sued, alleging that the code sequences were technological measures that protected access to the copyrighted software embedded in its garage door openers. The district court granted summary judgment to Skylink on Chamberlain's DMCA claim, and the court of appeals affirmed.⁸¹

The court in *Chamberlain*, like the court in *Reimerdes*, characterized the dispositive issue as whether the defendant had *authority* to access plaintiff's copyrighted work in the manner in which it did.⁸² The two courts' conceptions of what "authorization" entailed, however, could scarcely be more dissimilar. Whereas *Reimerdes* had looked only at whether the copyright owner had granted express permission for the defendant's access,⁸³ the *Chamberlain* court viewed the lack of Chamberlain's permission as essentially irrelevant to the

⁷⁷ The court believed itself required to assume that Chamberlain's program was covered by copyright because of the procedural posture in which the appeal arose—to wit, the grant of summary judgment in favor of Skylink. See *Chamberlain*, 381 F.3d at 1185 n.4. Accordingly, the court refrained from discussing in detail whether the existence of a valid copyright—the *sine qua non* of protection under the DMCA, see *infra* note 166—had been satisfactorily demonstrated by the plaintiff. From what little the court's opinion reveals, however, there would appear to be at least some grounds to question whether Chamberlain's software, which was designed predominantly to fulfill the functional purpose of opening and closing owners' garage doors, qualified for DMCA protection at all. See *infra* note 137; cf. *infra* note 120.

⁷⁸ For a fuller description of the operation of Chamberlain's product, see *Chamberlain*, 381 F.3d at 1183-84.

⁷⁹ See *id.* at 1184-85.

⁸⁰ See *id.*

⁸¹ *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 292 F. Supp. 2d 1040, 1046 (N.D. Ill. 2003), *aff'd*, 381 F.3d 1178 (Fed. Cir. 2004); *Chamberlain*, 381 F.3d at 1204.

⁸² See generally 17 U.S.C. § 1201(a)(3)(A)-(B) (2006) (defining both "circumvent a technological measure" and "effectively controls access to a work" in terms that require consideration of "the authority of the copyright owner").

⁸³ See *supra* notes 48-49 and accompanying text.

question before it, because *the copyright statute itself* supplied the necessary “authorization” for Skylink’s access.⁸⁴ So long as Skylink’s product was designed to enable uses that the copyright statute permitted, in other words, trafficking in such a device did not constitute a DMCA violation notwithstanding Chamberlain’s denial of permission.⁸⁵ The court rejected Chamberlain’s argument (which the *Reimerdes* court surely would have accepted) that “*all* such uses of products containing copyrighted software to which a technological measure controlled access are now per se illegal under the DMCA unless the manufacturer provided consumers with *explicit* authorization.”⁸⁶

Although the court declared that its “inquiry ends with [the] clear language” of the DMCA,⁸⁷ it went on to consider the issue in light of the statute’s background, structure, and purpose. It found that the “[s]tatutory structure and legislative history both make it clear that § 1201 applies only to circumventions *reasonably related to protected rights*.”⁸⁸ Quoting from the legislative history, the court emphasized Congress’s intention “to specify, with as much clarity as possible, how the right against anti-circumvention would be qualified to maintain balance between the interests of content creators and information users.”⁸⁹ That balance would be upset, the court reasoned, if the statute were read as Chamberlain wished. The crux of the matter, in the court’s view, was Chamberlain’s insistence “that no necessary connection exists between access and *copyrights*”⁹⁰—that is, that anti-circumvention liability under the DMCA was unrelated to the question whether the defendant had infringed, or contributed to the infringement, of plaintiff’s copyrights. Noting that the DMCA was enacted in part to deter copyright infringement, the court reasoned that it would be illogical to construe the statute so as to make irrelevant the question whether the plaintiff actually faced potential infringement. The court concluded that “Congress could not have intended such a broad reading of the DMCA.”⁹¹

As a policy matter, this interpretation of the DMCA may have much to commend it. It harmonizes the DMCA with the remainder of the Copyright Act in a fashion that self-consciously seeks to preserve the

⁸⁴ See *Chamberlain*, 381 F.3d at 1193 (“[T]he copyright laws authorize consumers to use the copy of Chamberlain’s software embedded in the GDOs that they purchased. . . . [C]opyright laws authorize members of the public to access a work.”); *id.* at 1182 (“Skylink’s accused devices enables only uses that copyright law expressly authorizes, and is therefore presumptively legal.”).

⁸⁵ *Cf. supra* note 71.

⁸⁶ *Chamberlain*, 381 F.3d at 1193.

⁸⁷ *Id.* at 1194.

⁸⁸ *Id.* at 1195 (emphasis added). This is, to be sure, not a holding that actual infringement must be proven before DMCA liability can attach. Short of that showing, however, it is not clear what the court means by the requirement of a “reasonable relation” between infringement of the plaintiff’s copyright and the viability of its claim under the DMCA.

⁸⁹ *Id.* at 1196 (quoting H.R. REP. NO. 105-551, at 26 (1998)).

⁹⁰ *Id.* at 1197.

⁹¹ *Id.*; see also *infra* note 175.

Copyright Act's balancing of the interests of content creators on the one hand and consumers and users of copyrighted works on the other.⁹² Furthermore, it neatly sidesteps the often-debated question whether the DMCA is inherently inimical to fair use.⁹³

The court's interpretation, however, makes a sufficiently poor fit with the text of the DMCA as enacted to raise challenging questions concerning the decision's persuasive force in future cases. Nothing in the text of Section 1201, for example, expressly conditions a defendant's anti-circumvention or trafficking liability upon a prior showing of copyright infringement.⁹⁴ Articulating the contrary view, the Copyright Office has suggested that, while circumvention of a *copy* control mechanism for a noninfringing purpose would survive scrutiny under the DMCA, circumvention of an *access* control mechanism for the same purpose would be illegal.⁹⁵ The *Chamberlain* court's apparent assumption that the defendant must have either infringed, or at least helped contribute to the infringement of, plaintiff's copyrights also coexists uneasily alongside Congress's express disavowal in the DMCA of any intention to alter the existing contours of secondary liability for copyright infringement.⁹⁶ In short, by purporting to rest its decision upon

⁹² The notion of a proper balancing of interests as between creators and consumers of content has been recognized as essential to serving the broader public interest in the creation and dissemination of new works, a process that could readily be stifled if creators' rights grew too powerful. *See, e.g., Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (copyright law "reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts."); *White v. Samsung Electronics America, Inc.*, 989 F.2d 1512, 1513 (9th Cir. 1993) (Kozinski, J., dissenting from denial of rehearing *en banc*) ("Overprotecting intellectual property is as harmful as underprotecting it. . . . Culture, like science and technology, grows by accretion, each new creator building on the works of those who came before. Overprotection stifles the very creative forces it's supposed to nurture."); YOCHAI BENKLER, *THE WEALTH OF NETWORKS* 38 (2006) ("If we pass a law that regulates information production too strictly, allowing its beneficiaries to impose prices that are too high on today's innovators, then we will have not only too little consumption of information today, but also too little production of new information for tomorrow.").

⁹³ *See, e.g., Nimmer, supra* note 8; *Armstrong, supra* note 11, at 51 n.5. The court in *Chamberlain* was careful to reserve judgment on this question. *See Chamberlain*, 381 F.3d at 1199 n.14.

⁹⁴ Indeed, legislative proposals to amend the DMCA to expressly permit circumvention for noninfringing purposes tend to negate any suggestion that the existing statutory text already embraces such a rule. *See* H.R. 1201, 109th Cong. (1st Sess. 2005), § 5(b)(1) (proposing to amend 17 U.S.C. § 1201(c)(1) by adding the following text: "and it is not a violation of this section to circumvent a technological measure in order to obtain access to the work for purposes of making noninfringing use of the work").

⁹⁵ U.S. COPYRIGHT OFFICE, *THE DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998: U.S. COPYRIGHT OFFICE SUMMARY 4* (1998), available at <http://www.copyright.gov/legislation/dmca.pdf> ("[S]ince the fair use doctrine is not a defense to the act of gaining unauthorized access to a work, the act of circumventing a technological measure in order to gain access is prohibited."). As noted above, nothing in the DMCA forbids circumvention of copy controls, although such circumvention may be punishable under ordinary copyright law where it results in copyright infringement. *See supra* note 20 and accompanying text.

⁹⁶ *See* 17 U.S.C. § 1201(c)(2) (2006); *see also* Zohar Efroni, *Towards a Doctrine of "Fair Access" in Copyright: The Federal Circuit's Accord*, 46 IDEA 99, 107 (2005) ("[T]he text of

the “clear language” of the DMCA,⁹⁷ the *Chamberlain* court may have limited the persuasive reach of its own decision, for the actual language of the DMCA may as readily support a conclusion opposite the one the *Chamberlain* court reached.⁹⁸

This is particularly true with respect to the court’s treatment of the pivotal issue of authorization. The DMCA, as the court correctly observed, “*defines* circumvention as an activity undertaken ‘without the authority of the copyright owner.’”⁹⁹ The court concluded, however, that the copyright owner’s denial of authorization was not dispositive, based on the court’s conclusion that other provisions of the Copyright Act provide an alternative source of “authority.”¹⁰⁰ This latter interpretation, to be sure, finds support in sources outside the statutory text.¹⁰¹ A court more inclined to focus on the text of the statute itself, however,¹⁰² might as readily conclude that the phrase “*authority of the copyright owner*”¹⁰³ necessarily implies that such authority is for the “copyright owner” to grant or withhold at its election.¹⁰⁴

b. *Lexmark International v. Static Control Components*

The court in *Lexmark International, Inc. v. Static Control Components, Inc.*¹⁰⁵ avoided the *Chamberlain* court’s entanglement in the thicket of “authorization,” relying instead on the dubious notion that the purchase of a product containing unencrypted software code necessarily conferred on consumers the right to extract and copy that code.¹⁰⁶

Lexmark involved a DMCA claim brought by a manufacturer of computer printers against a supplier of aftermarket refilled toner cartridge components.¹⁰⁷ *Lexmark*, the printer manufacturer, sought to avail itself of the protections of the DMCA by embedding a piece of copyrighted software, the “Printer Engine Program,” in its printers, and another software program, the “Toner Loading Program,” in its toner cartridges.¹⁰⁸ One purpose of these programs was to limit consumers’

neither the anti-circumvention nor the anti-trafficking provisions conditions liability with showing a link to activity that interferes with traditional copyrights.”).

⁹⁷ See *supra* note 87 and accompanying text.

⁹⁸ See Efroni, *supra* note 96, at 106 (suggesting that “*Chamberlain* performed a considerable deviation from the textual and contextual framework of the law in order to promote a certain policy”).

⁹⁹ *Chamberlain*, 381 F.3d at 1193 (quoting 17 U.S.C. § 1201(a)(3)(A)) (emphasis added).

¹⁰⁰ See *id.*

¹⁰¹ See *supra* notes 68-71 and accompanying text.

¹⁰² See, e.g., *infra* note 194.

¹⁰³ 17 U.S.C. § 1201(a)(3)(B) (2006) (emphasis added).

¹⁰⁴ See *supra* notes 48-49 and accompanying text.

¹⁰⁵ 387 F.3d 522 (6th Cir. 2004).

¹⁰⁶ *Id.* at 546-47.

¹⁰⁷ See *id.* at 529.

¹⁰⁸ See *id.* at 529-30.

freedom to install non-Lexmark toner cartridges by disabling their printers if they did so. Upon powering up, each Lexmark printer performed a two-step authentication sequence.¹⁰⁹ It first queried a separate microchip inside the inserted toner cartridge, which contained an eight-byte key combination. Applying a publicly available encryption algorithm known as “Secure Hash Algorithm-1” or “SHA-1,”¹¹⁰ the printer calculated an authentication code based on the toner cartridge’s eight-byte key. Authentication succeeded if the result the printer calculated matched a parallel calculation undertaken by the chip on the toner cartridge itself. During the second stage of the authentication sequence, the Printer Engine Program downloaded a copy of another very short program (the Toner Loading Program) from a chip on the toner cartridge and computed a checksum of the downloaded bytes.¹¹¹ This stage of the authentication procedure succeeded if the checksum the Printer Engine Program calculated matched a value encoded elsewhere on the toner cartridge chip. The printer shut itself down unless both steps of the authentication procedure succeeded. The authentication procedure sought to ensure that consumers used only toner cartridges (whether new or refilled) supplied by Lexmark.¹¹²

Although defendant Static Control Components (“SCC”) did not compete directly with Lexmark, it sold chips to Lexmark’s competitors in the market for remanufactured toner cartridges.¹¹³ SCC’s chips enabled Lexmark’s competitors to produce toner cartridges that mimicked the two-stage authentication sequence when used in a Lexmark printer. SCC advertised that its chips successfully bypassed the first step of Lexmark’s authentication sequence.¹¹⁴ For the second step of the sequence, SCC’s chips contained a byte-for-byte copy of Lexmark’s Toner Loading Program, which enabled the chip to pass Lexmark’s “checksum” calculation.¹¹⁵

Lexmark charged that SCC’s chips infringed Lexmark’s copyrights in the Printer Engine Program and Toner Loading Program. Lexmark also alleged that SCC’s chips circumvented, in violation of the DMCA, a technological measure (specifically, the first step of the two-step authentication sequence) that “effectively controlled access” to its copyrighted programs.¹¹⁶ A federal district court agreed and preliminarily

¹⁰⁹ See *id.* at 530.

¹¹⁰ *Id.*

¹¹¹ *Id.* at 531.

¹¹² See *id.* at 530-31.

