## LICENSING AS DIGITAL RIGHTS MANAGEMENT, FROM THE Advent of the Web to the IPad

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#### ABSTRACT

This Article deals with the Digital Millennium Copyright Act's anti-circumvention provision, Section 1201, and its relationship to licensing. It argues that not all digital locks and contractual notices qualify for legal protection under Section 1201, and attributes the courts' indiscriminate protection of all Digital Rights Management (DRM) measures to the law's incoherent formulation. The Article proposes a pair of filters that would enable courts to distinguish between those DRM measures that qualify for protection under Section 1201, and those that do not. The filters are shown to align with legislative intent and copyright precedent, as well as the approaches recently adopted by the Fifth Circuit, in MGE v. GE, and the Librarian of Congress, in granting the iPad "jailbreaking" exemption. The Article contends that articulating a coherent standard for legitimate circumvention would serve rightsholders by clarifying the scope of their protections, as well as prospective inventive competitors and generative consumers.

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#### TABLE OF CONTENTS

INTRODUCTION		142
I.	ADEQUATE PROTECTION	145
	A. Inventing, then Sharing, the Web	145
	B. Jefferson and the White Paper	146
	C. Brokering the DMCA	
	D. The Anti-Circumvention Provision	
	E. Defining DRM	153
II.	DMCA JURISPRUDENCE	
	A. Sony, Innovation & Vigorous Commerce	157
	B. Early DMCA Jurisprudence	
	C. Middle Period: Foreseeing Monopolies	
	D. Later Jurisprudence: Licenses Reign Supreme	163
III.	LICENSING GENERATIVITY	166
	A. The Court's Historical Approach to IP Licensing	166
	B. iPad DRM	170
	1. iPad Licensing	170
	2. iPad Generativity	
	C. Accommodating the Generative Consumer	
	1. Recognizing Generativity	
	2. Blips in the Night?	
Conclusion		

### INTRODUCTION

After Adam ate from the tree of the knowledge of good and evil, God placed the world's first protection measures around it: cherubim and a "flaming sword which turned every way."<sup>1</sup> God waited until the horse was out of the barn, but Apple took corresponding measures preemptively when it set up the App Store, attributing the rapid creation of hundreds of thousands of applications by third-party developers to the strict controls it cultivates as a part of its "ecosystem."<sup>2</sup> Others use less wholesome metaphors: just two years after the App Store's inception, a dramatic "jailbreak" was staged by none other than the Librarian of Congress (LoC).<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Genesis 3:24 (Revised Standard Version).

<sup>&</sup>lt;sup>2</sup> See Responsive Comment of Apple, Inc. in Opposition to Proposed Exemption 5A and 11A (Class #1) at 24-25, *In re* Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, No. RM 2008-8 (U.S. Copyright Office) [hereinafter Responsive Comment of Apple].

<sup>&</sup>lt;sup>3</sup> See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,825, 43,828-30 (July 27, 2010) (to be codified at 37 C.F.R. pt. 201).

What provoked this exigency measure? This Article traces the provocation to the Digital Millennium Copyright Act's (DMCA) anti-circumvention provision, Section 1201.<sup>4</sup> The DMCA was intended to enable copyright law to adapt to the Internet environment, maintaining a balance between creators and users.<sup>5</sup> Intended to protect only meritorious technical protection measures (TPMs), Section 1201's incoherent design has, over the past decade, led to absolute protection for digital locks such as the iPad's.

The Copyright Clause is the only Constitutional provision that addresses Congress's powers regarding copyrights through stipulations,<sup>6</sup> and it likely stems from the Framers' skepticism of monopolies.<sup>7</sup> Yet courts interpreting Section 1201 have failed to reconcile established copyright limitations with technological development under the DMCA. Over the past five years, TPMs been paired with expansive licensing regimes, thwarting legislative intent and traditional copyright principles.

Under the DMCA regime, digital advances have become a double-edged sword: though they have the potential to spur new forms of creating, modifying, and sharing works, their deployment with or as TPMs can obstruct interoperability and legitimate privileged uses. Courts that permit contractual notices to function as restrictive licenses sanction an "über"<sup>8</sup> or "mutant"<sup>9</sup> copyright ethos.

<sup>&</sup>lt;sup>4</sup> 17 U.S.C. §§ 512, 1201–05 (2006). Passed on October 12, 1998, the DMCA became effective on November 29, 1999; the anti-circumvention provision came into effect on October 28, 2000.

<sup>&</sup>lt;sup>5</sup> See S. REP. NO. 105-190, at 10 (1998); H.R. REP. NO. 105-551, pt. 2, at 24 (1998); World Intellectual Property Organization Copyright Treaty pmbl., April 12, 1997, S. TREATY DOC. NO. 105-17, 36 I.L.M. 65, *available at* http://www.wipo.int/export/sites/www/treaties/en/ip/wct/pdf/trtdocs\_wo033.pdf [hereinafter WCT].

<sup>&</sup>lt;sup>6</sup> U.S. CONST. art. I, § 8, cl. 8 (granting Congress power "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"); *see also* H. COMM. ON THE JUDICIARY, 87TH CONG., REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW 5 (Comm. Print 1961) ("[T]he ultimate purpose of copyright legislation is to foster the growth of learning and culture for the public welfare, and the grant of exclusive rights to authors for a limited time is a means to that end.").

<sup>&</sup>lt;sup>7</sup> See Tyler T. Ochoa & Mark Rose, *The Anti-Monopoly Origins of the Patent and Copyright Clause*, 49 J. COPYRIGHT SOC'Y U.S.A., 675, 677-78 & n.6 (2002) (noting that British monarchs granted monopoly privileges for political patronage).

<sup>&</sup>lt;sup>8</sup> Jane Ginsburg, From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law, 50 J. COPYRIGHT SOC'Y U.S. 113, 131 (2003).

<sup>&</sup>lt;sup>9</sup> Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 34 (2003).

This phenomenon impedes the emergence of what I call the "generative consumer," whose non-copyright-infringing digital production should be encouraged, not hindered. The World Wide Web (Web) itself was invented to promote global interoperability, modification, and redistribution.<sup>10</sup> These values accord with market economy and fair use principles, and the Supreme Court has repeatedly affirmed that trade in items that can be used both lawfully and unlawfully must be permitted to facilitate "innovation and a vigorous commerce."<sup>11</sup> Yet courts have failed to apply this logic in the context of DMCA circumvention.

I begin, in Part II, by reviewing Section 1201's legislative history, showing that it was meant to prevent media piracy while permitting a range of traditional uses. Congress's built-in exemptions have, however, been largely thwarted due to the law's incoherent design and its drafters' failure to anticipate interoperability-limiting behavior. Moreover, I show that members of the public generally do not understand what constitutes unauthorized circumvention, nor consider it immoral.

In Part III, I survey DMCA case law, showing that the courts' tendency to allow "licensing" agreements combined with TPMs to supersede traditional allowances is particularly problematic. I contend that pre-digital copyright principles capably addressed potentially infringing technology, and that they should be maintained. Part IV examines a century of copyright law precedent, highlighting a clear pattern of opposition to attempts to supersede federal copyright law allowances contractually— especially at the uneven seams where ownership meets license and copyright meets patent.

Most of the legal wrangling over circumvention pertains to DVDs, but I have chosen to focus on the iPad for two reasons. First, the iPad has proven extremely popular, overtaking DVD players' five-year sales numbers in its first quarter on the market.<sup>12</sup> Second, given that the device controls consumers' ability to access and use digital media in unprecedented ways, issues related to the differentiation of digital media which a consumer owns from that which she uses qua licensee are particularly salient in the iPad context.

I conclude by analyzing a pair of recent declarations, one by the Fifth Circuit and one by the LoC, that push back on current DRM practices by challenging the practice of labeling sales as licenses and the use of copyright law to limit interoperability. The

<sup>&</sup>lt;sup>10</sup> See discussion *infra* Part I.B.

<sup>&</sup>lt;sup>11</sup> See MGM Studios, Inc. v. Grokster, Ltd. 545 U.S. 913, 933 (2005); see discussion *infra* Part I.A.

<sup>&</sup>lt;sup>12</sup> See John Malloy, *iPad Adoption Rate Fastest Ever, Passing DVD Player* (CNBC, Oct. 4, 2010, 3:19 PM), http://www.cnbc.com/id/39501308.

philosophy implicit in these declarations endorses non-copyrightinfringing circumvention, and is in harmony with both the DMCA's legislative intent and copyright precedent. I argue that continuing to interpret Section 1201 along these lines would benefit the public by empowering would-be competitors and generative consumers alike.

#### I. ADEQUATE PROTECTION

#### A. Inventing, then Sharing, the Web

Tim Berners-Lee, the computer scientist generally credited with inventing the Web along with Robert Cailiau at the European Organization for Nuclear Research (CERN),<sup>13</sup> envisioned it as an egalitarian international method for sharing information over the Internet. On the Web, he imagined, individuals around the world would use a browser to freely interact with hypertext documents. Working at CERN, he promoted the Web as a means to reduce the inefficiencies caused by incompatible tools within the organization, which "le[d] to waste[d] time, frustration and obsolete answers."<sup>14</sup>

When he formally proposed the project in March 1989, he argued that it would be useful not only to the organization, but globally.<sup>15</sup> The invention lived up to CERN's expectations and, in extraordinary two-page statement, an the organization magnanimously relinquished all intellectual property rights in its source code. Proclaiming its desire to "further compatibility [and] collaboration," it granted permission "for anyone to use, duplicate, modify and redistribute it," making the Web freely available on April 30, 1993.<sup>16</sup>

CERN's altruism was reciprocated when, in May 2010, it introduced the Large Hadron Collider-the world's largest machine, propelling protons at 99.99% of the speed of lightseeking to recreate Big Bang conditions and explain human existence.<sup>17</sup> For the project to succeed, unprecedented amounts of

<sup>&</sup>lt;sup>13</sup> See, e.g., Robert Wright, Tim Berners-Lee: The Man Who Invented the Web, TIME, May 19, 1997, http://www.time.com/time/magazine/article/ 0,9171,986354,00.html.

<sup>&</sup>lt;sup>14</sup> Tim Berners-Lee & Robert Cailliau, WorldWideWeb: Proposal For A Hypertext Project, http://www.w3.org/Proposal.html.

<sup>&</sup>lt;sup>15</sup> See Tim Berners-Lee, Information Management: A Proposal, in MULTIMEDIA: FROM WAGNER TO VIRTUAL REALITY 189 (Randall Packer & Ken Jordan eds., W.W. Norton & Co. 2001).

<sup>&</sup>lt;sup>16</sup> CERN, Statement Concerning CERN W3 Software Release into Public Domain: Page 2, http://tenyears-www.web.cern.ch/tenyears-www/ Declaration/Page2.html.

<sup>&</sup>lt;sup>17</sup> Dennis Overbye, A New Clue to Explain Existence, N.Y. TIMES, May 18, 2010, at A1, available at http://www.nytimes.com/2010/05/18/science/

data must be stored and analyzed by thousands of scientists around the globe over a fifteen-year period. As a government-funded academic institution, the organization could scarcely afford sufficient computer storage, so it asked other research bodies and private citizens for help. Tens of thousands of computers were volunteered, and they are now jointly harnessed through a distributed network referred to as "the Grid."<sup>18</sup>

#### B. Jefferson and the White Paper

President Clinton wasted no time in seeking to fix rules of the road for the "Information Superhighway,"<sup>19</sup> tasking a Working Group with updating the Copyright Act of 1976<sup>20</sup> in February 1993.<sup>21</sup> Ironically, the Group invoked a Jeffersonian metaphor for its mandate<sup>22</sup>: determining whether the coat worn in copyright law's boyhood still fits in digital adulthood.<sup>23</sup> Praising existent copyright law and its role, over the centuries, in bettering society,<sup>24</sup> the Group's White Paper, released in September 1995, purported to recommend just slight clarification.<sup>25</sup> In light of rapid technological advances and the need to maintain the existent balance of rights, it concluded that the "[t]he coat is getting a little

<sup>24</sup> *Id.* at 212.

space/18cosmos.html; CERN – LHC: Facts and Figures, http://public.web.cern.ch/public/en/LHC/Facts-en.html.

<sup>&</sup>lt;sup>18</sup> See NICHOLAS CARR, THE BIG SWITCH: REWIRING THE WORLD, FROM EDISON TO GOOGLE 116-17 (W.W. Norton & Co. 2008); CERN – LHC: Facts and Figures, http://public.web.cern.ch/public/en/LHC/Facts-en.html.