¹¹³ *Id.* at 530.

¹¹⁴ *Id.*; see also *id.* at 537 (observing that SCC did not duplicate the algorithm Lexmark used in the first step of its authentication procedure, but instead “replaced Lexmark’s SHA-1 function with a different publicly available encryption program”).

¹¹⁵ *Id.* at 530-31.

¹¹⁶ *Id.* at 531.

enjoined SCC's distribution of its chips.¹¹⁷ On SCC's appeal, a fractured panel of the Sixth Circuit reversed.¹¹⁸ The three panel judges wrote three separate opinions, although they agreed unanimously that Lexmark could not show a likelihood of success on its DMCA claim.¹¹⁹

The panel first expressed doubt that Lexmark's Toner Loading Program ("TLP"), which was largely dictated by functional concerns and occupied only 37 to 55 bytes of memory, was eligible for copyright protection at all—a necessary prerequisite to any claim under the DMCA.¹²⁰

Lexmark's longer and more complex Printer Engine Program ("PEP"), SCC conceded, was protected by copyright.¹²¹ The panel, however, reasoned that the printer's authentication sequence failed to "effectively control access" to that program. The PEP, the panel observed, was built into every Lexmark printer and existed, unencrypted, in printer memory, where a sufficiently technologically knowledgeable user could access it at any time without needing to employ Lexmark's authentication sequence. For that reason, the court wrote:

It is not Lexmark's authentication sequence that "controls access" to the Printer Engine Program. It is the purchase of a Lexmark printer that allows "access" to the program. Anyone who buys a Lexmark printer may read the literal code of the Printer Engine Program directly from the printer memory, with or without the benefit of the authentication sequence, and the data from the program may be translated into readable source code after which copies may be freely distributed. No security device, in other words, protects access to the Printer Engine Program and no security device accordingly must be circumvented to obtain access to that program code.¹²²

Because any user could copy the PEP without using the authentication sequence, the court continued, that sequence could not be said to "control

¹¹⁷ See *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 253 F. Supp. 2d 943 (E.D. Ky. 2003).

¹¹⁸ *Lexmark*, 387 F.3d at 551.

¹¹⁹ See *id.* at 545-51; *id.* at 551-53 (Merritt, J., concurring); *id.* at 562-65 (Feikens, J., concurring in relevant part).

¹²⁰ *Lexmark*, 387 F.3d at 529, 537-44. The familiar general rule is that copyright protection does not extend to words and short phrases, on the grounds that some minimum threshold amount of expressive content must be present. See, e.g., 37 C.F.R. § 202.1(a) (2007) (listing examples of uncopyrightable subject matter including "[w]ords and short phrases such as names, titles, and slogans"). The functional characteristics of computer programs also impose limits on the scope of copyright protection that they receive. See, e.g., *infra* note 129. On remand from the Court of Appeals for the Sixth Circuit, the district court held Lexmark's Toner Loading Program uncopyrightable. *Static Control Components, Inc. v. Lexmark Int'l, Inc.*, 2007 WL 1485770, at *6 (E.D. Ky. Apr. 18, 2007).

In the court of appeals, one of the panel members (a district judge sitting by designation) dissented from this portion of the panel majority's opinion. See *Lexmark*, 387 F.3d at 553-61 (Feikens, J., dissenting in part). Judge Feikens nevertheless agreed with the majority's rejection of Lexmark's DMCA claim based on the Toner Loading Program, however, on the grounds that Lexmark could not show that SCC's "chip was primarily designed or produced for the purpose of accessing the TLP." *Id.* at 562.

¹²¹ *Id.* at 546.

¹²² *Id.* at 546-47 (citations omitted).

access” to the program, and certainly could not be said to do so “effectively”:

Because the statute refers to “control[ing] access to a work protected under this title,” it does not naturally apply when the “work protected under this title” is otherwise accessible. Just as one would not say that a lock on the back door of a house “controls access” to a house whose front door does not contain a lock and just as one would not say that a lock on any door of a house “controls access” to the house after its purchaser receives the key to the lock, it does not make sense to say that this provision of the DMCA applies to otherwise-readily-accessible copyrighted works. Add to this the fact that the DMCA not only requires the technological measure to “control[] access” but also requires the measure to control that access “effectively,” and it seems clear that this provision does not naturally extend to a technological measure that restricts one form of access but leaves another route wide open.¹²³

The panel denied that its interpretation of “effectively controls access” precluded application of the DMCA unless the plaintiff had created “an impervious shield to the copyrighted work.”¹²⁴ The panel insisted that the DMCA’s protection did not turn upon “the *degree* to which a measure controls access to a work.”¹²⁵ But for the DMCA to apply, the court maintained that “the challenged circumvention device must indeed circumvent something. . . .”¹²⁶ Because any user could read the Printer Engine Program directly from the printer, there was nothing to circumvent.

The two concurring opinions offered other avenues to the same destination. One judge concurred separately on the grounds that every purchaser of a Lexmark printer “acquire[d] an implied license to use the Printer Engine Program for the life of that printer,”¹²⁷ and accordingly, the DMCA could not be found to protect any “right of the copyright owner to prevent the consumer from using” that program.¹²⁸ Another judge would have gone even farther, concluding that extending the protections of the DMCA to Lexmark would be incompatible with

¹²³ *Id.* at 547 (citation omitted). *But see* Pearl Investments, LLC v. Standard I/O, Inc., 257 F. Supp. 2d 326, 350 (D. Me. 2003) (“The question of whether a technological measure ‘effectively controls access’ is analyzed solely with reference to how that measure works ‘in the ordinary course of its operation.’ The fact that [defendant] had alternative means of access to the works is irrelevant. . . .”) (citation omitted).

¹²⁴ *Lexmark*, 387 F.3d at 549.

¹²⁵ *Id.*

¹²⁶ *Id.* (emphasis omitted). Cases testing the boundaries of the DMCA’s definition of “circumvention” may represent the next frontier in DMCA litigation. *See, e.g.*, Healthcare Advocates, Inc. v. Harding, Earley, Follmer & Frailey, 497 F. Supp. 2d 627, 644-45 (E.D. Pa. 2007) (malfunction of online archive’s system to limit archival storage of web pages did not constitute “circumvention” of the system); I.M.S. Inquiry Mgmt. Sys., Ltd. v. Berkshire Info. Sys., Inc., 307 F. Supp. 2d 521, 532-33 (S.D.N.Y. 2004) (defendant’s unauthorized use of another party’s valid password did not constitute “circumvention” of plaintiff’s password-protection mechanism). The DMCA’s definition of “circumvention” may do more to complicate the courts’ task in these cases than to simplify it. *See generally infra* notes 211-215 and accompanying text.

¹²⁷ *Lexmark*, 387 F.3d at 564 (Feikens, J., concurring in part).

¹²⁸ *Id.* at 563.

legislative intent because of its anticompetitive effects in the market. Congress, the concurring opinion emphasized, never “intend[ed] to allow the DMCA to be used offensively in this manner,” which in the concurring judge’s view allowed a manufacturer to “create monopolies for replacement parts. . . .”¹²⁹ A device that circumvented such a monopoly-creating mechanism, this opinion reasoned, could not be said to be “primarily designed or produced for the purpose of” accessing copyrighted works.¹³⁰ The concurrence expressed the fear that, in the wake of the panel’s decision, companies would still try to “use the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves just by tweaking the facts of this case[,]” and believed a broader opinion was required to forestall such a result.¹³¹

Lexmark, like *Chamberlain*, differs markedly from *Reimerdes* in its reading of the DMCA. The most striking contrast between *Lexmark* and its predecessors, however, lies less in the court’s analytical approach and more in the attitudes and sympathies revealed in the judges’ opinions. The court in *Reimerdes* was openly hostile towards technologically sophisticated parties who wished to use their own consumer electronic products in a manner inconsistent with the desires of those products’ suppliers.¹³² *Lexmark* is as bountifully indulgent towards such technology-savvy users as *Reimerdes* was unsparingly averse. It is scarcely possible to imagine the court in *Reimerdes* penning a sentence like this one from *Lexmark*:

Anyone who buys a Lexmark printer may read the literal code of the Printer Engine Program directly from the printer memory, with or without the benefit of the authentication sequence, and the data from the program may be translated into readable source code after which copies may be freely distributed.¹³³

One cannot, of course, take this sentence literally; it is likely that only a minuscule number of printer owners in fact possess the technological acumen to “read the literal code of the Printer Engine Program directly from the printer memory” as the panel somewhat breezily suggests.¹³⁴ *Lexmark*, however, remains significant insofar as it evaluates the plaintiff’s technological protection scheme from the perspective of a knowledgeable, sophisticated end-user, rather than

¹²⁹ *Id.* at 552 (Merritt, J., concurring).

¹³⁰ *Id.* (quoting 17 U.S.C. § 1201(a)(2)(A) (2006)).

¹³¹ *Id.* at 551.

¹³² See *supra* notes 56–61 and accompanying text.

¹³³ *Lexmark*, 387 F.3d at 546.

¹³⁴ *Id.* Ascertaining precisely how this might be accomplished with one’s own printer is left as an exercise for the reader.

insisting, as *Reimerdes* does, that users must remain ignorant of the capabilities of the electronic products they have purchased.¹³⁵

Nevertheless, despite its normative appeal, *Lexmark* ultimately articulates an interpretation of the DMCA that is not readily squared with the statutory text. The court's stated assumption that any purchaser of a product containing unencrypted software code is necessarily allowed to extract that code from the product and make copies¹³⁶ surely has the general rule backwards. Although the court's analysis would be correct as to uncopyrighted code (or, what is the same thing, the uncopyrightable functional characteristics of code that is nominally subject to copyright¹³⁷), purchasers enjoy no general right to copy and distribute unencrypted copyrighted works.¹³⁸ Audio compact discs ("CDs"), for example, ordinarily omit any form of encryption to protect the musical works recorded thereon,¹³⁹ but no one (and certainly not the *Lexmark* court) believes that purchasers are generally immune from liability if they copy and distribute the unencrypted content of a music CD.¹⁴⁰ Although it is true (indeed, it is tautological) that a plaintiff cannot prevail under the DMCA where there is no technological measure protecting the work in question (and therefore nothing to "circumvent"),

¹³⁵ Although *Lexmark* took pains to distinguish *Reimerdes* as not involving "a situation where the access-control measure left the literal code or text of the computer program or data freely readable," *id.* at 547, *Lexmark's* own analytical framework seems to be far enough removed from anything the *Reimerdes* court said to raise the question whether the decisions are ultimately irreconcilable. The point is thrown into sharp relief by redrafting the "access control" discussion in *Lexmark* to describe instead the technological measure that was at issue in *Reimerdes*:

It is not [CSS] that "controls access" to the [DVD video stream]. It is the purchase of a [DVD player] that allows "access" to the [video stream]. Anyone who buys a [DVD player] may read the literal code of the [player key] directly from the [player], with or without the benefit of [CSS], and the data from the program may be translated into readable source code after which copies may be freely distributed. No security device, in other words, protects access to the [video stream] and no security device accordingly must be circumvented to obtain access to that program code.

Cf. id. at 546-47.

¹³⁶ See *supra* note 122 and accompanying text.

¹³⁷ As the Court of Appeals for the Second Circuit has suggested, computer programs commonly contain elements that derive from sources other than the original creative expression of the programmer. These elements are *ipso facto* outside the scope of any copyright subsisting in the program as a whole, and must be "filtered out" of any infringement analysis. See *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 705 (2d Cir. 1992) (copyright protection does not extend to "those elements of a computer program that are necessarily incidental to its function"); *id.* at 707-10 (in considering scope of copyright protection for software, courts must "filter out" any components thereof that were "dictated by efficiency," "dictated by external factors," or "taken from the public domain").

¹³⁸ See 17 U.S.C. § 106(1), (3) (2006).

¹³⁹ The official specifications governing the format of digital audio information on music CDs do not include any provision for the use of access or copy controls, and efforts to add such systems to audio CDs have to date been mostly unsuccessful—even occasionally resulting in damage to customers' electronic equipment. See Deirdre K. Mulligan & Aaron K. Perzanowski, *The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident*, 22 BERKELEY TECH. L.J. 1157 (2007). See generally Armstrong, *supra* note 11, at 61-62.

¹⁴⁰ See, e.g., *Zomba Enters., Inc. v. Panorama Records, Inc.*, 491 F.3d 574, 577-78, 584-85 (6th Cir. 2007).

Lexmark's broader suggestion of a general right to copy unencrypted digital works surely goes too far.

Lexmark also made no serious effort to parse and apply the statutory definition of the pivotal DMCA clause—"effectively controls access." Although the court included a citation to the district court's discussion of the statutory definition,¹⁴¹ absent from the court of appeals' opinion is any analysis of whether *Lexmark*'s authentication sequence "in the ordinary course of its operation, require[d] the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work."¹⁴² Instead, *Lexmark*—while denying that it was doing so¹⁴³—applied an understanding of "effectively controls access" that expressly made the extent of statutory protection dependent upon the relative strength of the plaintiff's technological protection measure.¹⁴⁴ Is the *Lexmark* court's effective revision of the DMCA preferable as a matter of policy? Perhaps. But it remains exceedingly difficult to shoehorn the court's interpretation into the existing statutory language.¹⁴⁵ The tension between the court's reasoning and the binding text of the DMCA can only limit the decision's precedential value—to the detriment of technology users who would benefit from a more robustly articulated set of limitations on the scope of the statute's circumvention and trafficking prohibitions.

c. Storage Technology Corporation v. Custom Hardware Engineering

In *Storage Technology Corporation v. Custom Hardware Engineering & Consulting, Inc.*,¹⁴⁶ the same court that decided *Chamberlain* sought again to borrow from ordinary copyright principles to limit the reach of the DMCA. Plaintiff Storage Technology Corp. ("StorageTek") manufactured data tape storage libraries that included copyrighted maintenance software code that loaded automatically at

¹⁴¹ See *Lexmark International, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 546 (6th Cir. 2004).