<sup>&</sup>lt;sup>19</sup> See Ilene Knable Gotts et al., *Navigating the Global Information* Superhighway: A Bumpy Road Lies Ahead, 8 HARV. J.L. & TECH. 275, 275-77 (1995) (explaining that when Vice President Al Gore first used the term "Information Superhighway" on January 11, 1994 in an address before the Academy of Television, Arts, and Sciences, "he most likely contemplated the creation of a state-of-the-art 'smart' highway system with no potholes or structural limitations").

<sup>&</sup>lt;sup>20</sup> Pub. L. No. 94-553, 90 Stat. 2541 (1976).

<sup>&</sup>lt;sup>21</sup> The Information Infrastructure Task Force was created to deal with the "National Information Infrastructure," of which the Internet was one component. *See* INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995), *available at* http://www.uspto.gov/web/offices/com/doc/ipnii/ipnii.pdf [hereinafter WHITE PAPER].

<sup>&</sup>lt;sup>22</sup> Jefferson was notoriously critical of strong intellectual property protections. *See, e.g.*, Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* THOMAS JEFFERSON: WRITINGS 1286, 1291 (Merrill D. Peterson ed., 1984) ("That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature.").

<sup>&</sup>lt;sup>23</sup> See WHITE PAPER, supra note 21, at 13.

<sup>&</sup>lt;sup>25</sup> *Id.* at 17.

tight. There is no need for a new one, but the old one needs a few alterations."<sup>26</sup>

The Group's invocation of the Founder is, like much of its rationale, specious. The White Paper asserts,

Jefferson stated: "I am not an advocate for frequent changes in laws and constitutions. But laws and institutions must go hand and hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and manners and opinions change, with the change of circumstances, institutions must advance also to keep pace with the times. We might as well require a man to wear still the coat which fitted him when a boy..."<sup>27</sup>

In fact, Jefferson wrote:

"I am certainly not an advocate for frequent and untried changes in laws and constitutions. I think moderate imperfections had better be borne with; because, when once known, we accommodate ourselves to them and find practical means of correcting their ill effects. But I know also that laws and institutions must go hand in hand...."<sup>28</sup>

The inconsistency may be partially explained by the fact that the Group chose to quote the Jefferson Monument inscription rather than his actual letter. Closer scrutiny reveals further discrepancies. Jefferson did not express a willingness to readily change laws in light of technological advances. Rather, he wrote a particularly private,<sup>29</sup> bold,<sup>30</sup> and issue-specific response.<sup>31</sup> Recent

<sup>&</sup>lt;sup>26</sup> *Id.* at 212.

 $<sup>^{27}</sup>$  Id. at 13 (quoting from the Inscription at the Jefferson Memorial, Washington, D.C.).

<sup>&</sup>lt;sup>28</sup> Letter from Thomas Jefferson to Samuel Kercheval (July 12, 1816), *in* 10 THE WRITINGS OF THOMAS JEFFERSON 37, 42-43 (Paul L. Ford ed., New York, G.P. Putnam's Sons 1899) (continuing as the Memorial version does, and concluding: "as civilized society to remain ever under the regimen of their barbarous ancestors").

<sup>&</sup>lt;sup>29</sup> *Id.* ("I wish to take no public share. Yet, if it be asked for your own satisfaction only, and not to be quoted before the public....").

<sup>&</sup>lt;sup>30</sup> See R.B. BERNSTEIN, THOMAS JEFFERSON 184 (Oxford Univ. Press 2005) ("Rarely did he show . . . [more] confidence . . . [as he] unburdened himself on the defects of the Virginia constitution of 1776, against which he had spoken and written for forty years.").

<sup>&</sup>lt;sup>31</sup> See id.; Letter from Thomas Jefferson to Samuel Kercheval (July 12, 1816), in THE ESSENTIAL JEFFERSON 239 (Jean M. Yarbrough ed., Hackett Pub. Co.

scholarship has deemed it one of Jefferson's most "wildly misconstrued remarks," typically marshaled under the banner of legislative revision.<sup>32</sup>

While the Group praised copyright law's historical evolution, the regime it espoused threatened to replace the balance instead. The uncompromising anti-circumvention measures proposed were paired with little proof that such legal protections would provide a necessary and productive accompaniment for TPMs. The legislation enacted in its wake runs counter to core intellectual property principles. Jefferson's actual plea should inform DMCA analysis: recognizing the "moderate imperfections" in harmonizing the Internet's effects on copyright law, we should accommodate them by sanctioning legitimate circumvention.

## C. Brokering the DMCA

Despite the Administration's vigorous efforts, Congress did not bite when the legislation was first floated, and the Group's bill failed to make it out of committee over multiple attempts in 1995 and 1996.<sup>33</sup> Opposition came from several quarters, with the most effective and well-funded resistance emanating from the technology industry.<sup>34</sup> It deemed the proposed law's anticircumvention provisions draconian and incompatible with age-old copyright principles.<sup>35</sup> The bill criminalized products and services by virtue of either their "primary purpose or *effect*,"<sup>36</sup> and hardand software developers strenuously demanded both a focus on designer intention and protection from liability for users' potentially criminal behavior.<sup>37</sup>

<sup>35</sup> *Id*.

<sup>2006);</sup> Larry Kramer, Fidelity to History—And Through It, 65 FORDHAM L. REV. 1627, 1637 (1997).

<sup>&</sup>lt;sup>32</sup> ALAN PELL CRAWFORD, TWILIGHT AT MONTICELLO: THE FINAL YEARS OF THOMAS JEFFERSON 130 (Random House 2008).

<sup>&</sup>lt;sup>33</sup> See, e.g., Ruth L. Okediji, *The Regulation of Creativity Under the WIPO Internet Treaties*, 77 FORDHAM L. REV. 2379, 2387 (2009).

<sup>&</sup>lt;sup>34</sup> See, e.g., JESSICA LITMAN, DIGITAL COPYRIGHT 122-29 (Prometheus Books 2001); Pamela Samuelson, *The U.S. Digital Agenda at WIPO*, 37 VA. J. INT'L L. 369 (1997).

<sup>&</sup>lt;sup>36</sup> Section 1201 of the draft bill read: "No person shall import, manufacture or distribute any device, product, or component incorporated into a device or product, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without the 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 of the copyright owner under § 106." WHITE PAPER, *supra* note 21, at 6.

<sup>&</sup>lt;sup>37</sup> See Jerome H. Reichman, Graeme B. Dinwoodie, and Pamela Samuelson, A Reverse Notice and Takedown Regime to Enable Fair Uses of Technically Protected Copyrighted Works," 22 BERKELEY TECH. L.J. 981, 998-1001 (2007).

Moreover, the sector contended, innovation necessitates explicit allowances for constructive uses of protected works, such as security research and reverse engineering.<sup>38</sup> While such circumvention exceptions were accordingly incorporated into the legislated DMCA a few years later, they have been restricted by judicial interpretation.

Having suffered defeat on the Hill, the Administration changed tack, refashioning the White Paper as a draft treaty distributed to World Intellectual Property Organization (WIPO) members at their December 1996 conference in Geneva. WIPO's legislative process had, at that point, already taken years and "intense, breathtaking negotiations of Hollywood-style epic proportion."<sup>39</sup> National and industry players from academia and the content, technological, and telecommunications industries battled over the resolution finally embodied in the WIPO *Copyright Treaty* and WIPO *Performances and Phonograms Treaty*.<sup>40</sup>

Here too, a critical mass objected to inflexible anticircumvention provisions. As a result, signatory states were not obligated to implement specific laws domestically, only to ratify the law through individual national schemes, by providing: (i) "adequate protection" to intellectual property through technical measures, and (ii) "effective remedies" against those who circumvent, or facilitate the circumvention of, said measures.<sup>41</sup> The agreed-upon document was premised on the recognition that the balance between rightsholders and the public interest must be maintained.<sup>42</sup>

Once the international treaties were put in place, attention shifted once again to the United States, as the House Judiciary and Commerce Committees fought over the draft DMCA for months.<sup>43</sup>

<sup>42</sup> WCT pmbl., *supra* note 5.

<sup>&</sup>lt;sup>38</sup> Id.

<sup>&</sup>lt;sup>39</sup> Okediji, *supra* note 33, at 2389.

<sup>&</sup>lt;sup>40</sup> See Reichman, supra note 37, at 995 & n.65; World Intellectual Property Organization Performances and Phonograms Treaty, Dec. 20, 1996, S. Treaty Doc. No. 105-17, 36 I.L.M. 76 (1997).

<sup>&</sup>lt;sup>41</sup> WCT art. 11, *supra* note 5; *see also* Reichman, *supra* note 37, at 1001-02. The European Union implemented the Articles as Article 6(4) of its Information Society Directive. *See* Directive 2001/29, of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L167) 19. However, it has yet to be litigated. *See* Patricia Akester, *Technological Accommodation of Conflicts between Freedom of Expression and DRM: The First Empirical Assessment* (Center for Intellectual Property and Information Law, University of Cambridge, Working Paper, 2009), *available at* http://ssrn.com/abstract=1469412.

<sup>&</sup>lt;sup>43</sup> See, e.g., WILLIAM H. MANZ, 5 FEDERAL COPYRIGHT LAW: THE LEGISLATIVE HISTORIES OF THE MAJOR ENACTMENTS OF THE 105TH CONGRESS (1999).

President Clinton's efforts were vindicated when he signed the bill into law five years after its conception, on October 28, 1998, making it the most significant amendment to the Copyright Act of 1976 in decades. Its primary benefit was publicized as providing authors with "global protection from piracy in the digital age,"<sup>44</sup> in light of the newfound ease by which "digital technology enables pirates to reproduce and distribute perfect copies of works."<sup>45</sup>

In this incarnation, the entertainment and software industries' support overwhelmed opposition by factions including scientists, librarians, and academics.<sup>46</sup> For better or worse, lobbying is rampant in intellectual property matters, and the copyright realm in particular.<sup>47</sup> Writing in 1996, William Patry, who had served in various Congressional capacities, related a disturbing *quid pro quo*: copyright interest groups regularly held fundraisers, wrote campaign songs, and provided tickets to sought-after shows, with the expectation that "not even the hands of congressional staff have touched the committee reports."<sup>48</sup>

Partially as a result of lobbying, and partially due to the rapidly changing nature of copyright, interests tend to be gauged in present-day, rather than forward-looking, terms.<sup>49</sup> Legislative myopia is evident throughout the DMCA, even with key elements such as interoperability—a cornerstone of intellectual property and the related areas of antitrust and telecommunication regulation.<sup>50</sup>

<sup>&</sup>lt;sup>44</sup> William J. Clinton, Statement on signing the Digital Millennium Copyright Act, 2 PUB. PAPERS 1902-03 (Oct. 28, 1998).

<sup>&</sup>lt;sup>45</sup> H.R. REP. NO. 105-551, pt. 2, at 25 (1998); *see also* S. REP. NO. 105-190, at 8 (1998).

<sup>&</sup>lt;sup>46</sup> See Steve P. Calandrillo & Ewa M. Davison, The Dangers of the Digital Millennium Copyright Act: Much Ado About Nothing?, 50 WM. & MARY L. REV. 349, 354 (2008).

<sup>&</sup>lt;sup>47</sup> See Mark Lemley, Property, Intellectual Property, and Free Riding, 83 TEXAS L. REV. 1031, 1064 (2005) [hereinafter Lemley, Property] (explaining that economic theory suggests that parties "will spend up to the total value of the benefit" sought when lobbying); Neil W. Netanel, Why Has Copyright Expanded? Analysis and Critique (Public Law & Legal Theory Research Paper Series, Paper No. 07-34, 2008, available at http://papers.ssrn.com/sol3/ papers.cfm?abstract id=1066241).

<sup>&</sup>lt;sup>48</sup> W.F. Patry, Copyright and the Legislative Process: A Personal Perspective, 14 CARDOZO ARTS & ENT. L.J. 141 (1996); see also David Nimmer, Appreciating Legislative History: The Sweet and Sour Spots of the DMCA Commentary, 23 CARDOZO L. REV. 909, 970 (2002) (sharing Patry's "ire" for the process by which the 104th Congress produced the Digital Performance Right in Sound Recordings Act of 1995).

<sup>&</sup>lt;sup>49</sup> See, e.g., Mark Lemley, *The Constitutionalization of Technology Law*, 15 BERKELEY TECH. L.J. 529, 532 (2000) (discussing, in the wake of the DMCA's enactment, how Congress fails to consider copyright "proactively," allowing private interests to set the agenda).

<sup>&</sup>lt;sup>50</sup> See, e.g., Urs Gasser & John Palfrey, Breaking Down Digital Barriers: How and When ICT Interoperability Drives Innovation, BERKMAN CENTER

The anti-circumvention provision was intended to protect interoperability.<sup>51</sup> Content providers were, perhaps naively, expected to consult "product designers... about the design and implementation of technological protection measures."<sup>52</sup> Congress failed to anticipate the interoperability-limiting behavior that actually emerged.<sup>53</sup>

## D. The Anti-Circumvention Provision

The blanket prohibition against circumvention articulated in Section 1201 is accompanied by a convoluted set of exceptions and limitations on those exceptions. The law does not permit noncopyright-infringing circumvention, including having a right to access or use protected work by virtue of one's ownership or intended "fair" use. Instead, legislators sought to accommodate such rights by tailoring a series of flexible exceptions.

Subsection (a)(1)(A) prohibits circumventing any TPM "that effectively controls access to a work" protected by copyright. Critics have explained that this wording suggests that "*not every*" TPM warrants legal protection, by virtue of the effectiveness condition.<sup>54</sup> Congressional and European Parliamentary debate, the treaties' chief architect, and a recent comprehensive international survey have all recognized these limitations.<sup>55</sup>

<sup>51</sup> 144 CONG. REC. E2136 (daily ed. Oct. 13, 1998) (remarks of Rep. Bliley).

<sup>52</sup> H.R. REP. NO.105-551, pt. 2, at 40 (2d Sess. 1998).

PUBLICATION SERIES (2007), http://cyber.law.harvard.edu/interop/pdfs/interopbreaking-barriers.pdf; Pamela Samuelson & Jason Schultz, *Should Copyright Owners Have to Give Notice of Their Use of Technical Protection Measures?*, 6 J. TELECOMM. & HIGH TECH. L. 41, 47 (2007-08) ("Among the most widespread concerns arising from use of TPM technology is the potential damage it can inflict on device and service interoperability. It is well documented that many of the advantages consumers enjoy from the digital networked economy result from compatibility between devices, formats, platforms, and applications. These 'network effects' increase the value of the overall network for each individual user.").

<sup>&</sup>lt;sup>53</sup> See id. (explaining that the two products particular concern was expressed for, "digital television monitors and digital audio playback devices," were novel at the time of the bill's introduction but ubiquitous by the time it went into effect). Portable music players are a prime example of interoperability-limiting design today: Microsoft's Zune portable music player is designed not to work with Apple operating systems, whereas Apple's iTunes files are only playable with Apple products such as the iPod.

<sup>&</sup>lt;sup>54°</sup> Ian R. Kerr et al., *Technical Protection Measures: Tilting at Copyright's Windmill*, 34 OTTAWA L. REV. 7, 35 (2002).

<sup>&</sup>lt;sup>55</sup> See S. Exec. Rep. No. 105-25, at 31 (1998) (statement of Alan P. Larson, Asst. Sec. of State for Economic and Business Affairs); Directive 2001/29, of the European Parliament and of the Council of 22 May 2001, *supra* note 41; Akester, *supra* note 41, at 121 (citing MIHALY FICSOR, THE LAW OF COPYRIGHT AND THE INTERNET: THE 1996 WIPO TREATIES, THEIR INTERPRETATION AND IMPLEMENTATION 548 (2002), and explaining that there is no obligation on any

Congress strove to integrate these limitations, explaining that the prohibition on circumvention "does not apply to the subsequent actions of a person once he or she has obtained authorized access to a copy of a work…even if such actions involve circumvention."<sup>56</sup> Legislators sought to downplay the scope of the prohibition, describing it as "very limited," while characterizing the scope of the exceptions as "very broad."<sup>57</sup> Still, courts have generally construed any act of circumvention as *prima facie* illicit.<sup>58</sup>

Subsections (B)-(E) detail the process by which the LoC may grant triennial Section 1201 exemptions. Users of specific classes of works may be exempted in light of the prohibition's adverse effects on their ability to make noninfringing use of the works in question. The rulemaking process was meant as a fail-safe to protect those whose noninfringing uses are adversely affected.<sup>59</sup> Yet until the most recent batch of LoC exemptions—discussed below—it has proven neither forward-looking nor effective. Few exemptions have been granted, many have been fought off vigorously,<sup>60</sup> and a perennial problem remains: even where a form of circumvention is exempted, rightsholders may still sue for breach of contract, and the *tools* required for lawful circumvention remain prohibited under section 1201(a)(2).<sup>61</sup>

signatory "to provide 'adequate legal protection and effective legal remedies' against acts of circumvention which concern acts permitted by law").

<sup>&</sup>lt;sup>56</sup> H.R. Rep. No. 105-551, pt.1, at 18 (1998).

<sup>&</sup>lt;sup>57</sup> 144 CONG. REC. E2136 (daily ed. Oct. 13, 1998) (remarks of Rep. Bliley).

<sup>&</sup>lt;sup>58</sup> See, e.g., Lexmark Int'l, Inc. v. Static Control Components, Inc. (*Lexmark II*), 387 F.3d 522, 549 (6th Cir. 2004) (explaining that rightsholders need not raise "an impervious shield....Otherwise the DMCA would apply only when it is not needed").

<sup>&</sup>lt;sup>59</sup> H.R. Rep. No. 105-551, pt. 2, at 38 (1998) ("Given the threat of a diminution of otherwise lawful access to works and information...a 'fail-safe' mechanism is required.").

<sup>&</sup>lt;sup>60</sup> At the latest hearings, for instance, seeking to demonstrate the supposed ease of non-circumventive fair use on DVD TPMs, an MPAA representative set up a completely darkened room, high definition camcorder, and flatscreen TV, using "VLC" editing software to edit a Harry Potter film. Ironically, VLC itself circumvents the TPMs, and the MPAA opposes using camcorders to record its movies. *See* Wendy Seltzer, *Theater of the DMCA Anticircumvention Hearings*, WENDY'S BLOG (May 8, 2009, 8:03 AM), http://wendy.seltzer.org/

blog/archives/2009/05/08/theater-of-the-dmca-anticircumvention-hearings.html; *see also* Press Release, Motion Picture Association of America, MPAA Chief Dan Glickman Launches Anti-Camcord Initiative in India (Sep. 7, 2009), *available at* http://mpai.org/newspress/newspress\_india090907.html.

<sup>&</sup>lt;sup>61</sup> Practically any act of permissible circumvention requires such tools, whether it be VLC for DVD editing or decryption software required for encryption research (authorized under Section 1201(g)) or a nonprofit library's determination of whether to purchase an encrypted version of a given work (authorized under Section 1201(d)).

Section (c) states that nothing in Section 1201 shall "affect rights, remedies, limitations, or defenses to copyright infringement, including fair use." Indeed, fair use is statutorily protected under 17 U.S.C. § 107, and grounded in common law and equity.<sup>62</sup> The White Paper pledged not to diminish fair use privileges,<sup>63</sup> and the DMCA legislators sought to integrate it.<sup>64</sup> The drafters thought it would be as applicable in the digital environment as it was in the analog environment.<sup>65</sup> However, they failed to anticipate that courts would consider circumvention a tort separate from copyright infringement.

## E. Defining DRM

Before turning to the specifics of the controls at issue, a word about definitions is in order. Anti-circumvention laws address breaches of TPM and DRM schemes. These terms are contentious on two levels. First, most people consider DRM an umbrella term subsuming TPM,<sup>66</sup> but others see it the other way around or as interchangeable.<sup>67</sup> Second, the rights at issue are contentious, so while most consider DRM an acronym for "Digital Rights Management," some contend that the "R" stands for

<sup>&</sup>lt;sup>62</sup> See Harper & Row Publishers, Inc. v. Nation Enterprises, Inc., 471 U.S. 539 (1985).

<sup>&</sup>lt;sup>63</sup> WHITE PAPER, *supra* note 21, at 17 ("Preserving the framework does not require, however, a dramatic increase in authors' rights, such as more limited or no further applicability of the fair use doctrine in the NII environment. Some have argued that because it may now be technically feasible to "meter" each use of a copyrighted work, and to charge a user a fee for the use, the concept of fair use has no place in the NII environment.").

<sup>&</sup>lt;sup>64</sup> See H.R. Rep. No. 105-551, pt. 1, at 18 (1998) (explaining that users may circumvent TPMs "in order to make fair use of a work").

<sup>&</sup>lt;sup>65</sup> See S. Rep. No. 190, at 23-24 ("The bill does not amend section 107 of the Copyright Act, the fair use provision. The Committee determined that no change to section 107 was required because section 107, as written, is technologically neutral, and therefore, the fair use doctrine is fully applicable in the digital world as in the analog world.").

<sup>&</sup>lt;sup>66</sup> See, e.g., Akester, *supra* note 41, at 13 (DRM involves "technological protection measures (particularly focused on access control and copy control) and other components, such as identifiers (which identify content in a unique manner) and meta-data (including, for example, the identity of the copyright owner and the price for usage of the work)"); Timothy K. Armstrong, *Digital Rights Management and the Process of Fair Use*, 20 HARV. J.L. & TECH. 49, 50 (2006).

<sup>&</sup>lt;sup>67</sup> See, e.g., Kevin J. Harrang, *Challenges in the Global IT Market: Technology, Creative Content, and Intellectual Property Rights*, 49 ARIZ. L. REV. 29, 30 (2007) ("To be precise, DRM is a subset of TPMs, although the two terms are commonly used interchangeably.").

"Restrictions."<sup>68</sup> Others simply forgo the term DRM, opting to use only the term TPM, deeming it less contentious.<sup>69</sup>

I will use "DRM" to refer to systems employing TPMs on their own, or in combination with licensing terms. The TPMlicensing nexus is apparent in later DMCA case law, but has yet to be properly studied. A large-scale recent international DRM survey, for instance, found that many problems did "not stem from DRM but from the fact that licenses may override copyright law," yet such problems were deemed beyond the study's scope.<sup>70</sup>

Its ability to endow rightsholders with control is "both the beauty of DRM (from the point of view of copyright owners) and its bane (from the point of view of many consumers and technology companies)".<sup>71</sup> DRM advocates assert that it is not information that "wants to be free," but certain individuals who want media gratis.<sup>72</sup> The Internet and mass digitization, they point out, have, just as drafters of the White Paper and DMCA anticipated, facilitated an unprecedented ability to copy and share media.

Rightsholders suffer from rampant unauthorized downloading by individuals from various backgrounds who seem to share a belief that whereas physical theft is morally wrong, copyright infringement is not.<sup>73</sup> But neither the anti-circumvention provisions nor legal victories premised on other legal grounds have curbed this illicit behavior.<sup>74</sup> Perhaps the content industry will soon have another avenue to pursue, via the enigmatic Anti-Counterfeiting Trade Agreement, which would reportedly target ISPs<sup>75</sup>—a White Paper-approved strategy<sup>76</sup>—but, in any event, anti-circumvention laws have not stemmed the trend.

<sup>&</sup>lt;sup>68</sup> Neil Weinstock Netanel, *The Digital Broadband Migration: The Next Wave of Innovation*, 6 J. ON TELECOMM. & HIGH TECH. L. 77, 84. "DRM" nomenclature is even used by those who resent what they deem rightsholders' attempt "to secure content and services beyond the scope of any preexisting legal 'rights'"—intending for the acronym to stand for "digital restrictions management" instead.

<sup>&</sup>lt;sup>69</sup> Samuelson & Schultz, *supra* note 50, at 41 ("We regard TPM as a more neutral term than DRM that avoids resolving the ambiguity about whose 'rights' matter in the context of DRM.").

<sup>&</sup>lt;sup>70</sup> Akester, *supra* note 41, at 37.

<sup>&</sup>lt;sup>71</sup> Lionel S. Sobel, *DRM as an Enabler of Business Models: ISPs as Digital Retailers*, 18 BERKELEY TECH. L.J. 667, 670 (2003).

<sup>&</sup>lt;sup>72</sup> Tom W. Bell, Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine, 76 N.C. L. REV. 557, 558 (1998).

<sup>&</sup>lt;sup>73</sup> Mohsen Manesh, *The Immorality of Theft, the Amorality of Infringement*, 2006 STAN. TECH. L. REV. 5.

 $<sup>^{74}</sup>$  *Id.* at 8-10.

<sup>&</sup>lt;sup>75</sup> See Paul Meller, *EU Data Protection Chief Slams Secret ACTA Talks*, BUS. WK., Feb. 22, 2010, http://www.businessweek.com/technology/content/

Moreover, members of the public seem to either misunderstand the meaning of circumvention or deem it generally permissible. To situate the circumvention/ infringement distinction in lay people's minds, consider a recent letter to *The New York Times*'s resident ethicist, Randy Cohen. A reader bought an ereader for a trip, intending to read the Steven King's latest book on it. Discovering the official electronic version's release had been delayed, she grudgingly bought the thousand-page hardcover and prepared to schlep it, but then found a pirated version online. Would it be immoral to download it on her e-reader?