¹⁴² 17 U.S.C. § 1201(a)(3)(B) (2006).

¹⁴³ See *supra* notes 124–125 and accompanying text.

¹⁴⁴ See *Lexmark*, 387 F.3d at 547 (noting that "the DMCA not only requires the technological measure to 'control[] access' but also requires the measure to control that access 'effectively'" (quoting § 1201(a)(3)(B))); cf. *supra* note 43 and accompanying text.

¹⁴⁵ To be sure, the panel opinion in *Lexmark* did not, as the *Chamberlain* panel had, contend that its interpretation was commanded by the DMCA's literal text, relying instead on a mix of arguments grounded in the legislative history and purpose of the statute. Compare *Lexmark*, 387 F.3d at 546–51, with *supra* note 87 and accompanying text. But cf. *Lexmark*, 387 F.3d at 552 (Merritt, J., concurring) (complaining that *Lexmark*'s "reading would ignore the precise language . . . as well as the main point of the DMCA"); *id.* at 564 (Feikens, J., concurring in part) ("[U]nder the plain meaning of the law, circumventing a technological measure . . . is only a violation of § 1201(a) if the device allows consumers access to a work that they are not otherwise permitted to have.").

¹⁴⁶ 421 F.3d 1307 (Fed. Cir. 2005), *reh'g denied*, 431 F.3d 1374 (Fed. Cir. 2005).

startup.¹⁴⁷ In the event of a maintenance problem, the software was designed to transmit coded error messages describing the symptoms of the problem only if supplied with a valid password.¹⁴⁸ Custom Hardware Engineering (“CHE”) was a competitor of StorageTek’s in the aftermarket for technical service and maintenance of StorageTek’s products. To access the maintenance error codes on tape libraries manufactured by StorageTek, CHE designed two devices to circumvent StorageTek’s password protection system.¹⁴⁹ Doing so enabled CHE to diagnose and repair problems with tape libraries manufactured by StorageTek.¹⁵⁰ StorageTek sued, alleging both copyright infringement and violation of the DMCA. It alleged that, by causing StorageTek’s customers’ tape libraries to transmit coded error messages, CHE had circumvented its password authentication mechanism and thereby gained access to (and created an unauthorized copy of) StorageTek’s copyrighted maintenance software.¹⁵¹

The court rejected StorageTek’s copyright claims, finding CHE’s activities protected by a statutory safe harbor for copies necessarily made in the course of maintenance or repair of a computer.¹⁵² The failure of StorageTek’s claims for copyright infringement, the court then continued, was all but dispositive of its claims under the DMCA. The court reasoned, citing *Chamberlain*, that:

To the extent that CHE’s activities do not constitute copyright infringement or facilitate copyright infringement, StorageTek is foreclosed from maintaining an action under the DMCA. That result follows because the DMCA must be read in the context of the Copyright Act, which balances the rights of the copyright owner against the public’s interest in having appropriate access to the work.

¹⁴⁷ See *id.* at 1309-10. Strangely, StorageTek did not license the code to its own customers, necessarily (if paradoxically) implying that every customer infringed StorageTek’s copyright in the code each time they turned their purchased hardware on. See *id.* at 1310 (noting that, although “StorageTek provides the entire [software] code to the customer,” the accompanying “license covers only . . . portions of the software, and it specifically excludes the maintenance code”). Most likely, StorageTek was attempting to avoid—unsuccessfully, as it turned out, see *id.* at 1311-15—the application of 17 U.S.C. § 117(c), which allows copying of “an authorized copy of [a] computer program . . . for purposes . . . of maintenance or repair . . .” 17 U.S.C. § 117(c) (2006) (emphasis added). The copies of the maintenance software StorageTek had installed on its own customers’ machines were, by the terms of its own license, unauthorized copies. StorageTek’s apparent adversarial attitude towards its own customers surely heightened the court’s skepticism towards StorageTek’s interpretation of the DMCA.

¹⁴⁸ See *Storage Tech.*, 421 F.3d at 1310. Presumably, StorageTek’s intention in adopting this password authentication mechanism was effectively to prevent its customers or competitors from performing their own maintenance on StorageTek’s tape libraries.

¹⁴⁹ See *id.* As the court described it, CHE’s two devices worked somewhat differently—one by computing a valid password for StorageTek’s system, the other apparently by preventing the system from requesting a password at all—but the differences are immaterial for present purposes.

¹⁵⁰ *Id.*

¹⁵¹ See *id.*

¹⁵² *Id.* at 1311-15; see also *Storage Tech. Corp. v. Custom Hardware Eng’g & Consulting, Inc.*, 431 F.3d 1374, 1375-76 (Fed. Cir. 2005) (opinion on denial of rehearing) (reiterating court’s conclusion that safe harbor of 17 U.S.C. § 117(c) covered CHE’s activities). The copyright safe harbor provision on which the court relied was itself enacted in 1998 as part of the DMCA. See *infra* note 174.

Therefore, courts generally have found a violation of the DMCA only when the alleged access was intertwined with a right protected by the Copyright Act. To the extent that StorageTek's rights under copyright law are not at risk, the DMCA does not create a new source of liability.¹⁵³

This interpretation of the DMCA rests upon the foundation of the court's earlier decision in *Chamberlain* and, like that decision, is subject to the objection that the DMCA itself does not require a plaintiff to demonstrate an antecedent act of copyright infringement as a precondition to liability under either the anti-circumvention or trafficking provisions.¹⁵⁴ Again, although the result in *StorageTek* might be defensible (and even superior) as a matter of wise policy, it is remarkable how far the court was obliged to bend the statutory text to reach its result.

III. HOW SHOULD THE COURTS INTERPRET THE DMCA?

If there is a common thread to be found uniting the judicial decisions that construe the DMCA broadly with those that construe the statute narrowly, it is their shared disregard of inconvenient provisions that actually appear in the statutory text and point to a conclusion contrary to the one the court reached. *Reimerdes* effectively struck out the DMCA's express guarantee of continued fair use,¹⁵⁵ *Chamberlain*, the statute's reference to "the authority of the copyright owner,"¹⁵⁶ and *Lexmark*, its definition of "effectively controls access."¹⁵⁷ Efforts to develop a coherent jurisprudence under the DMCA are only hampered, however, by judicial insistence on disregarding the text of the statute while simultaneously declaring that the text alone justifies the decision in the case at bar. However desirable either set of decisions might appear as a normative matter, their precedential force will be diminished if future courts find it difficult to harmonize DMCA precedents with the language of the DMCA itself. Judged against the standard of fidelity to the statutory text—the standard that the courts themselves, by their repeated references to what they portray as unambiguous statutory commands, seem to invite—the principal DMCA cases on both sides come up short.

If the courts are not simply enforcing the DMCA according to its literal terms, they must necessarily be exercising a measure of interpretive discretion—creating meaning from, rather than merely finding it in, the statutory language. Forthright judicial acknowledgment of this reality, rather than the making of unsustainable pronouncements as to what the statutory text alone is perceived to command, holds greater

¹⁵³ *Storage Tech.*, 421 F.3d at 1318 (citations omitted).

¹⁵⁴ See *supra* notes 94-96 and accompanying text.

¹⁵⁵ See *supra* notes 62-65 and accompanying text.

¹⁵⁶ See *supra* notes 99-104 and accompanying text.

¹⁵⁷ See *supra* notes 141-145 and accompanying text.

promise in developing a rational and consistent body of DMCA case law. Rather than ignoring provisions of the DMCA that suggest decisions contrary to the ones they wish to reach, we should prefer instead that the courts acknowledge the necessity of venturing beyond the four corners of the enacted text. Although such an acknowledgement is potentially controversial largely for political reasons,¹⁵⁸ the foreseeable benefits to both the courts and public from considering additional indicia of meaning beyond the bare text of the DMCA suffice to outweigh the risks. The benefits to be gained include rationality and predictability, and ultimately a DMCA regime that more closely resembles the world Congress believed it was creating in 1998.

The discussion that follows will begin by situating the DMCA within the broader corpus of federal copyright law. Although the DMCA created new obligations beyond those that already existed under the copyright statute, it nevertheless drew heavily upon copyright concepts, language, and policies in delimiting those obligations. Because of the multiple interconnections between the DMCA and the remainder of federal copyright law, the analysis then turns to the question how those connections can and should illuminate judicial decisions. Finding the DMCA to be unclear or internally inconsistent at a number of key junctures, I conclude that the courts should play the same policy-making role that they have historically performed in guiding the evolution of copyright. Finally, by way of illustrating some consequences that might follow if the courts were to proceed along the lines identified herein, I consider whether existing copyright principles of fair use may serve to guide future decisions in DMCA cases.

A. *Reading the DMCA as a Copyright Statute*

One identifiable source of the courts' varying readings of the DMCA lies in their disagreements about the relevance, or lack thereof, of the remaining provisions of the Copyright Act. As some courts (and some litigants) have portrayed it, the DMCA stands entirely apart from preexisting copyright law.¹⁵⁹ Congress, on this reading, created a *sui generis* regulatory regime for technological protection systems, just as it had previously done for semiconductor chips,¹⁶⁰ digital audio recording devices,¹⁶¹ bootleg recordings,¹⁶² and boat hulls.¹⁶³ The courts, on this

¹⁵⁸ Although not, as I will suggest below, overly so. *Cf. infra* Part IV and notes 274-277 and accompanying text.

¹⁵⁹ See *supra* notes 51-55, 90 and accompanying text.

¹⁶⁰ See Semiconductor Chip Protection Act of 1984, Pub. L. No. 98-620, 98 Stat. 3335 (codified as amended at 17 U.S.C. §§ 901-914 (2006)).

¹⁶¹ See Audio Home Recording Act of 1992, Pub. L. No. 102-563, 106 Stat. 4237 (codified as amended at 17 U.S.C. §§ 1001-1010 (2006)).

¹⁶² See Uruguay Round Agreements Act, Pub. L. No. 103-465, § 512(a), 108 Stat. 4809, 4974 (1994) (codified at 17 U.S.C. § 1101 (2006)).

view, should not look outside the DMCA's anti-circumvention and trafficking provisions to inquire, when adjudicating a DMCA claim, whether a plaintiff's copyright interests are at stake.¹⁶⁴

Taken as a whole, however, the statutory text does not comfortably accommodate the attempts of decisions such as *Reimerdes* to draw a sharp dividing line between the offense of copyright infringement on the one hand and violations of the DMCA on the other.¹⁶⁵ The two are clearly more closely related, their boundaries more permeable, than these opinions suggest.

First, the DMCA contains multiple provisions that refer explicitly to copyright language and concepts. Reference to the broader corpus of federal copyright law is essential to give these provisions of the DMCA any meaning at all. Liability for both circumvention and trafficking, for instance, exists only where technological measures protect a presently copyrighted work; that is, the existence of a valid copyright is an express statutory precondition both to a claim for copyright infringement and a claim arising under the DMCA.¹⁶⁶ One of the DMCA's two bans on trafficking in circumvention devices imposes liability only where "a right of a copyright owner" is at stake.¹⁶⁷ The DMCA does not tell us what the "rights of a copyright owner" are; only the Copyright Act can do that.¹⁶⁸ To take another example: although the DMCA refers repeatedly, at critical junctures, to the concept of the authority of the copyright owner,¹⁶⁹ nothing in the DMCA identifies the copyright owner whose "authority" is needed; only the Copyright Act does that.¹⁷⁰ Furthermore, nothing in the DMCA tells us how to determine the scope of the "rights, remedies, limitations, or defenses to copyright infringement, including fair use,"¹⁷¹ or the scope of "vicarious or contributory liability for copyright infringement,"¹⁷² with which Congress disclaimed any intent to interfere.

The interconnections between copyright and the DMCA are even more substantial and pervasive, however, than the foregoing paragraph might suggest. For example, the remedies Congress provided under the

¹⁶³ See Vessel Hull Design Protection Act, Pub. L. No. 105-304, §§ 501-505, 112 Stat. 2860, 2905-18 (1998) (codified at 17 U.S.C. § 1301 (2006)).

¹⁶⁴ Cf., e.g., R. Polk Wagner, *Reconsidering the DMCA*, 42 HOUS. L. REV. 1107, 1125 (2005) (noting that "the DMCA is not really a law about copyright. It is instead a law about technology").

¹⁶⁵ See *supra* notes 51-55 and accompanying text.

¹⁶⁶ 17 U.S.C. § 1201(a)(1)(A) and (a)(2) repeatedly refer to "a work *protected under this title*"—that is, protected by copyright—as the subject matter to which either anti-circumvention or trafficking liability can attach. 17 U.S.C. § 1201 (a)(1)(A)-(a)(2) (2006) (emphasis added).

¹⁶⁷ *Id.* § 1201(b)(1).

¹⁶⁸ See *id.* § 106 (2006) (defining rights of a copyright owner).

¹⁶⁹ The copyright owner's authority forms a part of the definitions of both "circumvent" and "effectively controls access." *Id.* § 1201(a)(3)(A)-(B) (internal quotation marks omitted).

¹⁷⁰ See *id.* §§ 201-205 (2006).

¹⁷¹ *Id.* § 1201(c)(1).