While such an illegal download is illegal, Cohen suggested, it is not unethical: "Author and publisher are entitled to be paid for their work, and by purchasing the hardcover, you did so. Your subsequent downloading is akin to buying a CD, then copying it to your iPod."<sup>77</sup> Analogously, piracy rates may be as much as ten times greater on the iPad than the iPhone. A possible explanation is that consumers are reluctant to pay for slightly different versions of the products they already purchased for their iPhones.<sup>78</sup>

Unsurprisingly, DRM proponents have not touted its chief benefit as frustrating non-infringers, but rather of ridding them and rightsholders of a shared enemy: free riders.<sup>79</sup> Controls, the argument goes, facilitate differential pricing, transactional efficiency, and thus lower prices and greater choice for consumers.<sup>80</sup> Critics see the "rhetoric of free riding" as an implement for rightsholders to capture more than the reasonable return on their investment a competitive market would provide.<sup>81</sup>

is\_app\_piracy\_higher\_on\_the\_ipad.php.

<sup>79</sup> See, e.g., Stan J. Liebowitz, *The Myth of Copyright Inefficiency*, 32 REGULATION 28, 28 (2009) ("Virtually all economic discussions of intellectual property law and its alternatives depend on the size of the incentive/access tradeoff. How much of a deadweight loss do intellectual property laws create on the access side of the market?"); Bell, *supra* note 72, at 582-3.

feb2010/tc20100222\_165816.htm (describing how ACTA drafts would reportedly make ISPs liable for their networked users' file transfers).

<sup>&</sup>lt;sup>76</sup> See WHITE PAPER, *supra* note 21, at 117 (explaining that ISPs are better placed to monitor and prevent infringement than rightsholders); *id.* at 114-24 (recommending that ISPs be held strictly liable for their users' infringement due to the RAM copies retained on their servers); *id.* at 109-14 (proposing contributory and vicarious liability schemes).

<sup>&</sup>lt;sup>77</sup> Randy Cohen, *E-Book Dodge*, N.Y. TIMES, Apr. 4, 2010, at MM15.

<sup>&</sup>lt;sup>78</sup> See Adrianne Jeffries, *Is App Piracy Higher on the iPad*?, READWRITEWEB (Aug. 25, 2010, 7:18 PM), http://www.readwriteweb.com/archives/

<sup>&</sup>lt;sup>80</sup> See WHITE PAPER, supra note 21, at 230; Bell, supra note 72, at 584, 587; Sobel, supra note 71, at 670-2.

<sup>&</sup>lt;sup>81</sup> Lemley, *Property, supra* note 47, at 1032, 1037-8. Incidentally, in *Grokster*'s oral arguments, Justice Souter asserted: "I know perfectly well I could go out and buy a CD and put it on my iPod, but I also know perfectly well that if I can get music on the iPod without buying the CD, that's what I'm going to do. And I think it's reasonable to suppose that everybody else would guess that."

DRM may tempt dominant players to charge consumers more, create barriers to market entry for competitors, and reduce interoperability.<sup>82</sup>

Theoretical utility aside, there are practical problems in designing proper TPM systems, as controls are more effective at tracking and obstructing use than permitting exemptions.<sup>83</sup> While it is technically simple to write code permitting certain classes access and copying capabilities, the difficulty lies in creating custom-TPM systems ensuring: (i) free access for those deserving; (ii) qualitatively differentiated quality of use; (iii) that exempted users' identities are genuine; and (iv) that users do not illicitly distribute material after being granted access.<sup>84</sup>

Resultantly, systems often sacrifice user exceptions in favor of rightsholder control. Privacy concerns also arise as device manufacturers and content providers develop their ability to openly or surreptitiously—monitor and control use.<sup>85</sup> The "arms race" between TPM designers and hackers shows no sign of abating as technology advances,<sup>86</sup> and crucially, courts have opted to prop up licensing agreements rather than allowing digital fair use doctrine to evolve through common law. The next section demonstrates that pre-DMCA common law capably addressed evolutions in technology, in accord with both market economy and fair use principles.

Transcript of Oral Argument at 13-18, Metro-Goldwyn-Mayer Studios, Inc., v. 913 Grokster. 545 U.S. (2005)(No. 04-480),available at http://www.supremecourt.gov/oral arguments/argument transcripts/04-480.pdf. <sup>82</sup> See Jack Shafer, Apple Wants to Own You: Welcome to our Velvet Prison, Sav the Boys and Girls from Cupertino, SLATE, Apr. 15, 2010, http://www.slate.com/id/2250993 (deploring "the perimeter mines, tank traps, revetments, and glacis [Steve Jobs has] deployed around these shiny devices to slow software developers to a crawl so he can funnel them through his rapacious toll booth and collect a sweet vig before he'll let their programs run on your new iDevice.").

<sup>&</sup>lt;sup>83</sup> See, e.g., Ginsburg, supra note 8, at 128.

<sup>&</sup>lt;sup>84</sup> See Akester, supra note 41, at 86-7.

<sup>&</sup>lt;sup>85</sup> See Nina Elkin-Koren, *Making Room for Consumers Under the DMCA*, 22 BERKELEY TECH. L.J. 1119, 1119-20 (2007).

<sup>&</sup>lt;sup>86</sup> See Ian R. Kerr, *Technical Protection Measures: Part I—Trends in Technical Protection Measures and Circumvention Technologies* (Dec. 15, 2005), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=705003; Wendy Seltzer, *The Imperfect is the Enemy of Good: Anticircumvention versus Open User Innovation*, 25 BERKELEY TECH. L.J. 909, 957 (2010) (noting that "closed software and hardware can engage in the arms race, appearing secure until a smarter hacker comes along").

#### **II. DMCA JURISPRUDENCE**

#### A. Sony, Innovation & Vigorous Commerce

The fair use doctrine serves as a key limitation on the exclusivity of rights granted to owners of copyrighted works. First codified in Section 107 of the Copyright Act of 1976,<sup>87</sup> the principle has evolved as an equitable defense since its introduction in *Folsom v. Marsh*, an 1841 Supreme Court case.<sup>88</sup> It is intended to ensure that copyright law remains flexible and solely extends to authorial expression rather than underlying facts, ideas, or systems.<sup>89</sup> In determining whether a given use is "fair," and thus excused from infringement, courts undertake an evaluation of: its purpose and character, the proportion of the copyrighted work it involves, and its effect on the copyrighted work's potential market.<sup>90</sup>

Just before the digital revolution, in 1984, the Supreme Court reacted to groundbreaking technology facilitating copyright infringement by affirming the malleability of fair use<sup>91</sup> and checking "[t]he monopoly privileges that Congress may authorize."<sup>92</sup> Sony had pioneered the Betamax system, a VCR, or videocassette recorder technology, which allowed users to "timeshift" television programming by making copies of it on analog cassettes for later viewing.<sup>93</sup>

A pair of Hollywood studios, MCA/ Universal Studios and Walt Disney Productions, brought a suit against Sony, charging that its product enabled consumers to infringe their copyrights. The Court ruled for Sony, finding it not liable for contributory infringement since its device also facilitated substantial non-

<sup>&</sup>lt;sup>87</sup> 17 U.S.C. § 107 (2006).

<sup>&</sup>lt;sup>88</sup> Folsom v. Marsh, 9 F. Cas. 342, 349 (C.C.D. Mass. 1841) (concerning the meritoriousness of a publication featuring George Washington's letters, in light of the fact that a third of them had been previously published verbatim).

<sup>&</sup>lt;sup>89</sup> Archetypical fair uses include criticism, scholarship, and research. *See, e.g.*, U.S Copyright Office-Fair Use, http://www.copyright.gov/fls/fl102.html (last visited Mar. 29, 2011).

<sup>&</sup>lt;sup>90</sup> 17 U.S.C. § 107 (the fourth factor in the non-exhaustive list is a consideration of the nature of the copyrighted work).
<sup>91</sup> Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 478 n. 31

<sup>&</sup>lt;sup>91</sup> Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 478 n. 31 (1984) (noting that Congressional reports "eschewed a rigid, bright-line approach to fair use," particularly in light of technological advances and the innumerable situations they can lead to).

<sup>&</sup>lt;sup>92</sup> *Id.* at 429.

<sup>&</sup>lt;sup>93</sup> JVC's VHS system, released shortly after Betamax, won the ensuing "format war". *See Videotape Format War*, WIKIPEDIA, http://en.wikipedia.org/ wiki/Videotape format war (last updated Mar. 15, 2011).

infringing uses.<sup>94</sup> Copyright "has never accorded [its] owner complete control over all possible uses of his work."<sup>95</sup>

Sony held that fair use can foster competition, innovation, and potential new markets,<sup>96</sup> and the Court has affirmed these principles repeatedly. In 1991 it ruled that while authors are entitled to their personal expression, others may freely build upon it.<sup>97</sup> In *Dastar*, Justice Scalia warned, for a unanimous court, that legally protecting expired copyrights would "create a species of mutant copyright law that limits the public's 'federal right to copy and use."<sup>98</sup> Copyright and patent rights, he continued, are components of a special bargain and are not intended "to reward manufacturers for their innovation in creating a particular device."<sup>99</sup> The decision is illuminating as technological innovators of devices like the iPad increasingly bind their patents up with copyright.

In *Grokster*, the Court explicitly affirmed *Sony's* brand of fair use, declaring that it permits "selling an item with substantial lawful as well as unlawful uses," leaving "breathing room for innovation and a vigorous commerce."<sup>100</sup> Studies bear this rationale out, since the fair use industries are arguably growing more rapidly than content ones.<sup>101</sup>

<sup>97</sup> Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349-50 (1991) (quoting U.S. CONST. art. I, § 8, cl. 8).

<sup>99</sup>*Id.* (citation omitted).

<sup>&</sup>lt;sup>94</sup> Sony, 464 U.S. at 456.

 $<sup>^{95}</sup>$  *Id.* at 432.

<sup>&</sup>lt;sup>96</sup> See, e.g., WILLIAM PATRY, MORAL PANICS AND THE COPYRIGHT WARS 158 (2009) (quoting Viacom chairman Sumner Redstone to the effect that the new home video market *Sony* facilitated was "the bonanza that saved Hollywood from bankruptcy"); Pamela Samuelson, *The Generativity of* Sony v. Universal: *The Intellectual Property Legacy of Justice Stevens*, 74 FORDHAM LAW REVIEW 1831, 1875 (2006) (concluding that the decision "pave[d] the way for the untrammeled introduction into the market of iPods, MP3 players, digital video recorders, CD ripping software, CD burners, p2p technologies, and many others").

<sup>&</sup>lt;sup>98</sup> Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 34 (2003) (citation omitted).

<sup>&</sup>lt;sup>100</sup> Metro-Goldwyn-Mayer Studios, Inc., v. Grokster, 545 U.S. 913, 932-33 (2005).

<sup>&</sup>lt;sup>101</sup> See BUREAU OF ECON. ANALYSIS, U.S. DEP'T OF COMMERCE, GROSS-DOMESTIC-PRODUCT-BY-INDUSTRY ACCOUNTS, 1947-2009, (2010), available at http://www.bea.gov/industry/gpotables/gpo\_action.cfm (demonstrating that from 2003-2008, the information-communications-technology industries contributed 3.8% growth in real GDP, whereas the publishing industry contributed 1.2%, and the motion picture and sound recording industries added 0.3%); THOMAS ROGERS & ANDREW SZAMOSSZEGI, COMPUTER & COMMC'NS INDUS. ASS'N, FAIR USE IN THE U.S. ECONOMY: ECONOMIC CONTRIBUTION OF INDUSTRIES RELYING ON FAIR USE 8-12 (2010), available at http://www.ccianet.org/

CCIA/files/ccLibraryFiles/Filename/00000000085/FairUseStudy-Sep12.pdf (noting that from 2002 to 2007, the fair use industries accounted for 23 percent

The White Paper seemed to foresee and approve of this, as *Sony* is the only case cited in its "recommendations" section, and it is quoted extensively. Congress explicitly affirmed that the anticircumvention provision was intended to sanction substantially non-infringing products.<sup>102</sup> Yet courts have generally found traditional and *Sony* principles inapplicable in the DMCA context.

I now move to discuss courts' Section 1201 analysis in three phases: (i) the early period, where the law's outer limits were charted in an over-broad manner; (ii) the middle era, where courts foresaw and vainly tried to check aftermarket monopolies; and (iii) the latter phase, where courts have tended to construe the law by simply turning to, and upholding, "licenses."

## **B.** Early DMCA Jurisprudence

The DVD Copy Control Association administers what became the first widely known TPM, CSS.<sup>103</sup> Encrypting DVD and Blue-ray Disc content, CSS enables only authorized players to unscramble programming, making it playable. Prospective CSS licensees are disallowed from negotiating aspects of another crucial DRM tool, the CSS license. In fact, they are not even provided with the restrictive terms while deliberating the agreement.<sup>104</sup> Since several anti-circumvention cases and much of the LoC Rulemaking Exemption process have revolved around CSS, it is a sensible place to begin our DMCA case law analysis.

of U.S. real economic growth); Andrew Bartels, *Global Tech Recovery Will* Drive US IT Market Growth of 6.6% and 8.2% Globally (in Dollars) in 2010, FORRESTER BLOGS (Jan. 12, 2010), http://blogs.forrester.com/vendor\_strategy/2010/01/global-tech-recovery-will-drive-us-it-market-growth-of-66-and-82-

globally-in-dollars-in-2010.html (showing that business spending on information technology rose by 12% in Q2 2010, following a 10% rise in Q1 2010).

<sup>&</sup>lt;sup>102</sup> See H.R. REP. No. 105-551, pt. 2, at 22, 24 (1998); 144 CONG. REC. S9935, 9936 (daily ed. Sep. 3, 1999) (statement of Sen. Ashcroft); see also 144 CONG. REC. H7094 (daily ed. Aug. 4, 1998) (statement of Rep. Bliley) (noting that § 1201(a)(2) is "aimed fundamentally at outlaying [sic] so-called 'black boxes' that are expressly intended to facilitate circumvention of protection measures for purposes of gaining access to a work . . . . [not] products that are capable of commercially significant noninfringing uses"). The "substantial non-infringing use" language is borrowed from the Patent Code, 35 U.S.C. § 271(c) (2006), which was imported and analogously applied to copyright law by the Supreme Court in Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 440 (1984).

<sup>&</sup>lt;sup>103</sup> The collective includes members from the film, consumer electronics, computer, and software industries. *See* JIM TAYLOR, DVD DEMYSTIFIED 11-27 (2d ed. 1998) (explaining that CSS was developed and released in the US in October 1996).

<sup>&</sup>lt;sup>104</sup> See Realnetworks, Inc. v. DVD Copy Control Ass'n, Inc., 641 F. Supp. 2d 913, 922 (2009).

Universal City Studios, Inc. v. Reimerdes,<sup>105</sup> the first case to consider Section 1201, revolved around TPM "effectiveness." The United States District Court for the Southern District of New York determined that a construction of the term whereby only successful TPMs would be protected would "gut" the statute, since any circumvented TPM would automatically be deemed ineffective.<sup>106</sup> Instead, the court chose a construction whereby effectiveness results whenever a TPM is employed with the intention of controlling access. Subsequent decisions have generally affirmed this rationale, finding that claimants do not need to create "an impervious shield . . . . Otherwise the DMCA would apply only when it is not needed."<sup>107</sup>

Responding to the argument that CSS prevents both legitimate and illegitimate access to the work in question, the court again disregarded legislative debate and declared that Congress "would have said so" had it intended for the fair use defense to apply.<sup>108</sup> The tone for DMCA litigation was thus set by the declaration that Section 1201 applies even in the absence of copyright infringement. Acknowledging that this created a disconnect with *Sony*, the latter was declared overruled by the DMCA where the two conflict,<sup>109</sup> and CSS was found to justifiably block fair as well as foul uses.<sup>110</sup>

Soon after, Missouri-based software company 321 Studios created a pair of software programs that enabled purchasers to make back-up copies of DVDs by circumventing CSS.<sup>111</sup> It brought a preemptive suit to have the programs declared non-DMCA-infringing on First Amendment-rather than fair usegrounds.<sup>112</sup> The court disagreed, finding analog copying of CSSprotected works possible, even though it was not "as easy, as exact, or as digitally manipulable as plaintiff desires."<sup>113</sup>

The *Reimerdes* appeal. *Corlev*, met with the same fate.<sup>114</sup> as consumers were deemed free to comment on films, quote portions

<sup>&</sup>lt;sup>105</sup> Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000), aff'd 273 F.3d 429 (2d Cir. 2001).

<sup>&</sup>lt;sup>106</sup> *Id.* at 318.

<sup>&</sup>lt;sup>107</sup> Lexmark Int'l v. Static Control Components (*Lexmark II*), 387 F.3d 522, 549 (6th Cir. 2004). But see MGE UPS Systems, Inc. v. GE Consumer and Industrial, Inc., 612 F.3d 760 (5th Cir. 2010) (depublished).

<sup>&</sup>lt;sup>108</sup> Universal City Studios, Inc., 111 F. Supp. 2d at 322.

<sup>&</sup>lt;sup>109</sup> *Id.* at 323.

<sup>&</sup>lt;sup>110</sup> Id. at 304.

<sup>&</sup>lt;sup>111</sup> See 321 Studios v. Metro Goldwyn Mayer Studios, Inc., 307 F. Supp. 2d 1085, 1097 (N.D. Cal. 2004).

<sup>&</sup>lt;sup>112</sup> See id. at 1098. <sup>113</sup> Id. at 1102.

<sup>&</sup>lt;sup>114</sup> The court deemed circumvention a prima facie DMCA violation, automatically designating its speech illegal and thus undeserving of First

of their underlying screenplays, and record films while viewing them (using microphones and still or video cameras).<sup>115</sup> Elcomsoft's TPM-stripping software, which created easily-copied and disseminated PDF files, was similarly condemned by the California district court in *United States v. Elcom*.<sup>116</sup> While engaging in fair use would be more difficult, the court concluded, users could still quote from and compare protected works.<sup>117</sup> Concerns relating to the proliferation of TPMs were dismissed, including effects on public domain works, as it was the "user/purchaser [who] has acquiesced in this restriction when purchasing/ licensing the work."<sup>118</sup>

## C. Middle Period: Foreseeing Monopolies

Unlike *Reimerdes*, which turned on TPM efficacy, "authorization" proved determinative in *Chamberlain v. Skylink Technologies*.<sup>119</sup> Plaintiff Chamberlain acknowledged that it did not explicitly prohibit purchasers from programming competing universal garage door transmitters. But, it contended, the product's website and warranty had implied terms forbidding purchasers from using competing aftermarket products.

The district court found no Section 1201(a)(2) violation, ruling that as there was no explicit restriction, purchasers deserve "the full range of rights that normally accompany consumer products—including those containing copyrighted embedded software."<sup>120</sup> Consumers could thus ignore a product's warranty and use the product as they wished.<sup>121</sup>

The Federal Circuit decision has been read as an affirmation of the district court decision, and at first blush it appears to be. Consumers who purchase a product containing copyrighted software were said to have an "inherent legal right" to use their copy.<sup>122</sup> Moreover, the district court's DMCA construction was castigated, as it "would allow virtually any

Amendment protection. *See* Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001).

<sup>&</sup>lt;sup>115</sup> See id. at 459.

<sup>&</sup>lt;sup>116</sup> 203 F. Supp. 2d 1111, 1118 (N.D. Cal. 2002).

<sup>&</sup>lt;sup>117</sup> *Id.* at 1134–35.

<sup>&</sup>lt;sup>118</sup> *Id.* at 1141.

<sup>&</sup>lt;sup>119</sup> Chamberlain Group, Inc. v. Skylink Technologies, Inc. (*Chamberlain I*), 292
F. Supp. 2d 1023 (N.D. Ill. 2003), *aff* d 381 F.3d 1178 (*Chamberlain III*) (Fed. Cir. 2004).

<sup>&</sup>lt;sup>120</sup> Chamberlain III, 381 F. 3d at 1187.

<sup>&</sup>lt;sup>121</sup> Chamberlain Group, Inc. v. Skylink Technologies, Inc. (*Chamberlain II*), 292
F. Supp. 2d 1040, 1045 (N.D. Ill. 2003).

<sup>&</sup>lt;sup>122</sup> *Chamberlain III*, 381 F.3d at 1202.

company to attempt to leverage its sales into aftermarket monopolies."<sup>123</sup>

Significantly however, the opinion's precedential value only lies in a narrow holding. Chamberlain's warranty and website only failed to bar uses, as they did not do so explicitly<sup>124</sup>: rightsholders *could* dictate terms for consumer use. The court warned that the DMCA, wrongly interpreted, could "allow any copyright owner, through a combination of contractual terms and technological measures, to repeal the fair use doctrine."<sup>125</sup> While the Sixth Circuit's concurrent opinion in *Lexmark Int'l v. Static Control Components*<sup>126</sup> favored consumers, the prophecy came to embody the landscape shortly thereafter.

The *Lexmark* district court determined that since the microchips in Static Control's cartridges bypassed plaintiff Lexmark's printers' TPMs without authorization, it was liable under Section 1201(a)(2).<sup>127</sup> The Sixth Circuit disagreed, finding that since Lexmark had not directed security efforts—such as encrypting the code of its authentication sequence—the TPM was ineffective.<sup>128</sup> It was the consumer's purchase of the Lexmark printer, rather than the process of authentication, that spelt access.<sup>129</sup> Congress, the court declared, did not "express an interest in creating liability for the circumvention of technological measures designed to prevent consumers from using consumer goods while leaving the copyrightable content of a work."<sup>130</sup>

A serious flaw inherent in the court's methodology, however, is that had the copyrighted elements been inaccessible (by virtue of encryption or other effective TPMs), illegitimate circumvention would have resulted. A second fundamental deficiency is the ruling's disregard for the shrinkwrap agreement on the top of each cartridge box, which spelled out Lexmark's conditions and declared the act of using the cartridge their acceptance.<sup>131</sup> The court fatefully warned of future plaintiffs "us[ing] the DMCA in conjunction with copyright law to create

<sup>&</sup>lt;sup>123</sup> *Id.* at 1201.

 $<sup>^{124}</sup>$  *Id.* at 1187.

 $<sup>^{125}</sup>$  *Id.* at 1202.

<sup>&</sup>lt;sup>126</sup> Lexmark Int'l, Inc. v. Static Control Components, Inc., 387 F.3d 522 (6th Cir. 2004).

<sup>&</sup>lt;sup>127</sup> Lexmark Int'l, Inc. v. Static Control Components, Inc. (*Lexmark I*), 253 F. Supp. 2d 943, 971 (E.D. Ky. 2003).

<sup>&</sup>lt;sup>128</sup> Lexmark II, 387 F.3d at 549.

<sup>&</sup>lt;sup>129</sup> *Id.* at 546.

<sup>&</sup>lt;sup>130</sup> *Id.* at 549.

<sup>&</sup>lt;sup>131</sup> See *id.* at 530 (the majority mentions it in passing). *But see id.* at 563 (arguing that the requirement would likely be found enforceable if properly considered) (Feinkens, J., concurring in part and dissenting in part).

monopolies of manufactured goods for themselves just by tweaking the facts of this case."<sup>132</sup>

#### D. Later Jurisprudence: Licenses Reign Supreme

*Davidson & Associates v. Jung*<sup>133</sup>, decided shortly after *Chamberlain* and *Lexmark*, eerily embodies such concerns vis-àvis comprehensive DRM schemes. Plaintiff Blizzard produced video games and ran a free online multiplayer gaming site for them at Battle.net.<sup>134</sup> Paradoxically, a surge in the site's popularity adversely affected the user experience, as there were increased instances of system crashes, profanity, and cheating.<sup>135</sup> Frustrated, the defendants, a group of volunteer gaming enthusiasts, established an alternative non-profit site for playing their Blizzard games at bnetd.org.<sup>136</sup>

Since bnetd.org did not interact with Battle.net, the defendants contended that their purchase of Blizzard games meant that their use, through an alternate server, of the Battle.net "mode" contained was authorized.<sup>137</sup> The District Court of the Eastern District of Missouri disagreed, finding a Section 1201(a) violation: while the defendants had a lawful right to use their copies, the moment they agreed to the End User License Agreement (EULA) and Terms of Agreement (TOU) which forbade doing so, they were disentitled to access the work through an alternate server.<sup>138</sup>

The court began from the proposition that reverse engineering is "firmly established" fair use,<sup>139</sup> but found conflicting precedent regarding whether it could be contracted around. *Vault Corp. v. Quaid Software*<sup>140</sup>, the decision cited by the defendants, found a restriction in Vault's license agreement—disallowing decompilation and disassembly—unenforceable, as it conflicted with Section 117 of the Copyright Act.<sup>141</sup> Instead, the

<sup>&</sup>lt;sup>132</sup>*Id.* at 551.