¹⁷² *Id.* § 1201(c)(2).

DMCA closely track the remedies available for copyright infringement.¹⁷³ The DMCA's anti-circumvention provisions were enacted alongside provisions creating new defenses to claims for copyright infringement.¹⁷⁴ Both Congress and the President justified the enactment of the DMCA as a necessary measure to deter copyright infringement.¹⁷⁵ The statute gives authority to craft exceptions from its liability provisions in part to the Register of Copyrights.¹⁷⁶ Even the placement of the statute within the United States Code carries colorable significance: although an early version of the legislation that became the DMCA proposed to "move[] the anti-circumvention provisions out of Title 17" on the grounds that "these regulatory provisions have little, if anything, to do with copyright law,"¹⁷⁷ the eventual inclusion of the anti-circumvention provisions alongside the rest of the federal copyright law

¹⁷³ Compare *id.* § 1203(b)(1) (2006) (authorizing a court to grant temporary and permanent injunctions to prevent or restrain a DMCA violation), with *id.* § 502(a) (2006) (authorizing courts to award injunctive relief to prevent or restrain infringements of copyright); *id.* § 1203(b)(2) (authorizing a court to impound any device or product it finds was involved in a DMCA violation) with *id.* § 503(a) (authorizing courts to seize and impound property believed to have been used in infringements of copyright); *id.* § 1203(c)(2) (authorizing a court to award actual damages for violations of the DMCA) with *id.* § 504(b) (2006) (authorizing award of actual damages to copyright holders injured through infringements of copyright); *id.* § 1203(c)(3) (authorizing a complaining party to elect to recover statutory damages any time before final judgment on a DMCA violation) with *id.* § 504(c)(1) (authorizing award of statutory damages to a copyright owner for copyright infringement violations); *id.* § 1203(c)(5)(B) (authorizing a court to reduce or remit an award of damages when it finds a library, archives, education institutions or public broadcasting entity innocently violated the DMCA) with *id.* § 504(c)(2)(i)-(ii) (authorizing reduction in statutory damages awards against innocent infringers, and the remitting of all statutory damages where the copyright infringement was committed by a nonprofit archive, library, educational institution, or public broadcaster, or the employees of such institutions).

¹⁷⁴ The anti-circumvention provisions of the DMCA were added in Title I of the legislation. See Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, § 103, 112 Stat. 2860, 2861-77. Title II enacted what is now 17 U.S.C. § 512, creating a new statutory immunity from liability for copyright infringement for internet service providers in certain circumstances. See *id.* § 202, 112 Stat. at 2877-84. Title III of the statute amended 17 U.S.C. § 117 to provide a new defense to claims for copyright infringement arising from computer maintenance or repair, superseding court decisions such as *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518-19 (9th Cir. 1993). See Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, § 302, 112 Stat. 2860, 2886-87. Title IV of the statute made various other modifications to the Copyright Act. See *id.* §§ 401-407, 112 Stat. at 2887-2905. The only portion of the DMCA as enacted that is arguably unconnected with copyright is Title V, in which Congress created a form of *sui generis* intellectual property protection for the design of boat hulls, superseding the Supreme Court's decision in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 143 (1989). See *supra* note 163.

¹⁷⁵ See Statement on Signing the Digital Millennium Copyright Act, 2 PUB. PAPERS 1902, 1903 (Oct. 28, 1998) ("Through enactment of the Digital Millennium Copyright Act, we have done our best to protect from digital piracy the copyright industries that comprise the leading export of the United States."); S. REP. NO. 105-190, at 2 (1998) ("[T]he law must adapt in order to make digital networks safe places to disseminate and exploit copyrighted materials."); *id.* at 8 ("Due to the ease with which digital works can be copied and distributed worldwide virtually instantaneously, copyright owners will hesitate to make their works readily available on the Internet without reasonable assurance that they will be protected against massive piracy."); H.R. REP. NO. 105-551, pt. 2, at 25 (1998) ("[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.").

¹⁷⁶ 17 U.S.C. § 1201(a)(1)(C); see also *supra* note 28.

¹⁷⁷ H.R. REP. NO. 105-551, at 23-24.

in Title 17 would appear to indicate that Congress recognized their connection with copyright.

More persuasive, therefore, are those courts that have attempted to harmonize the DMCA with other provisions of copyright law, applying the settled principle that statutes *in pari materia* should be construed together.¹⁷⁸ Construing the DMCA alongside the rest of copyright law makes available powerful analytical tools of proven usefulness. Consider, for example, the functionality principle, which rests upon the dichotomy long recognized in copyright law between idea and expression. The familiar general rule is that, even where copyright protects a work, copyright protection does not extend to aspects of the work that are predominantly functional rather than expressive.¹⁷⁹ Courts applying this principle have declined to extend copyright protection to portions of computer software¹⁸⁰ or other articles¹⁸¹ that reflect predominantly functional, rather than expressive or creative, concerns.¹⁸² The functionality doctrine serves a valuable purpose in ensuring that copyright protection does not restrict that which should remain “open and free to the use of the public.”¹⁸³

Interpreting the DMCA as a copyright statute brings copyright’s functionality doctrine into play. The functionality principle, in turn, does much to justify decisions like *Lexmark* and *Chamberlain*. Because the works the plaintiffs in both those cases sought to protect were closely

¹⁷⁸ See, e.g., *Erlenbaugh v. United States*, 409 U.S. 239, 243-44 (1972); *Postmaster Gen. v. Early*, 25 U.S. (12 Wheat.) 136, 152 (1827).

¹⁷⁹ This rule is often traced to *Baker v. Selden*, 101 U.S. 99 (1879). There, the Court reasoned that the copyright in the plaintiff’s book on accounting did not prevent the defendant from copying the *accounting system* the plaintiff had developed and described in the book. See *id.* at 107. Although the literal text of the book itself was under copyright and protected against wholesale taking, the same was not true of the functional accounting methodology that the book endeavored to explain. See *id.* at 104 (“[W]hilst no one has a right to print or publish his book, . . . any person may practise and use the art itself which he has described and illustrated therein. . . . The copyright of a book on book-keeping cannot secure the exclusive right to make, sell, and use account-books prepared upon the plan set forth in such book.”); see also *Mazer v. Stein*, 347 U.S. 201, 217 (1954) (“Unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself.”). On the functionality doctrine in general, see 1 PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 2.15 (3d ed. Supp. 2008).

¹⁸⁰ See *supra* note 137; see also H.R. REP. NO. 94-1476, at 56-57 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5670 (explaining that 17 U.S.C. § 102(b) “is intended, among other things, to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of the copyright law”).

¹⁸¹ See, e.g., *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1148 (2d Cir. 1987) (rejecting copyrightability of plaintiff’s bicycle rack design on grounds that the design was dictated by functional considerations involved in storing bicycles); *Carol Barnhart, Inc. v. Econ. Cover Corp.*, 773 F.2d 411, 419 (2d Cir. 1985) (finding plaintiff’s molded styrene human torso designs ineligible for copyright on grounds that designs were dictated by functional considerations involved in display of clothing).

¹⁸² Many other examples are collected in Dennis S. Karjala, *Distinguishing Patent and Copyright Subject Matter*, 35 CONN. L. REV. 439, 444 n.22 (2003).

¹⁸³ *Baker*, 101 U.S. at 104.

bound up with utilitarian considerations,¹⁸⁴ the functionality principle would suggest that those works were entitled to comparatively limited copyright protection. Interpreting the DMCA to extend comparably limited protections in the same circumstances might explain the courts' decisions for the defendants in each of those cases. Conversely, interpreting the DMCA to provide a *sui generis* form of protection unconnected with traditional intellectual property principles makes such decisions correspondingly difficult to understand in view of their apparent departures from the text of the DMCA as written.

The functionality principle is only one of many useful analytical tools that the courts have developed during the more than two centuries since the enactment of the first federal copyright law.¹⁸⁵ Many of those concepts carry as much potential explanatory power in today's digital world as they did before the enactment of the DMCA. DMCA jurisprudence would be needlessly impoverished if the courts were walled off from considering the broader history of federal efforts to protect expressive works. Borrowing from long-established copyright principles carries no perceptible risks of flouting legislative intent, and the courts should, therefore, assume that general copyright principles remain applicable in cases under the DMCA.

B. *Copyright, Statutory Interpretation, and the DMCA*

If, as I have argued, it is correct to interpret the DMCA as a copyright statute, rather than as a *sui generis* regulatory regime unmoored from the broader corpus of intellectual property law, one practical implication is a relatively greater policymaking role for the courts. Although the development of federal copyright law has rested partly upon a series of statutory enactments,¹⁸⁶ the copyright statutes have always left the courts with substantial policymaking responsibilities. Indeed, some of the most important (and now unquestioned) doctrines in all of copyright, such as fair use, evolved from courts seizing policymaking functions even in the absence of an express legislative delegation.¹⁸⁷ Congress, for its part, has generally not sought to craft exhaustive, comprehensive statutory text that leaves no discretion to the

¹⁸⁴ The software at issue in *Chamberlain*, which the court presumed to be copyrighted, was designed to serve the functional purpose of enabling purchasers to open and close their garage doors via remote control, rather than for a creative or expressive purpose. See *supra* notes 78-80 and accompanying text. The copyrighted works at issue in *Lexmark* were a pair of computer programs that had been written to assist with the operation of Lexmark printers, including the functionality of testing to see whether the customer had inserted a third-party refilled toner cartridge. See *supra* notes 107-112 and accompanying text; see also *supra* note 120 and accompanying text (noting court's doubts that Lexmark's TLP qualified for copyright protection due to its functional characteristics).

¹⁸⁵ See Act of May 31, 1790, ch. 15, 1 Stat. 124; see also 1 WILLIAM F. PATRY, COPYRIGHT LAW AND PRACTICE 25-36 (1994) (recounting history of Copyright Act of 1790).

¹⁸⁶ See generally 1 WILLIAM F. PATRY, PATRY ON COPYRIGHT §§ 1:19--98 (2007) (recounting history of federal copyright legislation since 1790).

¹⁸⁷ See *infra* notes 231-244 and accompanying text.

courts; to the contrary, it has repeatedly blessed judicial exercises of independent policymaking in matters of copyright.¹⁸⁸ Copyright treatises, too, recognize the historical and ongoing policymaking responsibilities of the courts.¹⁸⁹

This history puts one obvious objection to the creation of a judge-made fair circumvention doctrine in a rather different light. In substance, the objection would be that to recognize a new judge-made doctrine of fair circumvention would be an affront to Congress's lawmaking role.¹⁹⁰ Congress having spoken, the argument would run, the courts' obligation as "faithful agents" of the legislature¹⁹¹ is to apply the enacted text as written, and to leave to Congress the task of crafting exceptions from whatever liability rules it chose to adopt.¹⁹² The fact that Congress expressly established certain limitations upon the liability rules adopted in the DMCA, this line of reasoning would continue, only strengthens the presumption against the recognition of additional unstated exceptions by judicial fiat.¹⁹³

To be sure, the courts can and do rely on the enacted statutory text as the primary and best indication of legislative intent,¹⁹⁴ although the command to apply the enacted text as written is not inexorable.¹⁹⁵ Nevertheless, whatever the overall merits of the interpretive theory that courts must act only as "faithful agents," applying the statutory text precisely as written by Congress without interjecting their own

¹⁸⁸ See, e.g., *infra* notes 201-202; *cf. infra* note 200.

¹⁸⁹ See 1 HOWARD B. ABRAMS, *THE LAW OF COPYRIGHT* § 1:1, at 1-6 (2007) ("While some lines are drawn in the Copyright Act, they are often drawn in terms that rely on the history of copyright, and, indeed, of the history of judicial and jurisprudential thinking about copyright."); PATRY, *supra* note 186, § 2:1 ("[C]ritical components of copyright law are judge-made. . . . [T]he Act is a mixture of statutory and common-law features.").

¹⁹⁰ See Efroni, *supra* note 96, at 100 (arguing that judicial decisions in the durable goods cases reflect a judicial "understanding of the appropriate balance between the interests of copyright owners and information users" that "is quite different from Congress's policy reflected in the DMCA").

¹⁹¹ See John F. Manning, *Textualism and the Equity of the Statute*, 101 COLUM. L. REV. 1, 5 (2001).

¹⁹² See, e.g., Antonin Scalia, *Common-Law Courts in a Civil-Law System: The Role of United States Federal Courts in Interpreting the Constitution and Laws*, in *A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW* 3, 20 (Amy Gutmann ed., 1997) ("Congress can enact foolish statutes as well as wise ones, and it is not for the courts to decide which is which and rewrite the former.").

¹⁹³ See *supra* notes 53-55 and accompanying text.

¹⁹⁴ See, e.g., *Estate of Cowart v. Nicklos Drilling Co.*, 505 U.S. 469, 476 (1992) (referring to "the basic and unexceptional rule that courts must give effect to the clear meaning of statutes as written"); *Caminetti v. United States*, 242 U.S. 470, 485 (1917).

¹⁹⁵ See, e.g., *United States v. Ron Pair Enters., Inc.*, 489 U.S. 235, 242 (1989) (where "'the literal application of a statute will produce a result demonstrably at odds with the intentions of its drafters[.]' . . . the intention of the drafters, rather than the strict language, controls") (quoting *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 571 (1982)); *United States v. Turkette*, 452 U.S. 576, 580 (1981) ("absurd results are to be avoided and internal inconsistencies in the statute must be dealt with"); *Haggar Co. v. Helvering*, 308 U.S. 389, 394 (1940).

preferences or policy judgments,¹⁹⁶ it seems quite clear that the role of the courts in the copyright arena is not, and properly should not be, so limited. To the contrary, the text and history of federal copyright legislation in the United States have made the courts more coequal partners than mere servants of the legislature.

The courts would face a nearly insurmountable task in striving to apply the Copyright Act strictly as written, for the statute includes provisions that simply cannot be enforced according to their literal terms.¹⁹⁷ The statute's simultaneous grants of overlapping rights to multiple parties without expressly ranking their relative priority have raised challenging questions of policy for the courts.¹⁹⁸ Elsewhere, the statute leaves pivotal terms entirely undefined.¹⁹⁹ The nature of the text to

¹⁹⁶ For a book-length critique of the "faithful agent" theory, see WILLIAM N. ESKRIDGE, JR., *DYNAMIC STATUTORY INTERPRETATION* (1994).

¹⁹⁷ For example, the literal text of the copyright statute appears to excuse all unauthorized copying from liability for copyright infringement—precisely the opposite of the legislative purpose. First, the statute confers on copyright holders the "exclusive right[] . . . to reproduce the copyrighted work in copies." 17 U.S.C. § 106(1) (2006) (emphasis added). "Copies," the statute tells us, "are material objects . . . in which a work is fixed by any method . . ." *Id.* § 101 (emphasis added). And a work becomes "fixed," we learn, "when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." *Id.* (emphasis added). A woefully literal reading of this text might suggest that copyright infringement is definitionally impossible, because any copy made without "the authority of the author" is not "fixed" within the meaning of the statutory definition, and hence not a "copy" that the copyright holder alone has the right to make. The courts, of course, have correctly refused to read the statute in such a way as to subvert the very possibility of liability for infringement in this fashion. *See, e.g.,* Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc., 964 F.2d 965, 968 (9th Cir. 1992) ("A derivative work must be fixed to be protected under the [Copyright] Act, . . . but not to infringe.") (emphases omitted).

¹⁹⁸ *See, e.g.,* N.Y. Times Co. v. Tasini, 533 U.S. 483, 493 (2001) (reasoning that individual authors' reproduction and distribution rights override compiler's rights in collective work in which authors' contributions were included); Pickett v. Prince, 207 F.3d 402, 405-06 (7th Cir. 2000) (reasoning that copyright holder's right to prepare derivative works takes precedence over separate provision granting creators of derivative works independent rights in their own creations).

¹⁹⁹ *See, e.g.,* Lindsay v. R.M.S. Titanic, 52 U.S.P.Q.2d 1609, 1612 (S.D.N.Y. 1999) (construing the undefined statutory term "author"). Congress's choice not to supply a definition of this key term in 17 U.S.C. § 101 appears to have been deliberate, in light of the litigated controversies over the meaning of "authorship" that predated the Copyright Act of 1976. *See, e.g.,* Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 57-58 (1884).

The Copyright Act grants copyright holders the exclusive right "to distribute copies or phonorecords of the copyrighted work to the public." 17 U.S.C. § 106(3) (2006). The statute is silent, however, on the meaning of the term "distribute," which has, predictably, resulted in conflicting interpretations by the courts. *Compare* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1014 (9th Cir. 2001) (reasoning that users of file-sharing software violated distribution right by "upload[ing] file names to the search index for others to copy"), *and* Hotaling v. Church of Jesus Christ of Latter-Day Saints, 118 F.3d 199, 203 (4th Cir. 1997) (reasoning that a public library violated distribution right by "add[ing] a [copyrighted] work to its collection, list[ing] the work in its index or catalog system, and mak[ing] the work available to the borrowing or browsing public"), *and* Marobie-FL, Inc. v. Nat'l Ass'n of Fire Equip. Distribs., 983 F. Supp. 1167, 1173 (N.D. Ill. 1997) (placing copyrighted files on a web server from which they may be downloaded by others constitutes "distribution"), *with* Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1162 (9th Cir. 2007) (agreeing with district court that "distribution requires an actual dissemination of a copy") (quotation marks omitted), *and* Atlantic Recording Corp. v. Howell, 554 F. Supp. 2d 976, 983 (D. Ariz. 2008) ("Merely making an unauthorized copy of a copyrighted work available to the public does not violate a copyright holder's exclusive right of distribution."), *and* Elektra Entm't Group, Inc. v. Barker, 551 F. Supp. 2d 234, 244-45 (S.D.N.Y. 2008) (holding complaint's allegation that defendant

be construed, at the outset, thus poses a substantial challenge to the notion that the courts in copyright cases may simply begin and end their inquiry by parsing the statute.²⁰⁰

Indeed, the legislative record reveals a number of instances in which Congress in the 1976 Act intended to defer to prior judicial practice, rather than providing new rules that would override what the courts had previously done. The areas in which Congress deferred to prior judicial practice include the core statutory requirement of originality²⁰¹ and the reach of protection for depictions of useful articles.²⁰² Similarly, although the Copyright Act (unlike, say, the Patent Act²⁰³) omits any express provisions making persons other than direct infringers liable for copyright infringement,²⁰⁴ the courts have consistently applied common-law principles of secondary liability in the copyright context.²⁰⁵ This judicial development of secondary liability for

"made . . . [c]opyrighted [r]ecordings available for distribution to others" insufficient to allege violation of the distribution right) (internal quotation marks, citation, and alteration omitted). For a critique of the courts' expansion of the distribution right to include transmissions of copyrighted works over the Internet, see R. Anthony Reese, *The Public Display Right: The Copyright Act's Neglected Solution to the Controversy Over RAM "Copies"*, 2001 U. ILL. L. REV. 83, 125-38.

In 17 U.S.C. § 102(a), Congress listed eight nonexclusive categories of copyrightable subject matter. Although five of the categories carry accompanying definitions in § 101, "musical works," "dramatic works," and "pantomimes and choreographic works" do not. 17 U.S.C. § 102(a)(2)-(4) (2006). Congress explained the omission by remarking that these terms "have fairly settled meanings." H.R. REP. NO. 94-1476, at 53 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5666-67.

²⁰⁰ To be sure, the Copyright Act includes a number of very detailed provisions that Congress clearly intended to cover the waterfront within their respective spheres. *See* PATRY, *supra* note 186, § 2:8 (citing 17 U.S.C. §§ 111, 112, 114, 115, 119, 122, and 512 as examples of statutory provisions that aim to "micromanage" the courts). Most of the statute, however, is not so specific.

²⁰¹ 17 U.S.C. § 102(a) extends copyright protection to "original works of authorship." 17 U.S.C. § 102(a) (2006). The legislative history declared that Congress "purposely left [this phrase] undefined, . . . intend[ing] to incorporate without change the standard of originality established by the courts under" the prior statute. H.R. REP. NO. 94-1476, at 51 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5664.

²⁰² 17 U.S.C. § 113(a) recognizes that a copyright holder's exclusive reproduction right over a pictorial, graphic, or sculptural work "includes the right to reproduce the work in or on any kind of article . . ." 17 U.S.C. § 113(a) (2006). Subsection 113(b), however, offers the caveat that, where depictions of useful articles are concerned, the statute "does not afford . . . any greater or lesser rights . . . than those afforded to such works under the law . . . in effect" before the effective date of the Copyright Act of 1976. *Id.* § 113(b).

²⁰³ *See, e.g.*, 35 U.S.C. § 271(b)-(c) (2006) (establishing liability for inducing infringement of patent or for contributory patent infringement).

²⁰⁴ *See* 17 U.S.C. § 501(a) (2006) (providing that "[a]nyone who violates any of the exclusive rights of the copyright owner" shall be directly liable for copyright infringement); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 434-35 (1984) (observing that, unlike the Patent Act, "[t]he Copyright Act does not expressly render anyone liable for infringement committed by another").

²⁰⁵ *See, e.g.*, *Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259, 261 (9th Cir. 1996) ("Although the Copyright Act does not expressly impose liability on anyone other than direct infringers, courts have long recognized that in certain circumstances, vicarious or contributory liability will be imposed."); *id.* at 261-64 (explaining theories and elements of vicarious and contributory infringement of copyright).

copyright received Congress's blessing in the committee reports accompanying the Copyright Act of 1976.²⁰⁶

Even in the absence of express legislative ratification, the courts occasionally exercise their interpretive authority under the Copyright Act to protect countervailing policies. Thus, for example, although the literal text of the Copyright Act appears to assign the copyright in scholarly works to the institutions that employ the scholar,²⁰⁷ the courts have refused to so construe the act on public policy grounds, instead invoking a judge-made "teacher's exception" to vest in scholars themselves the copyright interests in their own work.²⁰⁸ Indeed, the Supreme Court has repeatedly exercised its interpretive authority to "import" new theories of liability, and new defenses, from the Patent Act into the Copyright Act—citing, in each case, what the Court portrayed as strong policy reasons for reading the Copyright Act as if it included language actually found in another statute altogether.²⁰⁹

Thus, although nominally a creature of statute, federal copyright law has actually grown and evolved as a hybrid of statutory and common-law principles. Partly for historical reasons, and partly because of the vagueness of many of the governing provisions of the Copyright Act, the courts in copyright cases have long exercised substantial policymaking duties. Theories of statutory interpretation that demote the courts to a more passive role, commanding them merely to read Congress's words and apply them exactly as written, make an especially poor fit for copyright law. The applicable statutory provisions, with few exceptions, simply are not written in such a way as to make such judicial passivity feasible, and two centuries of copyright history have accustomed the courts to a more coequal role in the development of copyright doctrine—a role Congress has repeatedly recognized and towards which it has repeatedly expressed approval.

The DMCA is of a piece with the rest of federal copyright law in that the text as enacted fairly cries out for a careful, nuanced parsing rather than wooden literalism. The DMCA, like the rest of the copyright statute, includes multiple provisions that seem to pull in conflicting

²⁰⁶ See H.R. REP. NO. 94-1476, at 61(1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5674 (explaining that Congress's use of the words "to authorize" in 17 U.S.C. § 106 was "intended to avoid any questions as to the liability of contributory infringers").

²⁰⁷ See 17 U.S.C. § 101 (2006) (defining "work made for hire" to include any "work prepared by an employee within the scope of his or her employment"); *id.* § 201(b) (assigning copyright in such works made for hire to the employer).

²⁰⁸ See, e.g., *Hays v. Sony Corp. of Am.*, 847 F.2d 412, 416-17 (7th Cir. 1988).

²⁰⁹ See *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 125 S. Ct. 2764, 2778-80 (2005) (creating new cause of action for inducing copyright infringement based upon Patent Act's provision at 35 U.S.C. § 271(b) for inducing patent infringement); *Sony Corp. of America*, 464 U.S. at 439 (arguing that "the historic kinship between patent law and copyright law" makes it appropriate to draw common-law copyright principles from patent law); *id.* at 440-42 (recognizing new defense to secondary liability in copyright cases based upon Patent Act's provision, 35 U.S.C. § 271(c), immunizing seller of "a staple article or commodity of commerce suitable for substantial noninfringing use").

directions.²¹⁰ What is worse, the statute's definitional provisions are a muddle, creating uncertainty at the very point where the statute most needs (and promises) clarity. Consider first the legislative definition of "circumvention," the key analytical concept around which both the anti-circumvention and anti-trafficking liability provisions ultimately revolve:

[T]o "circumvent a technological measure" means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner. . . .²¹¹

At the most literal level, *every* work published in digital form is "scrambled" or "encrypted" solely by reason of being digital. Any work published in digital format consists of a series of ones and zeroes that must be deciphered to reveal the work's original content²¹²—whether that content represents the language of a poem, the color of an artist's palette, the sound of a French horn, or the images of a motion picture. Playing an audio CD on one's computer is an exercise in converting those ones and zeroes back into sound waves²¹³—a process that, under any ordinary understanding of those words, might be thought to involve "descrambling" or "decryption" of the content. It appears to have been quite far from Congress's intention to forbid ordinary uses of digital works not also protected by a separate DRM mechanism,²¹⁴ but the text as enacted leaves ample room for a textual formalist argument that the DMCA's reach is much more expansive in actuality.²¹⁵ Something more than mere literalism, in other words, is necessary to prevent this definitional provision from vastly expanding the scope of the DMCA beyond the limits of Congress's apparent intent.²¹⁶

The other pertinent statutory definition—that of "effectively controls access"—is still worse, although the reasons why this is so become clear only after first attempting to construe the statute without reference to the definition. The DMCA forbids circumvention, or the trafficking in tools that enable circumvention, of technological measures that "effectively control access" to a copyrighted work.²¹⁷ Ordinary

²¹⁰ See *infra* notes 247-249 and accompanying text.

²¹¹ 17 U.S.C. § 1201(a)(3)(A) (2006).

²¹² See, e.g., *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1159 (9th Cir. 2007).

²¹³ See, e.g., *Optical Disc Corp. v. Del Mar Avionics*, 45 Fed. Appx. 887, 888-90 (Fed. Cir. 2002) (explaining CD authoring and playback); *SightSound.Com Inc. v. N2K, Inc.*, 185 F. Supp. 2d 445, 458 (W.D. Pa. 2002) (same).

²¹⁴ See H.R. REP. NO. 105-551, pt. 1, at 39 (1998) (suggesting that Congress meant the statute to extend to technological protection measures "which require[] the use of a 'key' provided by a copyright owner to gain access to a work").

²¹⁵ See Landau, *supra* note 20, at 300-01 (suggesting that traditional entertainment products such as "[m]usic, film, [and] books" may be analytically indistinguishable from "computer software" when published in digital form).

²¹⁶ See, e.g., *United States v. Kirby*, 74 U.S. (7 Wall.) 482, 486 (1869) (noting that statutes should be interpreted to avoid absurd results).