<sup>&</sup>lt;sup>133</sup> Davidson & Associates v. Jung (*Davidson II*) 422 F.3d 630 (8th Cir. 2005).

 $<sup>^{134}</sup>$  See *id.* at 633.

<sup>&</sup>lt;sup>135</sup> See id. at 635.

<sup>&</sup>lt;sup>136</sup> See id.

<sup>&</sup>lt;sup>137</sup> See Davidson & Associates, Inc. v. Internet Gateway, Inc. (Davidson I), 334
F.Supp. 2d 1164, 1184 (E.D. Mo.) aff'd sub nom. Davidson & Associates v. Jung, 422 F.3d 630 (8th Cir. 2005).

 $<sup>^{138}</sup>$  Id. at 1185.

<sup>&</sup>lt;sup>139</sup> *Id.* at 1180 (citing Bowers v. Baystate Tech., Inc., 320 F.3d 1317, 1325 (Fed. Cir. 2003)).

<sup>&</sup>lt;sup>140</sup> 847 F.2d 255 (5th Cir. 1988).

<sup>&</sup>lt;sup>141</sup> See Vault, 847 F.2d at 269–70 (Section 117(a) of the Copyright Code provides "for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided: that such a new copy . . . [is] an essential step in the utilization of the computer program. . . . ").

court relied on a 2003 Federal Circuit case, *Bowers v. Baystate Techs.*, in holding that private parties may contractually forgo the reverse-engineering exception.<sup>142</sup>

Thus, whereas *Lexmark* effectively ignored its shrinkwrap license, *Davidson* and subsequent decisions took such licenses as gospel. The court incanted the stipulations: users "may not, in whole or in part, copy, photocopy, reproduce, translate, reverse engineer, derive source code, modify, disassemble, decompile, create derivative works based on the Program, or remove any proprietary notices or labels on the program" without Blizzard's prior written consent.<sup>143</sup> By not returning their games within the thirty days allotted in the license, the defendants accepted the agreements wholesale, waiving rights including fair use and reverse engineering.<sup>144</sup> The court thus began the trend of overturning legislated and common law exceptions by simply looking to rightsholders' contractual stipulations.

Blizzard returned to court over World of Warcraft, then the world's most popular multiplayer game, with over 10,000,000 active subscribers and annual revenues in excess of \$1.5 billion.<sup>145</sup> Users had to agree to the TOU and EULA in order to play. MDY created and sold "Glider," a TPM-circumventing bot program that could play for users while they were away from their systems, enabling them to gain equipment and advance through levels more rapidly.<sup>146</sup> MDY branded itself an innovator in enhancing users' gaming experience; Glider even enabled some disabled people to play.<sup>147</sup> Blizzard contended that the program disrupted its "carefully balanced competitive environment"—language Apple would go on to adopt with its ecosystem metaphor—as some users went as far as mining virtual goods and selling them on auction sites.<sup>148</sup>

As in *Davidson*, the district court turned to see whether MDY infringed Blizzard's copyright or breached its contract. It tersely determined that the "license" (the TOU and EULA) was "limited" and thus not superseded by federal law: the title, "'Grant of Limited Use License'—makes clear that the license is limited, as does the later reference to a 'limited, non-exclusive license."<sup>149</sup> Users violated the license and resultantly, by using Glider, "the act

<sup>&</sup>lt;sup>142</sup> See Bowers v. Baystate Technologies, Inc., 320 F.3d 1317, 1325-26 (1st Cir. 2003).

<sup>&</sup>lt;sup>143</sup> Davidson I, 334 F.Supp. 2d, 1170–71.

<sup>&</sup>lt;sup>144</sup> See id. at 1181.

 <sup>&</sup>lt;sup>145</sup> See MDY Industries, LLC v. Blizzard Entertainment Inc. 2008 WL 2757357,
 1 (D. Ariz.).

<sup>146</sup> See id.

<sup>&</sup>lt;sup>147</sup> See id. at 2.

<sup>&</sup>lt;sup>148</sup> See id. at 1.

<sup>&</sup>lt;sup>149</sup>*Id.* at 4.

that exceeds the scope of the license and the act that violates Blizzard's copyright are the same."<sup>150</sup> The suggestion that, under Section 117, Warcraft purchasers own their copies and are therefore entitled to use them as they wish, was also simply dismissed by turning to the EULA.<sup>151</sup>

RealNetworks (Real) chose, like 321 Studios, to bring a preemptive suit in seeking a declaratory judgment that its "RealDVD" neither breached the DVD CCA license nor violated the DMCA.<sup>152</sup> The program allowed for DVD content to be timeand space-shifted, like Sony's Betamax, and Real sought to legitimate it. Marketing was directed at lawful DVD owners, encouraging them to make backup copies in anticipation of loss or damage (discs scratch easily). Its EULA forbade users from copying rented or borrowed discs, and while the program stripped CSS as it stored movies, it placed even stronger encryption on burned copies.<sup>153</sup>

The court seized on the fact that the software was unable to spot or prevent illegitimate use. Sony principles were upended as the onus was placed on Real to prove that its product would only be used for legitimate purposes.<sup>154</sup> Real invoked MDY's argument that any violation would merely be a breach of contract, rather than that of copyright or the DMCA, but the court found violations on all three fronts. Tellingly, it framed the decision in classical contract jargon: "Real cannot use the CSS License Agreement as a sword to unlock, decrypt and descramble CSS content and then assert this right as a shield against a DMCA violation."<sup>155</sup>

This rationale belies the court's misunderstanding of Congressional intentions. The DMCA was drafted on the assumption that such violations would only constitute contractual breaches, not DMCA or copyright ones.<sup>156</sup> Congress, the court then erroneously explained, designed Section 1201 to apply to "products like RealDVD...that are expressly designed to circumvent technological measures for purposes of thwarting the rights of copyright owners'[sic] to decide who may gain access to

<sup>&</sup>lt;sup>150</sup> *Id.* at 7. <sup>151</sup> *See id.* at 8–9.

<sup>&</sup>lt;sup>152</sup> Realnetworks, Inc. v. DVD Copy Control Ass'n, Inc., 641 F. Supp. 2d 913 (2009). <sup>153</sup> See id. at 927.

<sup>&</sup>lt;sup>154</sup> See id. at 936.

<sup>&</sup>lt;sup>155</sup> Realnetworks, 641 F. Supp. 2d at 936. See also Combe v. Combe, 2 K.B. 215, 220 (1951) (defining estoppel as "a shield not a sword.").

<sup>&</sup>lt;sup>156</sup> See WHITE PAPER, supra note 21, at 50 (explaining that "[1]icenses and other contracts cannot transform noninfringing uses (such as fair uses) into infringements; they can, however, make such uses violations of the terms and conditions of the agreements").

their copyrighted works in digital format."<sup>157</sup> But this is fallacious: anyone using RealDVD would already *have* access to the DVDs in question. Real's product enabled copying (or use), not access.

The decision gave the DMCA an unequivocally broad scope, finding new grounds for liability and defanging *Sony*.<sup>158</sup> While the court recognized a novel implicit DMCA "user exemption,"<sup>159</sup> it immediately folded it into a paper tiger, declaring that while it may be fair use for individuals to store backup copies of their DVDs, it is illegal for others to make or share tools enabling the creation of such copies.<sup>160</sup>

Citing *Reimerdes* and *Elcom*, the court thus came full circle, with the absurd conclusion that it was Congress's conscious "sacrifice" to "elect[] to leave technologically unsophisticated persons who wish to make fair use of encrypted copyrighted works without the technical means of doing so."<sup>161</sup> While the anticircumvention law permits fair use circumvention, it disallows the distribution of tools enabling it,<sup>162</sup> and only Congress can disturb this "balance."<sup>163</sup>

#### **III. LICENSING GENERATIVITY**

## A. The Court's Historical Approach to IP Licensing

As a general rule, federal copyright law is meant to preempt state contract law (under the Supremacy Clause),<sup>164</sup> but strategic digital rightsholders have, from the outset, sought to frame transactions as "licenses" rather than as sales.<sup>165</sup> Courts accepting such a categorization would permit copyright holders to deprive users of traditional and legislated rights, including ones related to the first sale doctrine and fair use.<sup>166</sup> But disallowing

<sup>&</sup>lt;sup>157</sup> Realnetworks, 641 F. Supp. 2d at 936.

 $<sup>^{158}</sup>$  Id. at 941 (explaining that "substantial noninfringing use' reasoning has no application to DMCA claims").

<sup>&</sup>lt;sup>59</sup> *Id*. at 942.

<sup>&</sup>lt;sup>160</sup> *Id*.

<sup>&</sup>lt;sup>161</sup> *Id.* at 943 (quoting Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 324 (S.D.N.Y. 2000)).

<sup>&</sup>lt;sup>162</sup> *Id.* at 943 (citing United States v. Elcom, 203 F. Supp. 2d 1111, 1125 (N.D. Cal. 2002)).

<sup>&</sup>lt;sup>163</sup> *Id*. at 943.

<sup>&</sup>lt;sup>164</sup> U.S. CONST. art. VI, cl. 2.

<sup>&</sup>lt;sup>165</sup> See Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 96 n.7 (3d Cir. 1991) (explaining that when "form licenses were first developed for software, it was, in large part, to avoid the federal copyright law first sale doctrine").

<sup>&</sup>lt;sup>166</sup> The first sale doctrine can be traced to an 1854 Supreme Court decision, and it was legislated as Section 109 of the Copyright Act. See Justin Graham, *Preserving the Aftermarket in Copyrighted Works: Adapting the First Sale Doctrine to the Emerging Technological Landscape*, 2002 STAN. TECH. L. REV. ¶ 6, http://stlr.stanford.edu/STLR/Articles/02\_STLR\_1.

vendors to apply a "license" label would impinge upon their ability to protect their work and their freedom of contract.<sup>167</sup> While the legal landscape remains murky, the Ninth Circuit recently found copyright owners can ensure that a "software user is a licensee rather than an owner of a copy" by unilaterally specifying so and stipulating stringent use and transfer restrictions.<sup>168</sup>

Contemporary DMCA circumvention case law has revolved around the license-TPM nexus, and rightsholder classifications have generally been abided by. The most recent anti-circumvention case, which I describe below, fails to address the nexus, as do the pair previously considered most proconsumer.<sup>169</sup> *Lexmark* practically ignored the shrinkwrap agreement placed on the product's box,<sup>170</sup> and *Davidson I* found that rightsholders may foist restrictive terms on purchasers and that purchasers "expressly consen[t]" to them by clicking "I agree."<sup>171</sup>

While technology has radically transformed in the Internet era, I have shown that courts should continue to apply traditional and *Sony* principles. I now move to show their historical weariness of licenses overriding copyright exceptions, especially when considering patent-copyright hybrids like the iPad and its software.

*Quanta Computer v. LG Electronics*,<sup>172</sup> a recent unanimous Supreme Court ruling, highlights the Court's historical opposition to rightsholder attempts at overriding intellectual property laws through contract.<sup>173</sup> The decision affirms *Motion Picture Patents v.* 

<sup>172</sup> 553 U.S. 617 (2008).

<sup>&</sup>lt;sup>167</sup> See, e.g., SoftMan Prods. Co. v. Adobe Sys., Inc., 171 F. Supp. 2d 1075, 1086 (C.D. Cal. 2001) ("Ownership of a copy should be determined based on the actual character, rather than the label, of the transaction by which the user obtained possession. Merely labeling a transaction as a lease or license does not control.") (citing RAYMOND NIMMER, THE LAW OF COMPUTER TECHNOLOGY 1-103 (Warren, Gorham, and Lamont eds., 2d ed. 1992)). See generally Michael Seringhaus, *E-Book Transactions: Amazon "Kindles" the Copy Ownership Debate*, 12 YALE J.L. & TECH. 147, 181 (2009).

<sup>&</sup>lt;sup>168</sup> Vernor v. Autodesk, Inc., 621 F.3d 1102, 1111 (9th Cir. 2010).

<sup>&</sup>lt;sup>169</sup> See e.g., Niva Elkin-Koren, *Making Room for Consumers Under the DMCA*, 22 BERKELEY TECH. L.J. 1119, 1132 (2007) (calling *Chamberlain* and *Lexmark* "dream cases" for consumers).

<sup>&</sup>lt;sup>170</sup> Lexmark Int'l v. Static Control Components II, 387 F.3d 522, 530 (6th Cir. 2004); *Id.* at 563 (Feikens, J., dissenting).

<sup>&</sup>lt;sup>171</sup> Davidson & Associates, Inc. v. Internet Gateway, Inc. (*Davidson I*), 334 F.Supp. 2d 1164, 1178 (E.D. Mo.) *aff'd sub nom*. Davidson & Associates v. Jung, 422 F.3d 630 (8th Cir. 2005).