²¹⁷ 17 U.S.C. § 1201(a)(1)(A), (a)(2).

readers or courts might attempt to parse this language literally, only to find themselves stymied by ambiguity. Reasoning from the text alone, one might get as far as the notion that “effectively controls access” must mean something different from merely “controls access,”²¹⁸ otherwise the word “effectively” becomes superfluous.²¹⁹ But what, then, can “effectively” mean?²²⁰ Perhaps Congress meant to require a certain minimum strength of access control—that is, perhaps Congress meant to say to the courts: *a technological protection measure must not only protect access to a work, but must meet some minimal standard of efficacy in doing so; a trivial cipher will not suffice.*²²¹ But the text might equally well support another reading, one that would *preclude* inquiry into the strength of an access control measure. Congress might have feared, for instance, that courts would interpret the word “control” as requiring *absolute control*, and added the word “effectively” as a way to signal that something less was required. That is, Congress might have meant the word “effectively” to mean something like “approximately” or “in general.”²²² Having identified this potential ambiguity in the statutory text, the reader might consult the definition to see what Congress actually intended.

The definition, however, turns out in reality to be an anti-definition. It obfuscates, rather than clarifies, the meaning of the term it purports to define:

[A] technological measure “effectively controls access to a work” if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.²²³

Absolutely nothing in this text speaks to the question whether the word “effectively” is meant to connote strength or its absence. Moreover, the definitional provision compounds the ambiguity of the rest of the text by introducing new concepts—such as “the application of information” and “the authority of the copyright owner”—that are difficult to anchor in any ordinary understanding of the terms they purport to define. Is the copyright owner’s authority relevant to an understanding of whether a DRM mechanism has “effectively” restricted access to a work? Or to

²¹⁸ See *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 547 (6th Cir. 2004); *supra* note 144.

²¹⁹ See *supra* note 65 and authorities cited (discussing principle of statutory construction that Congress is presumed to avoid surplusage).

²²⁰ Our hypothetical reader may be inclined to look to the WIPO treaties for guidance, but would surely be stymied by the absence of support there and by the differing approaches taken by the various nations that have sought to implement the treaties’ anti-circumvention mandates. See Urs Gasser, *Legal Frameworks and Technological Protection of Digital Content: Moving Forward Towards a Best Practice Model*, 17 *FORDHAM INTELL. PROP. MEDIA & ENT. L.J.* 39, 69-71 (2006).

²²¹ Cf. *supra* note 144 and accompanying text.

²²² Cf. *supra* note 47 and accompanying text.

²²³ 17 U.S.C. § 1201(a)(3)(B).

whether the mechanism “controls” access to the work? Or to whether what is controlled amounts to “access” rather than something else? It is no easy task to shoehorn this definition into the statutory phrase meant to embody it. Small wonder that the courts find the statute confusing.²²⁴

There is, in short, no reason to think that the DMCA is less amenable to the methods of judicial policymaking that have guided the development of the rest of copyright law. To the contrary, the DMCA suffers from some of the same sorts of infirmities that have confirmed the need for an independent judicial role.

C. *Fair Use and Interbranch Partnership*

There is precedent for the courts exercising their substantial policymaking powers in the domain of copyright to craft judge-made exceptions to liability based on public policy considerations even where the literal text of the statute seems to require a finding of infringement. Two features of copyright law in particular support an ongoing judicial role in recognizing exceptions to liability. First, copyright infringement is a strict liability offense; there is no requirement in the statute that the infringer have acted willfully or knowingly,²²⁵ or even consciously.²²⁶ Even so-called “innocent infringers” fall within the statute’s liability provisions, although they may be liable for reduced statutory damages.²²⁷ Second, the statute provides severe penalties for copyright infringement. A copyright plaintiff who cannot prove a penny of actual injury may nevertheless receive statutory damage awards that loom extraordinarily large in many cases: \$750 to \$30,000 per work infringed, increased to up to \$150,000 per work if the infringement was willful.²²⁸ Many courts

²²⁴ See *supra* notes 141-145 and accompanying text.

²²⁵ See, e.g., *Fitzgerald Pub. Co., Inc. v. Baylor Pub. Co., Inc.*, 807 F.2d 1110, 1113 (2d Cir. 1986) (“intent or knowledge is not an element of infringement”); *Pye v. Mitchell*, 574 F.2d 476, 481 (9th Cir. 1978) (“[E]ven where the defendant believes in good faith that he is not infringing a copyright, he may be found liable.”); *Educ. Testing Serv. v. Simon*, 95 F. Supp. 2d 1081, 1087 (C.D. Cal. 1999) (“copyright infringement . . . is a strict liability tort”). This general rule predates the Copyright Act of 1976. See *Buck v. Jewell-La Salle Realty Co.*, 283 U.S. 191, 198 (1931) (“[I]ntention to infringe is not essential under the [1909] act.”).

There is a separate exception to copyright infringement liability in the statute for parties who rely in good faith on inaccurate notices of copyright included on the plaintiff’s works. See 17 U.S.C. § 406(a) (2006). This provision does not, however, create a general knowledge prerequisite to an action for copyright infringement.

²²⁶ See, e.g., *Repp v. Webber*, 132 F.3d 882, 889 (2d Cir. 1997) (“The fact that infringement is subconscious or innocent does not affect liability.”) (quotation marks omitted); *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 741 (9th Cir. 1971) (“[C]opying need not be conscious, but may be the result of subconscious memory derived from hearing, seeing or reading the copyrighted work at some time in the past.”) (quotation marks and citations omitted); *Bright Tunes Music Corp. v. Harrisongs Music, Ltd.*, 420 F. Supp. 177, 181 (S.D.N.Y. 1976) (“[I]nfringement of copyright . . . is no less so even though subconsciously accomplished.”).

²²⁷ See 17 U.S.C. § 504(c)(2) (2006) (permitting reduction in statutory damage award “where the infringer sustains the burden of proving, and the court finds, that such infringer was not aware and had no reason to believe that his or her acts constituted an infringement of copyright”).

²²⁸ See 17 U.S.C. § 504(c)(1)-(2).

have applied these provisions strictly even where the resulting award of damages seems far disproportionate to any plausible claim of actual harm by the plaintiff.²²⁹ The conjunction of strict liability and heavy penalties makes it all too easy to imagine cases where literal application of the statute would yield an unjust result, requiring an award of damages far disproportionate to the defendant's actual culpability.

The courts, however, have played an important role here—aiming, with at least some success, to sand the rough edges off of copyright's strict-liability, sanctions-heavy regime. They have done so by what might at first glance seem to be sheer defiance of Congress, refusing to find liability even in circumstances where the statute appears to require it. Nowhere has this been more clear than in the development of copyright's doctrine of fair use.

The Supreme Court has characterized fair use as a limitation on copyright holders' exclusive rights when "rigid application of the copyright statute . . . would stifle the very creativity which that law is designed to foster."²³⁰ Although the fair use doctrine is now recognized by statute,²³¹ fair use received legislative recognition only after more than a century of growth as a judge-made copyright exception. The modern fair use doctrine is commonly traced to Justice Story's 1841 opinion in *Folsom v. Marsh*.²³² The case was brought by the holder of the copyright in a twelve-volume biography of President Washington that consisted predominantly of edited reproductions of Washington's own presidential papers.²³³ The defendant copied more than three hundred pages of Washington's records from the plaintiff's books in order to produce his

²²⁹ See, e.g., *BMG Music v. Gonzalez*, 430 F.3d 888, 889-90 (7th Cir. 2005) (upholding award of \$22,500 based on defendant's download of 30 copyrighted songs from unauthorized file-sharing service); Judgment in a Civil Case, *Virgin Records America, Inc. v. Thomas*, No. 06-1497 MJD/RLE (D. Minn. Oct. 5, 2007) (entering judgment for \$222,000 based on defendant's making 24 copyrighted songs available on unauthorized file-sharing service). But see *Capitol Records, Inc. v. Thomas*, 2008 WL 4405282 at *16-17 (D. Minn. Sept. 24, 2008) (vacating file-sharing judgment and ordering new trial on grounds that jury instructions failed to require proof of actual distribution).

²³⁰ *Stewart v. Abend*, 495 U.S. 207, 236 (1990). By forbidding copyright holders to restrict certain forms of speech that build upon their own prior works, the fair use doctrine also promotes First Amendment values. See *Eldred v. Ashcroft*, 537 U.S. 186, 219-20 (2003).

²³¹ 17 U.S.C. § 107 (2006) ("[T]he fair use of a copyrighted work . . . is not an infringement of copyright.").

²³² 9 F. Cas. 342 (C.C.D. Mass. 1841) (No. 4,901); see, e.g., *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 576 (1994) (citing *Folsom v. Marsh*); *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 550 (1985) (same); *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 475 n.27 (1984) (Blackmun, J., dissenting) (same). For an entertaining review of the *Folsom v. Marsh* litigation and the decision's place in the history of copyright, see R. Anthony Reese, *The Story of Folsom v. Marsh: Distinguishing Between Infringing and Legitimate Uses*, in *INTELLECTUAL PROPERTY STORIES 259* (Jane C. Ginsburg & Rochelle Cooper Dreyfuss eds., 2006). A more skeptical view is available in L. Ray Patterson, *Folsom v. Marsh and Its Legacy*, 5 J. INTELLECT. PROP. L. 431, 431 (1998) (finding *Folsom v. Marsh* to be "so poorly reasoned that it may be entitled to first place in the category of bad copyright decisions").

²³³ See *Folsom*, 9 F. Cas. at 345 ("The other eleven volumes consist of the letters of Washington, private and official, and his messages and other public acts, with explanatory notes and occasional illustrations by the editor.").

own two-volume biography of Washington.²³⁴ Justice Story found that both Washington's private²³⁵ and public correspondence²³⁶ were covered by copyright. Justice Story, although "not without some regret,"²³⁷ came to the conclusion that the defendant had simply taken too much of the plaintiff's work, and issued a permanent injunction against the publication or sale of the defendant's two-volume Washington biography.²³⁸ He based this decision on the likelihood that the defendant's work would dampen market demand for the plaintiff's work by supplying an effective substitute:

If so much is taken, that the value of the original is sensibly diminished, or the labors of the original author are substantially to an injurious extent appropriated by another, that is sufficient, in point of law, to constitute a piracy *pro tanto*. . . . In short, we must often, in deciding questions of this sort, look to the nature and objects of the selections made, the quantity and value of the materials used, and the degree in which the use may prejudice the sale, or diminish the profits, or supersede the objects, of the original work.²³⁹

²³⁴ *Id.*; see also *id.* at 348 ("[I]t cannot be doubted, that these letters are the most instructive, useful and interesting to be found in [plaintiff's] large collection.").

²³⁵ See *id.* at 345-47. Although recognizing uncertainty in the law regarding the copyright status of private correspondence, *id.* at 346, Justice Story found persuasive a line of English authorities recognizing the author's copyright, subject to a limited publication right held by the addressee. See *id.* at 346-47. The question of copyrightability *vel non* would not, of course, arise under the present state of copyright law. See 17 U.S.C. § 102(a) (2006) ("Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . ."); see also *Salinger v. Random House, Inc.*, 811 F.2d 90, 94-95 (2d Cir. 1987) (recognizing author's copyright in private correspondence).

²³⁶ See *Folsom*, 9 F. Cas. at 347. Justice Story's discussion of the copyright status of Washington's public correspondence was comparatively cursory in view of his finding that "of the letters and documents published by the defendants, not more than one fifth part are of an official character." *Id.* He reasoned, in essence, that the copyright status of private correspondence extended by analogy to public correspondence as well, subject to a colorable publication right in favor of the government. See *id.* The uncertainty surrounding the copyright status of Presidential documents has only partly abated since Story's time. Compare 17 U.S.C. § 105 (2006) (denying copyright protection to "any work of the United States Government") with 44 U.S.C. § 2202 (2001) (granting to the Government "complete ownership, possession, and control of Presidential records") and Exec. Order No. 13,233, § 3(d)(1), (2), 66 Fed. Reg. 56,025, 56,026-27 (Nov. 1, 2001) (forbidding public disclosure of records of past Presidential administration except upon the joint consent of both the former and incumbent Presidents). An informative assessment of the proprietary status of Presidential papers is available in Jonathan Turley, *Presidential Papers and Popular Government: The Convergence of Constitutional and Property Theory in Claims of Ownership and Control of Presidential Records*, 88 CORNELL L. REV. 651 (2003).

²³⁷ *Folsom*, 9 F. Cas. at 349.

²³⁸ See *id.*

²³⁹ *Id.* at 348. Elsewhere in his opinion, Justice Story offered an illustrative example of the sorts of uses that might pose such a substitution risk:

[N]o one can doubt that a reviewer may fairly cite largely from the original work, if his design be really and truly to use the passages for the purposes of fair and reasonable criticism. On the other hand, it is as clear, that if he thus cites the most important parts of the work, with a view, not to criticise, but to supersede the use of the original work, and substitute the review for it, such a use will be deemed in law a piracy.

Enacted more than sixty years after Justice Story's decision in *Folsom v. Marsh*, the landmark Copyright Act of 1909 made no mention of fair use.²⁴⁰ Nevertheless, courts applying the Copyright Act of 1909 continued to recognize circumstances in which a defendant whose activities amounted to infringement under the literal text of the statute would nevertheless be excused from liability.²⁴¹ By no later than the 1940s, the courts were beginning to echo Justice Story's language from *Folsom* in determining whether particular acts of copying could be excused under the fair use doctrine:

Whether a particular use of a copyrighted article, without permission of the owner, is a fair use, depends upon the circumstances of the particular case, and the court must look to the nature and objects of the selections made, the quantity and value of material used, and the degree in which the use may prejudice the sale, diminish the profits, or supersede the objects of the original work.²⁴²

Fair use was recognized as expressing a judge-made policy against imposing liability,²⁴³ notwithstanding the literal terms of the copyright statute, where it was believed that imposing liability would disserve public purposes.²⁴⁴

²⁴⁰ Copyright Act of 1909, ch. 320, 35 Stat. 1075. An interim general revision of the federal copyright statute in 1870 similarly took no account of the emerging judicial doctrine of fair use. See Act of July 8, 1870, ch. 230, §§ 85-111, 16 Stat. 198, 212-16. See generally PATRY, *supra* note 186, § 1:33 (discussing 1870 statute).

²⁴¹ It took the courts some years to apply the "fair use" label consistently to actions that would amount to copyright infringement but for the judge-made exception to liability. See *Meredith Corp. v. Harper & Row Publishers, Inc.*, 378 F. Supp. 686, 689 (S.D.N.Y. 1974) ("Originally fair use was based on the assumption that the user might copy an insignificant portion of protected material while freely using unprotected material.") (emphasis and quotation marks omitted). Judge Learned Hand, in some of the earliest cases, seemed to apply the label "fair use" to *any* use that was excused from liability. See *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 54 (2d Cir. 1936) (equating fair use with taking only "the theme, or ideas, or the like, of a work, though not its expression") (quotation marks omitted); *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir. 1930) (equating fair use with *de minimis* taking and explaining that "the question is whether the part so taken is substantial, and therefore not a fair use of the copyrighted work") (quotation marks omitted). Judge Hand's terminology is no longer apt; instead, the idea-expression dichotomy and the *de minimis* doctrine provide what we would now recognize as additional, independent defenses to a claim of infringement that render resort to the doctrine of fair use unnecessary. See, e.g., 17 U.S.C. § 102(b) (2006) ("In no case does copyright protection . . . extend to any idea . . ."); *Sandoval v. New Line Cinema Corp.*, 147 F.3d 215, 217 (2d Cir. 1998) ("[W]here the unauthorized use of a copyrighted work is *de minimis*, no cause of action will lie for copyright infringement, and determination of a fair use claim is unnecessary."). But see *Bridgeport Music, Inc. v. Dimension Films*, 410 F.3d 792, 798 (6th Cir. 2005) (eliminating *de minimis* doctrine for digital sampling of copyrighted sound recordings).

²⁴² *Matthews Conveyer Co. v. Palmer-Bee Co.*, 135 F.2d 73, 85 (6th Cir. 1943); cf. *supra* note 239 and accompanying text.

²⁴³ See, e.g., *Tenn. Fabricating Co. v. Moultrie Mfg. Co.*, 421 F.2d 279, 283 (5th Cir. 1970) (labeling fair use "a judicial rule of public policy" and "a balance wheel and safety valve for the copyright system") (quotation marks omitted) (quoting John Schulman, *Fair Use and the Revision of the Copyright Act*, 53 IOWA L. REV. 832, 832 (1968)).

²⁴⁴ See *Berlin v. E.C. Publications Inc.*, 329 F.2d 541, 544 (2d Cir. 1964) ("[C]ourts in passing upon particular claims of infringement must occasionally subordinate the copyright holder's interest in a maximum financial return to the greater public interest in the development of art, science and industry."); *Meredith Corp.*, 378 F. Supp. at 689 ("The [fair use] doctrine then

Fair use is a sufficiently settled principle today that it is perhaps easy to forget the doctrine's origins as a judge-made shield against what the courts, based on considerations of sound policy, perceived to be the over-deterrent effects of the copyright statutes as written. The parallels between the DMCA and the rest of federal copyright law, accordingly, leave ample room for similar doctrinal developments under the DMCA. It would be consistent with the substantial policymaking responsibilities the courts have long exercised under copyright for the courts to identify countervailing policy considerations militating against DMCA liability in proper cases. As the example of the fair use doctrine shows, where such countervailing policy considerations exist, the courts stand on relatively firm historical ground in declining to impose liability even where the defendant's conduct appears to fall within the literal prohibitions of the statute. It would, accordingly, be broadly consistent with the historical development of federal copyright law and with the courts' responsibilities as coequal partners in copyright policymaking to develop a set of rules defining circumstances in which the literal terms of the DMCA's circumvention and trafficking prohibitions will not be given effect—to craft, as I have labeled it herein, a doctrine of fair circumvention.²⁴⁵

IV. TOWARDS FAIR CIRCUMVENTION

If the courts are, as the foregoing analysis suggests, free to develop their own exceptions to the DMCA's liability provisions, how should they do so? The courts' present approach—announcing essentially *ad hoc* exceptions based upon dubious assertions about what the statutory text expressly requires—yields perhaps the worst of all possible worlds. By purporting to rest their decisions upon the statutory text alone, the courts seem to eschew broader policy considerations based upon sources that are surely pertinent to a complete understanding of the DMCA (such as the requirements of the relevant 1996 WIPO Treaties or the Clinton Administration's 1995 White Paper²⁴⁶) but which lie outside the statute itself. And by making overbroad or unjustified statements about what the statutory text alone is perceived to require, the courts undermine the authority of their own positions—future courts may simply examine the statute for themselves and discover that it does not really read as advertised.

developed to permit more than insignificant copying of protected material where such copying was clearly in the public interest and served the underlying purpose of the Copyright Act”) (emphasis omitted).

²⁴⁵ To reiterate a point stated in the text, I do not mean to imply from my choice of the label “fair circumvention” that the courts must limit their exercise of policymaking responsibilities to cases involving the DMCA's circumvention, rather than trafficking, offenses. To the contrary, copyright principles might as readily be invoked in proper cases to shield a defendant accused of producing or distributing tools that can be put to circumventing uses.

²⁴⁶ See *supra* notes 12, 14-15 and accompanying text.

The answer is not, it seems to me, for the courts to come to an agreement on what the literal text of the DMCA *really* requires. Such strict formalism is a recipe for circularity, given that the DMCA (no less than the rest of the copyright statute) includes provisions pointing in multiple directions. The statute speaks with many voices at once: punish circumvention, but protect libraries and schools;²⁴⁷ punish trafficking, but allow computer security and encryption researchers to share their discoveries;²⁴⁸ “protect[] . . . [the] right[s] of a copyright owner,” but without “affect[ing] . . . fair use.”²⁴⁹ At the end of the day, the statute may not have a single clear meaning to discover.²⁵⁰

That is not to say, however, that the courts are left without guidance. To the contrary, just as other copyright doctrines offer explanatory tools the courts may employ in DMCA cases,²⁵¹ the fair use doctrine itself gives the courts many analogous concepts upon which a “fair circumvention” doctrine might rest. The discussion that follows will begin by assessing what copyright doctrine, including principles of fair use, might teach future litigants and courts about the proper construction of the DMCA, then conclude by evaluating possible arguments against this approach.

A. *From Fair Use to Fair Circumvention*

The fair use provision of the copyright statute gives the courts a nonexclusive list of factors to consider in determining whether any challenged use is fair: “(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.”²⁵²

It is not difficult to imagine ways in which these same factors might be profitably analogized to explain limits on the reach of DMCA liability under the rubric of “fair circumvention.” The second fair use factor, for example—“the nature of the copyrighted work”—recognizes that copyright law does not extend exactly the same level of protection to all works. Rather, as the Supreme Court has explained, “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

²⁴⁷ See 17 U.S.C. § 1201(a)(1)(A), (d) (2006).

²⁴⁸ See *id.* § 1201(a)(2), (g), (j).

²⁴⁹ See *id.* § 1201(b), (c)(1).

²⁵⁰ As suggested above, the DMCA’s definitional provisions seem to pose particular challenges to textual formalism. See *supra* notes 211-224, 141-145 and accompanying text.

²⁵¹ See *supra* notes 178-184 and accompanying text.

²⁵² 17 U.S.C. § 107 (2006).

works are copied.”²⁵³ Copyright protects works lying along a broad continuum between “creative or instructive”²⁵⁴ works at one end and works of comparatively little originality (such as factual compilations) at the other.²⁵⁵ The closer a work falls to the creative/expressive end of the continuum, the stronger the author’s claim of entitlement to restrict subsequent uses of the work, and the less room is available for colorable claims of fair use.²⁵⁶ So, too, in the DMCA context, the courts might usefully differentiate between circumvention aimed at allowing the circumventer to access and copy a creative, expressive work (such as the movies at issue in *Reimerdes*) and circumvention that merely enables access to less expressive, more utilitarian works (as in *Chamberlain* and *Lexmark*).²⁵⁷ Just as the fair use doctrine would do relatively little to defeat a claim of copyright infringement where works closer to the “core” of copyright protection are copied,²⁵⁸ a doctrine of fair circumvention would impose comparatively weak limits on the reach of DMCA liability in similar circumstances.

Risks to intellectual property markets, to take another example, are readily encompassed within both the first and, especially, the fourth fair use factors. Here, too, it is analytically useful to distinguish between cases in which circumvention of a DRM mechanism threatens to provide a complete substitute for authorized purchases of an expressive work (the situation in *Reimerdes*),²⁵⁹ and cases in which circumvention merely exposes a maker of consumer products to additional marketplace competition (as in *Chamberlain* and *Lexmark*). Copyright protects holders from certain types of economic injury—principally, those stemming from substitution of the defendant’s copy for the

²⁵³ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994).

²⁵⁴ Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1117 (1990).

²⁵⁵ See *Feist Publ’ns, Inc. v. Rural Tele. Serv. Co., Inc.*, 499 U.S. 340, 345-51 (1991) (explaining minimum level of originality required for copyright protection).

²⁵⁶ See *Campbell*, 510 U.S. at 586.

²⁵⁷ See, e.g., *supra* notes 179-184 and accompanying text (explaining how copyright’s functionality doctrine may provide a more robust explanation for the courts’ results in *Chamberlain* and *Lexmark* than the courts’ stated justifications due to the predominantly utilitarian character of the works sought to be protected in those cases).

²⁵⁸ But see *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 449-50 (1984) (suggesting that fair use doctrine protects even copying of core creative, expressive works in some circumstances).

²⁵⁹ The weak encryption provided by the CSS system for DVD discs, the subject of the *Reimerdes* decision, was readily broken by a teenage computer user. See *supra* notes 37-40 and accompanying text. In consequence, *unencrypted* copies of formerly CSS-protected video content leaked onto the internet, where they continue to circulate today. See, e.g., Peter Biddle et al., *The Darknet and the Future of Content Protection*, in DIGITAL RIGHTS MANAGEMENT: TECHNOLOGICAL, ECONOMIC, LEGAL AND POLITICAL ASPECTS 344, 359 (Eberhard Becker et al. eds., 2003). The DMCA does nothing to prevent such no-longer-encrypted content from circulating online, although the general remedies for infringement of copyright remain available. See Posting of Edward Felten to Freedom to Tinker, <http://freedom-to-tinker.com/blog/felten/dmca-and-disrupting-darknet> (Aug. 17, 2005 01:36 EST) (“Files arrive on the darknet having already been stripped of any technological protection measures And you can’t circumvent a TPM that isn’t there.”).

plaintiff's²⁶⁰—but not all economic injuries from copying are redressable as copyright infringement.²⁶¹ Settled principles of fair use, again, may provide a useful guide to courts in developing a doctrine of fair circumvention under the DMCA.²⁶²

Finally, consider the problem of circumvention undertaken for noninfringing purposes. Suppose I try to spark a discussion among my Copyright students about the fair use claim at issue in *Hustler Magazine, Inc. v. Moral Majority, Inc.*,²⁶³ the infamous Jerry Falwell Campari ad parody case.²⁶⁴ To place the dispute in its historical context as part of the long-running feud between the late Reverend Falwell and the publisher of *Hustler* magazine, I wish to show my students a one-minute clip from director Miloš Forman's acclaimed motion picture, *The People vs. Larry Flynt*,²⁶⁵ which includes a subplot revolving around Flynt's copyright infringement lawsuit.²⁶⁶ To avoid losing the DVD in my office or leaving it in the classroom, I wish to extract a one-minute excerpt from the DVD onto my laptop, which I can then hook up to the classroom projector.²⁶⁷ Copyright law would surely permit this; mine is a paradigmatic fair use—a minuscule excerpt (third factor) used for nonprofit educational reasons (first factor) with no likelihood of impairing, and indeed some prospect of benefiting, the market for sales or exhibitions of authorized copies of *The People vs. Larry Flynt* (fourth factor).²⁶⁸

²⁶⁰ See Leval, *supra* note 254, at 1125; see also *supra* note 239 and accompanying text.

²⁶¹ See, e.g., *Campbell*, 510 U.S. at 591-92 (“[W]hen a lethal parody, like a scathing theater review, kills demand for the original, it does not produce a harm cognizable under the Copyright Act.”); see also *supra* note 38 (noting cases declaring reverse engineering of computer software not to be infringing even where the resulting increase in market competition harms the copyright holder).

²⁶² Cf. 17 U.S.C. § 1201(f) (2006) (establishing DMCA safe harbor for the development of interoperable products in certain circumstances).

²⁶³ 796 F.2d 1148 (9th Cir. 1986).

²⁶⁴ For a summary of the parties' dispute, see *id.* at 1149-50. Additional background information, including the parody advertisement at issue in the case, is available at http://en.wikipedia.org/wiki/Hustler_Magazine_v._Falwell.