<sup>&</sup>lt;sup>173</sup> The decision's precedential value is unclear: Brian W. Carver finds that the Court has declared "all manner of contractual restrictions on the sale and use of a tangible thing embodying a copyrighted or patented invention invalid." *Why License Agreements Do Not Control Copy Ownership: First Sales and Essential Copies*, BERKELEY TECH. L.J. 48 (forthcoming Mar. 2010). In contrast, Yina Dong concludes that the case "left open the questions of whether patent owners can contract around the principles of exhaustion." *A Patent Exhaustion* 

Universal,<sup>174</sup> a 1917 case concerning a patent for a mechanism facilitating the consistent threading of film through projectors.<sup>175</sup> The patent (a Thomas Edison brainchild) was held by a patentee that labeled its projectors with a notice precluding projecting films made by others.<sup>176</sup> Patents, the cases stress, are intended to promote artistic and scientific progress, not the "creation of private fortunes for the owners of patents".<sup>177</sup> The moment articles are sold, they are "rendered free of every restriction which the vendor may attempt to put upon it."<sup>178</sup>

A century of precedent at the copyright-patent-contract nexus bears these principles out. In 1908, Bobbs-Merrill prominently displayed a second notice under its copyright notice in copies of The Castaway, stipulating that should dealers sell them for less than one dollar, they would be infringing its copyright.<sup>179</sup> Macy's bought copies at bulk wholesale prices, and proceeded to sell them for 89 cents each-upending the publisher's aftermarket monopoly. The Court ruled copyright holders may not "fasten, by notice... a restriction upon the subsequent alienation of the subject-matter of copyright after the owner had parted with the title to one who had acquired full dominion over it and had given a satisfactory price for it."<sup>180</sup>

A decade later, the Court considered a licensing agreement foisted by a technological innovator eerily presaging Apple's. The Victor Talking Machine Company held significant market share, having pioneered phonographic technology, marketing strategies, and artist-exclusivity agreements.<sup>181</sup> It also developed a hierarchical contractual regime, only granting dealers a right to use the machine for demonstration purposes, and a right to convey a "license to use the machine" to members of the general public upon receipt of a \$200 "royalty."<sup>182</sup>

Victor purported to retain title and attached a host of conditions including a prohibition on playing records, or using equipment, such as needles, not manufactured by it. The contract also included a right to inspect, service, and even repossess the

<sup>175</sup> *Id.* at 505.

<sup>176</sup> *Id.* at 505-07.

<sup>178</sup> *Id.* at 516.

<sup>180</sup> *Id.* at 349-50.

Exposition: Situating Quanta v. LGE in the Context of Supreme Court Jurisprudence, 2010 STAN. TECH. L. REV. N2, available at http://stlr.stanford.edu/pdf/dong-a-patent-exhaustion-exposition.pdf. <sup>174</sup>243 U.S. 502 (1917).

<sup>&</sup>lt;sup>177</sup> Id. at 511 (citing U.S. CONST. art. I, § 8, cl. 8).

<sup>&</sup>lt;sup>179</sup> Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 342 (1908).

<sup>&</sup>lt;sup>181</sup> See Pekka Gronow, The Record Industry: The Growth of a Mass Medium. 3 POPULAR MUSIC, 53, 55-62 (2008).

<sup>&</sup>lt;sup>182</sup> Straus v. Victor Talking Machine Co., 243 U.S. 490, 494-95 (1917).

phonograph. Accepting the device supposedly constituted accepting these conditions.<sup>183</sup>

The Court lambasted the licensing scheme, finding the ostensible royalty, for instance, not to be a deposit for further payment, but rather an illustration of the company's "studied avoidance of the use of the word 'sale' and its frequent reference to the word 'use'."<sup>184</sup> Courts would have to be "perversely blind" to consider such full-price sales as notices, since such attempts "have been hateful to the law from Lord Coke's day to ours . . . [and] obnoxious to the public interest."<sup>185</sup>

*Hush-A-Phone Corp. v. U.S.* considered a tariff's prohibition on an innovative telephone attachment.<sup>186</sup> AT&T sued the inventor of a cup-like device that provided its users with increased privacy and better call quality, and their officemates with correspondingly quieter workspaces. The court rejected both suit and tariff, ruling that disallowing the device would constitute an "unwarranted interference with the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental."<sup>187</sup> Inconveniencing users by forcing them to cup their hands instead of using them for writing, or doing whatever else they liked, was ruled unreasonable.<sup>188</sup>

A decade later, in *Carterfone*, the FCC applied *Hush-A-Phone* to a more sophisticated mechanism, finding physical attachments and radio interconnection tools comparable.<sup>189</sup> The Carterfone's internal switching facilitated wireless, two-way "telephone" conversation through a mobile radio base station<sup>190</sup> —

 $\frac{188}{100}$  *Id*.

<sup>&</sup>lt;sup>183</sup> Id.

<sup>&</sup>lt;sup>184</sup> *Id.* at 500.

<sup>&</sup>lt;sup>185</sup> *Id.* at 500-01. *See* R. KENT NEWMYER, SUPREME COURT JUSTICE JOSEPH STORY: STATESMAN OF THE OLD REPUBLIC 41 (University of North Carolina Press 1985) (describing how Coke's seminal work, *Coke Upon Littleton*, had caused Justice Story—the father of fair use—to cry "bitter tears" as he struggled through it, but how he emerged "breath[ing] a purer air," having "acquired a new power"). The cited treatise was familiar to the judgment's readers, and it had just been cited approvingly by Mr. Justice Hughes opining for the Court on the same topic, just a few year earlier, in *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373, 404-05 (1911) ("If a man be possessed . . . of a horse or of any other chattel, real or personal, and give or sell his whole interest or property therein, upon condition that the donee or vendee shall not alien the same, the same is void, because the whole interest and property is out of him, so as he hath no possibility of a reverter; and it is against trade and traffic and bargaining and contracting between man and man.") (quoting Lord Coke).

<sup>&</sup>lt;sup>186</sup> 99 U.S. App. D.C. 190, 238 F.2d 266 (D.C. Cir. 1956).

<sup>&</sup>lt;sup>187</sup> *Id.* at 193.

<sup>&</sup>lt;sup>189</sup> In the Matter of Use of the Carterfone Device in Message Toll Telephone Service, 13 F.C.C. 2d 420, 423-24. (1968); 13 Rad. Reg. 2d (P & F) 597, 423-4.
<sup>190</sup> Id. at 420.

a boon to managers and laborers on massive oil fields and cattle ranches.<sup>191</sup> AT&T sued under a tariff disallowing the connection of external devices. The FCC reacted by striking down its provisions prohibiting such "customer-provided" interconnecting devices,<sup>192</sup> finding such rules wrongly burden both manufacturers and users.<sup>193</sup> A subsequent FCC report credited the decision with making "the Internet...the global medium that it is today."<sup>194</sup>

Such restrictions vividly evoke iPad DRM, as does *Motion Picture Patents'* warning: "restriction[s] which would give to the plaintiff such a potential power for evil over an industry which must be recognized as an important element in the amusement life of the nation" run counter to intellectual property laws and are harmful to the public interest.<sup>195</sup> Since Internet technology, entertainment, and speech are so entangled with copyright, patent, and TPM on devices like the iPad,<sup>196</sup> it is increasingly vital not to let related licensing schemes override traditional copyright principles.

## B. iPad DRM

*I could be bounded in a nutshell, and count myself a king of infinite space.*<sup>197</sup>

## 1. iPad Licensing

The iPad's DRM scheme is uniquely comprehensive,<sup>198</sup> as a tangle of TPMs is complemented by expansive licensing terms, and key distinctions like author-reader and device-software are

<sup>&</sup>lt;sup>191</sup> Nicholas Johnson, *Carterfone: My Story*, 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 677 (2009).

<sup>&</sup>lt;sup>192</sup> *Carterfone*, 13 F.C.C. 2d at 423.

<sup>&</sup>lt;sup>193</sup> *Id.* at 425.

<sup>&</sup>lt;sup>194</sup> Jason Oxman, *The FCC and the Unregulation of the Internet* 15 (Fed. Commc'ns Comm'n Office of Plans & Pol'y, Working Paper No. 31, 1999) (explaining that it did so by enabling consumers to "purchase … install and use [modems] without permission from the telephone company").

<sup>&</sup>lt;sup>195</sup> Motion Picture Patents Co. v. Universal Film Co, 243 U.S. 502, 514 (1917).

<sup>&</sup>lt;sup>196</sup> The White Paper speaks of an age where "[c]omputers, telephones, televisions, radios, fax machines and more will be linked by the [Internet], and users will be able to communicate and interact with other computers, telephones, televisions, radios, fax machines and more—all in digital form," WHITE PAPER, *supra* note 21, at 8. Its authors could scarcely imagine all of these functions on one device.

<sup>&</sup>lt;sup>197</sup> WILLIAM SHAKESPEARE, HAMLET, act 2, sc. 2.

<sup>&</sup>lt;sup>198</sup> The iPad and iPhone utilize the same operating system and feature a comparable DRM scheme, so much of my argument is applicable to both devices, but it is more salient with regard to the iPad which is primarily used to access digital media (as opposed to the iPhone, which is primarily used as a telephone).

blurred. Among other terms, consumers agree not to "copy... decompile, reverse engineer, disassemble, attempt to derive the source code of, decrypt, modify, or create derivative works" of the device and its operating system.<sup>199</sup> My DMCA case law analysis suggests that such a license is likely to pass juridical muster such that even where relevant rights are otherwise granted statutorily or through common law, they would be superseded by Apple's licensing terms.

Still, sales have been record-breaking,<sup>200</sup> thanks in part to its treasure of apps.<sup>201</sup> A virtuous commercial cycle has been established, as consumers are provided with increasingly varied applications, and developers with a growing customer-base. Hundreds of thousands of apps are available and billions have been downloaded.<sup>202</sup> App developers are, in a sense, both authors and rightsholders, as they produce each program, determine its price, and get paid based on units sold.<sup>203</sup> But the iPad, as mediator, scrambles the author-reader dichotomy.

Developers occupy an uneasy space nearer to licensee than author. Applications are regularly rejected,<sup>204</sup> and as many as one thousand are removed from the system daily.<sup>205</sup> Apple has carte blanche to refuse to distribute apps if it believes doing so is prudent or suspects that the application infringes anyone's rights, adversely affects a network, hardware, or software, or overburdens any service.<sup>206</sup> The developer agreement has restrictions on reverse engineering and creating modified works, like the regular user's agreement, but goes farther still with draconian rules including a prohibition on "public statements" about the license or developers' relationship with Apple.<sup>207</sup>

<sup>&</sup>lt;sup>199</sup> iPad License, 2(a)-(c).

<sup>&</sup>lt;sup>200</sup> See Eliot Van Buskirk, Apple iPad Reaches '1 Million Sold' Twice as Fast as iPhone, EPICENTER (May 3, 2010, 10:14 AM), http://www.wired.com/epicenter/2010/05/apple-ipad-reaches-one-million-sold-twice-as-fast-as-iphone/#ixzz0ygnYdWd3.

<sup>&</sup>lt;sup>201</sup> Applications or "apps" are user-friendly, function-specific programs.

<sup>&</sup>lt;sup>202</sup> See Press Release, Apple, Apple's App Store Downloads Top Three Billion (Jan. 5, 2010), http://www.apple.com/pr/library/2010/01/05appstore.html.

<sup>&</sup>lt;sup>203</sup> Apple earns 30 percent of each sale and 40 percent of in-application advertisement revenue. See David Kravets, Apple v. EFF: The iPhone Jailbreaking Showdown, WIRED THREAT LEVEL, May 2, 2009,

http://www.wired.com/threatlevel/2009/05/apple-v-eff-the-iphone-jailbreakingshowdown/; Daniel Lyons, *Fortress Apple: The Company Needs to Loosen Up*, NEWSWEEK, Apr. 23, 2010, http://www.newsweek.com/id/236890.

<sup>&</sup>lt;sup>204</sup> See Shafer, supra note 82.

<sup>&</sup>lt;sup>205</sup> See Jim Dalrymple, *Reports: 5,000 'Overtly Sexual' iPhone Apps Purged*, CNET (Feb. 22, 2010, 12:55 PM), http://news.cnet.com/8301-13579\_3-10457460-37.html.

<sup>206</sup> iPad License, 8(a), (b), (d), (j), (l).

<sup>&</sup>lt;sup>207</sup> *Id.* at 10.4.