²⁶⁵ THE PEOPLE VS. LARRY FLYNT (Columbia Pictures Corporation 1996).

²⁶⁶ In the film, as in real life, Falwell reacts to Flynt's tasteless parody of a well-known advertising campaign for Campari by mass-mailing unauthorized copies of Flynt's advertisement in a fundraising letter to members of Falwell's own Moral Majority. *Id.* Sadly, if understandably, the film soon leaves the copyright issue by the wayside, focusing instead on the First Amendment issues in the case that ultimately went to the Supreme Court as *Hustler Magazine, Inc. v. Falwell*, 485 U.S. 46 (1988). In the real world, the Ninth Circuit, by a 2-1 vote, accepted Falwell's fair use defense to Flynt's claim for copyright infringement, even though the purpose of Falwell's copying was clearly (indeed, solely) commercial. *Hustler Magazine*, 796 F.2d at 1152, 1156. The majority gave substantial weight to the political and social purpose of Falwell's copying, which was aimed, it said, at “generat[ing] moral outrage.” *Id.* at 1156.

²⁶⁷ For discussions of similar scenarios, highlighting the potential effects of the DMCA in chilling educational fair uses, see Landau, *supra* note 20, at 297-98; William W. Fisher & William McGeeveran, *The Digital Learning Challenge: Obstacles to Educational Uses of Copyrighted Material in the Digital Age* 23-30 (Berkman Ctr. for Internet & Soc'y Harv. L. Sch., Research Publication No. 2006-09, 2006), available at <http://cyber.law.harvard.edu/media/files/copyrightandeducation.html>; Denicola, *supra* note 11, at 209-10.

²⁶⁸ I am sensitive to the risk that even to articulate a detailed fair use justification for such a clearly lawful use may be taken as a concession that such a justification is necessary, thereby

But to copy the excerpt from the DVD, I must bypass CSS—and that, the *Reimerdes* opinion warns me sternly, I may not do.²⁶⁹ When the filmmakers sue me and my employer for violating the DMCA, what can we do? The Library of Congress recently provided a DMCA exemption permitting the extraction of clips from CSS-encrypted DVDs, but it does not apply to law professors.²⁷⁰ If my employer and I must rely (as the courts have said we must) solely upon the statutory text of the DMCA, then our defense is colorable, but hardly bulletproof—according to cases like *Reimerdes*, the text of the statute forbids circumvention even for fair uses, notwithstanding Congress’s stated intention to the contrary. The White Paper and the WIPO Treaties, however, both seem to approve of circumvention undertaken for such noninfringing purposes.²⁷¹ “Fair circumvention” would permit the courts in DMCA cases to consult these outside sources for guidance, ultimately yielding greater doctrinal consistency between the defenses available to claims for copyright infringement and for violations of the DMCA.

By citing these examples, I do not mean to suggest that copyright’s fair use doctrine should operate as an outer boundary on the scope of a permissible fair circumvention defense under the DMCA. My point is less ambitious—even if the courts do not transplant copyright’s fair use doctrine, root and branch, into the somewhat different soil of the DMCA,²⁷² it is nevertheless true that existing principles of fair use provide at least some analytical guidance upon which the courts profitably may rely as they begin to develop a separate body of “fair circumvention” jurisprudence.²⁷³ What future directions that body of law

ceding “too much legitimacy to what sensible people should recognize as extreme copyright claims.” Rebecca Tushnet, *Sight, Sound, and Meaning: Teaching Intellectual Property with Audiovisual Materials*, 52 ST. LOUIS U. L.J. 891, 903 (2008). I offer the example here only to highlight the (analytically absurd, in my view) disconnect between conduct that is clearly lawful under copyright, yet just as clearly punishable under the DMCA as it has hitherto been construed.

²⁶⁹ See *supra* Part II.B.1.

²⁷⁰ See 2006 Final Rule, *supra* note 28. The new exemption allows circumvention of DRM mechanisms protecting “[a]udiovisual works included in the educational library of a college or university’s film or media studies department, when circumvention is accomplished for the purpose of making compilations of portions of those works for educational use in the classroom by media studies or film professors.” 37 C.F.R. § 201.40(b)(1) (2007). By its terms, this exemption is too narrow to allow a law professor to copy an excerpt from his or her personal copy of a copyrighted motion picture.

²⁷¹ See *supra* notes 68-71 and accompanying text.

²⁷² See Denicola, *supra* note 11, at 220-32; Tian, *supra* note 11, at 779-81.

²⁷³ *Uncertainty and unpredictability* are frequently cited as undesirable characteristics of contemporary fair use law that preclude the doctrine from being reduced to a set of clearly established systematic rules and may inhibit users from engaging in uses that, even if they would ultimately be found lawful, rest upon debatable claims of entitlement to fair use protection. See Armstrong, *supra* note 11, at 52, 70-74; see also James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882, 890 (2007) (labeling fair use “famously ambiguous”). This uncertainty stems in part from the case-specific balancing inquiry mandated by the statute—which, the Supreme Court has warned, “is not to be simplified with bright-line rules.” *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994). By inviting the courts to draw upon fair use principles, at least initially, in formulating fair circumvention doctrine, the risk of multiplying the undesirable traits of unpredictability and uncertainty may seem apparent. Two

may take are for the courts to say. It is better that they begin to do so rather than continuing to invoke the fiction that the text of the statute alone commands their contradictory decisions.

B. *Possible Criticisms*

The mode of analysis sketched out in the preceding section, which generally contemplates construing the DMCA in the light of the broader corpus of copyright law and with particular attention to the fair use doctrine, might plausibly be attacked as either unduly lax or unduly confining. Neither objection, it seems to me, ought to obscure its potential advantages in achieving rationality and coherence of judicial doctrine under the DMCA.

First, construing the DMCA in light of the broader purposes of copyright poses no real risk that unchecked judicial activism will thwart legislative intent. My recommendation is not that the courts make up for themselves a set of policies and purposes for the DMCA, but rather that they seek guidance from a comparatively well-developed body of analytically related copyright jurisprudence. Construing related statutory texts harmoniously is a familiar exercise well within the courts' institutional competence.²⁷⁴ And many interpretive theories recognize the propriety of consulting broader statutory purposes as aids to determine the meaning of an enacted text.²⁷⁵ Congress spoke in copyright language²⁷⁶ and was thinking copyright thoughts²⁷⁷ in the DMCA, and it

related observations, however, may point the way towards mitigating the risk of such doctrinal indeterminacy. First, to say that fair use doctrine as a whole suffers from an unpredictability problem, *see* David Nimmer, "Fairest of Them All" and *Other Fairy Tales of Fair Use*, 66 *LAW & CONTEMP. PROBS.* 263 (2003), is not to say that the outcome of any individual fair use dispute is necessarily unknowable in advance: some uses are clearly fair. *See, e.g.,* *Lenz v. Universal Music Corp.*, No. C 07-3783 JF, 2008 WL 3884333, at *4 (N.D. Cal. Aug. 20, 2008) (dismissing copyright holder's concerns about unpredictability of fair use); *id.* ("Undoubtedly, some evaluations of fair use will be more complicated than others."). Second, as Michael Madison has demonstrated, some of the putative confusion surrounding the fair use doctrine vanishes upon careful identification of certain factual commonalities in the courts' decisions. These commonalities may be ascertained in advance and employed to aid in planning for both litigants and courts, potentially making subsequent case outcomes more predictable. *See* Michael J. Madison, *A Pattern-Oriented Approach to Fair Use*, 45 *WM. & MARY L. REV.* 1525, 1645-65 (2004).

²⁷⁴ *See, e.g., supra* note 178 and accompanying text.

²⁷⁵ *See, e.g.,* HENRY M. HART, JR. & ALBERT M. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 147 (1994) (Judges should resolve uncertainties in the meaning of statutory text "in the way which best serves the principles and policies it expresses. If the policy of the specific arrangement is open to doubt, the official should interpret it in the way which best harmonizes with more basic principles and policies of law."); ESKRIDGE, *supra* note 196, at 234-38 (defending, against contemporary formalist critiques, reliance on legislative history and other extrinsic aids to identify meaning). Other interpretive theories, of course, would go even further than I am presently suggesting. *See, e.g.,* GUIDO CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* 98 (1982) ("Scholarly criticisms . . . , jury actions that nullify or mitigate past rules, even administrative determinations, all can be appropriate reports of change in the landscape" that courts should be permitted at least to consider.).

²⁷⁶ *See supra* notes 166-172 and accompanying text.

²⁷⁷ *See supra* note 175 and accompanying text.

would hardly represent judicial usurpation of lawmaking authority for the courts to construe the statute consistently with its background.

The objection from the opposite direction would be that construing the DMCA as a part of the broader corpus of copyright law threatens, rather than protects, the public's interest in access to expressive works, in view of the generally pro-plaintiff orientation of the courts in copyright cases.²⁷⁸ I readily concede that the conception of copyright as predominantly a vehicle for advancing public ends, although firmly grounded in the text of the Constitution,²⁷⁹ has met with a chillier reception from the courts in recent decades.²⁸⁰ But it has hardly disappeared from the landscape. Courts and commentators alike continue to speak of copyright's value in promoting broader public ends involving the availability of expressive works, not merely as a mechanism for transferring wealth from the public to copyright holders.²⁸¹ And the scope of protections available under copyright law for the public interest, even under a restrictive view, surely compare favorably with the most restrictive current interpretations of the DMCA. Analogizing from the latter to the former, accordingly, ought to pose no serious risk of contracting, and some possibility of enlarging, the sphere of viable public uses of digital copyrighted works.

V. CONCLUSION

The institutional response of the courts to the enactment of the DMCA has been puzzling. Federal copyright law has long developed as an exercise in interbranch partnership, with Congress and the courts generally acting as coequal partners in the development of doctrine. The courts have played particularly important roles in limiting the potentially undesirable reach of copyright's liability and penalty provisions, which might readily threaten other expressive values if applied strictly as written. Under the DMCA, in contrast, the courts seem to have ceded a

²⁷⁸ See, e.g., BENKLER, *supra* note 92, at 441 (lamenting chilling effects created by restrictive judicial interpretations of fair use).

²⁷⁹ See U.S. CONST. art. I, § 8, cl. 8 ("The Congress shall have Power . . . [t]o promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings . . .") (emphasis added). Recent historical scholarship identifies the "promotion of progress" as a substantive objective that the Framers intended as a constraint upon legislative authority. See Dotan Oliar, *Making Sense of the Intellectual Property Clause: Promotion of Progress as a Limitation on Congress's Intellectual Property Power*, 94 GEO. L.J. 1771 (2006).

²⁸⁰ Compare *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) ("[P]rivate motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts."), with *Eldred v. Ashcroft*, 537 U.S. 186, 212 n.18 (2003) ("[C]opyright law serves public ends by providing individuals with an incentive to pursue private ones.").

²⁸¹ See, e.g., *Eldred*, 537 U.S. at 219-20 (observing that copyright law, including the exceptions to copyright holders' exclusive rights, is intended to promote dissemination of expressive works); Lloyd L. Weinreb, *Fair's Fair: A Comment on the Fair Use Doctrine*, 103 HARV. L. REV. 1137, 1150 (1990) ("Fair use does not exclude consideration of factors not related to the utilitarian justification for copyright—other social values or, more simply, fairness.").

good deal of their historical policymaking role in copyright matters back to Congress. Both the cases construing the DMCA broadly and the cases construing it narrowly have attempted to portray their results as resting not upon policy considerations, but instead as commanded solely, or primarily, by the literal text of the statute. In doing so, the courts have at once demoted themselves from the coequal policymaking role they have traditionally occupied in copyright and imposed on the text of the DMCA a far greater burden than it can colorably bear, for like other copyright statutes, the DMCA includes a multiplicity of provisions pointing in different directions.

The effect has been a devaluing of copyright doctrine in cases under the DMCA to no identifiable benefit. The development of a cohesive body of DMCA case law is hampered by the courts' insistence on disregarding provisions that actually appear in the statute. Doing so both diminishes the persuasive force of their decisions (for later courts may decide instead to emphasize the provisions of the DMCA that the earlier courts discounted) and inhibits consideration of plainly relevant source materials outside the enacted text. Copyright law, for its own valid purposes, long ago outgrew such strict formalism. It would be far preferable for the courts in DMCA cases to do likewise.

Perhaps they have. After all, cases like *Chamberlain* and *Lexmark* do seem to draw upon matters of legislative policy and intent to give the DMCA quite a different reading than did cases like *Reimerdes*. Perhaps the courts are silently thinking "fair circumvention" thoughts, while outwardly preserving a façade of formalist orthodoxy to forestall intervention by a more narrowly textualist Supreme Court. If that is their game, however, it seems hardly to be worth the candle. A court's insistence in case #1 that the literal text of the DMCA says something it clearly does not leaves all the parties in case #2 worse off, for they must either frame their own arguments around the supposed literal text of the statute (a recipe for continued confusion) or invoke policy considerations outside the statutory text that precedent has declared to be irrelevant.

Development of a rational, cohesive body of doctrine under the DMCA would be served far more readily by a forthright judicial declaration that, although particular conduct might be encompassed within the four corners of the statute's liability provisions, it nevertheless will not be punishable for good and adequate reasons of policy. Debate thereafter could revolve around ascertaining the reasonable limits of those policies and any countervailing principles (prominently including, to be sure, fidelity to the intent of Congress and the enacted text where it supplies an ascertainable rule of decision). This is the route the courts took when developing copyright's fair use doctrine, and it remains a sensible alternative for developing a "fair circumvention" doctrine under the DMCA.