Speech is an iPad touchstone. Political cartoonists' apps such as Pulitzer-prize-winner Mark Fiore's satirical "NewsToons," and Tom Richmond's bobblehead Congressional database—are regularly rejected for "ridiculing public figures."<sup>208</sup> But the voluntary public figures depicted enjoy minimal privacy under U.S. law,<sup>209</sup> and Apple's policy runs counter to the spirits of democracy and the First Amendment.

CEO Steve Jobs has similarly proclaimed Apple's "moral responsibility" to keep pornography off the iPhone and iPad.<sup>210</sup> The vague rules permit salacious apps from Playboy and Sports Illustrated while rejecting classics like a text-only Kama Sutra for "objectionable" content.<sup>211</sup> A cartoon version of James Joyce's *Ulysses*—the 20<sup>th</sup> century masterpiece famously banned for obscenity in 1921—was rejected for depicting a nude swimmer.<sup>212</sup>

<sup>&</sup>lt;sup>208</sup> See Michael Cavna, *Why Does Apple Hate Political Satire? Pulitzer Winner's App Case Stokes Larger Failure*, Apr. 16, 2010, WASH. POST, http://voices.washingtonpost.com/comic-

riffs/2010/04/power\_of\_the\_pulitzer\_apple\_re.html; *see also* iPhone Developer License, 3.3.14 ("Applications may be rejected if they contain content or materials of any kind (text, graphics, images, photographs, sounds, etc.) that in Apple's reasonable judgment may be found objectionable, for example, materials that may be considered obscene, pornographic, or defamatory"); Joel Schectman, *20 Rejected iPhone Apps*, BS. WK., Sept. 7, 2009, http://www.businessweek.com/technology/content/jul2009/tc20090731\_732921. htm (noting that a developer who submitted "Freedom Time", an application featuring a cartoon image of President George H.W. Bush pointing to the amount of time left in his administration, toward the end of his second term, received a rejection letter for Steve Jobs himself: "I think this app will be offensive to roughly half our customers.").

<sup>&</sup>lt;sup>209</sup> See Scott J. Shackelford, *Fragile Merchandise: A Comparative Analysis of the Privacy Rights for Public Figures* 29 (University of Cambridge Working Paper, 2009), *available at* http://ssrn.com/abstract=1396378 ("For voluntary public figures, then, privacy has largely disappeared as a value, and in large part as a fact in U.S. law."); *id.* at 26 (explaining that a voluntary public figure is one "who voluntarily places himself in the public eye, by engaging in public activities, or by assuming a prominent role in institutions or activities having general economic, cultural, social or similar public interest") (citing RESTATEMENT (SECOND) OF TORTS § 652D cmt. e (1977)); *id.* at 45 (noting that even *involuntary* public figures only enjoy "spotty protection at best").

<sup>&</sup>lt;sup>210</sup> See Brian X. Chen, *Want Porn? Buy an Android Phone, Steve Jobs Says*, WIRED GADGET LAB, Apr. 20, 2010, http://www.wired.com/gadgetlab/

<sup>2010/04/</sup>steve-jobs-porn/; Ryan Tate, *Steve Jobs Offers World "Freedom From Porn"*, GAWKER, May 15, 2010, http://gawker.com/#!5539717.

<sup>&</sup>lt;sup>211</sup> See Jim Dalrymple, Apple Rejects iPhone App over Access to Kama Sutra, CNET (May 22, 2009, 7:54 AM), http://news.cnet.com/8301-13579\_3-10247565-37.html (explaining that the book also happens to be freely-available on the iPad through the Kindle application, Google, and numerous other sources).

<sup>&</sup>lt;sup>212</sup> See Alison Flood, Comic Book Publisher Wins Battle Over Nudity in iPad Ulysses, THE GUARDIAN, June 16, 2010, http://www.guardian.co.uk/books/

While it has no bearing on the process by which Apple approves its apps, the rationale for *Fox Television Stations Inc. v. F.C.C.*<sup>213</sup>, a recent Second Circuit decision quashing the FCC's indecency policy, is illuminating. The court declared the policy overly vague, and attributed a chilling effect much more extensive than the fleeting expletives at issue to it. The FCC's refusal to provide "reliable guidance" for their standards was deemed to chill "a vast amount of protected speech dealing with some of the most important and universal themes in art and literature. Sex and the magnetic power of sexual attraction are surely among the most predominant themes in the study of humanity since the Trojan War."<sup>214</sup>

Other rejections raise competition concerns. Take Google's "Latitude;" unlike services like Foursquare, which require that users "check-in" to locations as they arrive, it automatically tracks and displays users' real-time geolocational information. Apple claimed to refuse the app for consumers' benefit, so they do not confuse it with the already-enabled "Google Maps," but the latter simply displays static maps.<sup>215</sup>

Camera+, a photo-taking app, enabled users to snap shots by pressing the device's volume button rather than the screen, and thus avoid shaking the device. Apple disabled the feature, ostensibly for user protection, though users appear to have understood and wanted the feature, as downloads skyrocketed once it was enabled.<sup>216</sup> Google Voice would have allowed users to make long-distance calls without involving Apple's carrier, AT&T, and potentially made them more inclined to switch providers by virtue of an accompanying independent phone number; it was rejected for offering "duplicate functionality."

In its LoC Rulemaking Exemption response, Apple claimed that opening the iPad to third party applications would violate the integrity of its ecosystem and jeopardize its network.<sup>217</sup> Its vague

<sup>2010/</sup>jun/16/ulysses-graphic-novel-apple-ipad; Kevin Kelleher, *Joyce's Ulysses Banned Again—by Apple*, THE BIG MONEY (June 9, 2010 12:09 AM), http://www.thebigmoney.com/blogs/app-economy/2010/06/09/joyce-s-ulysses-banned-again-apple-not-government?page=full.

<sup>&</sup>lt;sup>213</sup> Fox Television Stations Inc. v. FCC, 613 F.3d 317 (2d Cir. 2010).

<sup>&</sup>lt;sup>214</sup> *Id.* at 335.

<sup>&</sup>lt;sup>215</sup> Schectman, *supra* note 208.

<sup>&</sup>lt;sup>216</sup> See Aulia Masna, Camera+ Pulled from App Store over Hidden Feature, MACWORLD (Aug. 12, 2010, 1:05 PM), http://www.macworld.com/article/ 153337/2010/08/cameraplus\_pulled.html.

<sup>&</sup>lt;sup>217</sup> Responsive Comment of Apple, *supra* note 2, at 24-25 ("It should be clear that the iPhone ecosystem Apple has built is good for developers, good for iPhone users, good for Apple, and good for the policies underlying the copyright laws to encourage the creation of works of authorship. That ecosystem depends upon the 'chain of trust' implemented in the iPhone through its TPMs. The

arguments recall AT&T's unconvincing *Carterfone* claim of needing "absolute control" over the phone system.<sup>218</sup> The iPad does not utilize the phone system, and the LoC rightly, as I discuss below, rejected them.

Privacy concerns are also exacerbated in the DMCAlicensing context. Apple's license allows both it and its "subsidiaries and agents" to collect and use "non-personal data" about users' iPads, connected computers, systems, and peripherals.<sup>219</sup> Mention is not made of how information, including location data, is to be stored and shared.<sup>220</sup> While particular fragments of collected data may technically be anonymous, such large specific data sets can be used to identify individuals.<sup>221</sup>

A corollary issue is security research. DRM only came to the public consciousness in the wake of a researcher's revelation that Sony had been selling CDs that installed malicious rootkit spyware on listeners' PCs. A different graduate student had discovered the feature weeks earlier, but decided not to publicize his findings for fear of being sued.<sup>222</sup> While the LoC subsequently made an exception for such research, it limited it to CDs (although DVDs had been around for over a decade). The latest round of exceptions restricted it further still, to video games playable on PCs.

More recently, a group of hackers publicized a vulnerability related to a security hole on AT&T's website. iPad users' email addresses were exposed, as were SIM card identifiers tied to phone company subscriber databases, which could lead to the gleaning of their personal information and even real time locations.<sup>223</sup> Compromised accounts included ones belonging to

proposed exemption would destroy that chain of trust and threaten many of the benefits the ecosystem affords, and should therefore be rejected.").

<sup>&</sup>lt;sup>218</sup> *In re* Use of the Carterfone Device in Message Toll Tel. Serv., 13 F.C.C. 2d 420, 424, *reconsideration denied*, 14 F.C.C. 2d 571 (1968).

<sup>&</sup>lt;sup>219</sup> iPad License, 4(a).

<sup>&</sup>lt;sup>220</sup> *Id.* at 4(b).

<sup>&</sup>lt;sup>221</sup> See Carr, supra note 18, at 206 (claiming "anonymization provides little real protection in the face of sophisticated data-mining techniques"); Arvind Narayanan & Vitaly Shmatikov, Robust De-anonymization of Large Sparse Datasets, The University of Texas at Austin 1 (2008), http://www.cs.utexas.edu/~shmat/shmat\_oak08netflix.pdf ("Even if identifiers such as names ... have been removed, [one] can use background knowledge and cross-correlation with other databases to re-identify individual data records.").

<sup>&</sup>lt;sup>222</sup> See Deidre K. Mulligan & Aaron K. Perzanowski, *The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident*, 22 BERKELEY TECH. L.J. 1157 (2007).

<sup>&</sup>lt;sup>223</sup> See Spencer E. Ante, *Hacker Worries Persist: Obscure Piece of Data Puts iPad Users at Risk, Experts Warn*, WALL ST. J., June 28, 2010, http://online.wsj.com/article/SB100014240527487046385045753187640749858 50.html.

top military personnel, government officials, and private-sector executives.<sup>224</sup> The hackers argued their service was in the public interest, as they ensured the hole was closed before publicizing it, empowering users to take protective measures such as changing their email addresses, and making iPads safer.<sup>225</sup>

2. iPad Generativity

The traveler, then, was working at something; the tourist was a pleasure-seeker. The traveler was active; he went strenuously in search of people, of adventure, of experience. The tourist is passive; he expects interesting things to happen to him. He goes "sight-seeing" . . . He expects everything to be done to him and for him.

*Thus foreign travel ceased to be an activity—an experience, an undertaking—and became instead a commodity.*<sup>226</sup>

Daniel Boorstin, who served as Librarian of Congress from 1975-87, considered the book humankind's foremost technical advance as it shelters readers "from the flood of contemporaneous mathematicized homogeneity."<sup>227</sup> He would surely have disapproved of the Web tourism inherent in the confines of the iPad's walled garden.<sup>228</sup> Likewise, President Obama, not known as an enemy of DRM,<sup>229</sup> has declared that when using the iPad,

<sup>&</sup>lt;sup>224</sup> See Miguel Helft, *AT&T Said to Expose iPad Users' Addresses*, N.Y. TIMES, June 10, 2010, at B2, *available at* http://www.nytimes.com/2010/06/10/ technology/10apple.html?ref=technology.

<sup>&</sup>lt;sup>225</sup> See Ryan Tate, FBI Investigating iPad Breach (Update), GAWKER, June 10, 2010, http://gawker.com/5560542/fbi-investigating-ipad-breach; On Disclosure Ethics, Goatse Security (June 10, 2010), http://security.goatse.fr/on-disclosure-ethics.

<sup>&</sup>lt;sup>226</sup> DANIEL J. BOORSTIN, THE IMAGE: A GUIDE TO PSEUDO-EVENTS IN AMERICA 85 (1961) (lamenting the way by which modern tourism cheapened journeys, turning them into "pseudo-events").

 <sup>&</sup>lt;sup>227</sup> See Robert D. McFadden, *Daniel Boorstin, 89, Former Librarian of Congress Who Won Pulitzer in History, Dies*, N.Y. TIMES, Mar. 1, 2004, http://www.nytimes.com/2004/03/01/us/daniel-boorstin-89-former-librarian-of-congress-who-won-pulitzer-in-history-dies.html?pagewanted=1.
 <sup>228</sup> Id. (noting that Boorstin famously requested the library's grand bronze doors

<sup>&</sup>lt;sup>228</sup> *Id.* (noting that Boorstin famously requested the library's grand bronze doors be kept open; told this would cause a draft he responded, "great—that's just what we need"). Walled gardens are networks or services that impede users' ability to access or use outside content and programs. *See, e.g.*, Walled Garden Definition, PC MAG, http://www.pcmag.com/encyclopedia\_term/

<sup>0,2542,</sup>t=walled+garden&i=54187,00.asp (last visited Mar. 29, 2011).

<sup>&</sup>lt;sup>229</sup> See, e.g., Barack Obama, President, U.S., Remarks by the President at the Export-Import Bank's Annual Conference (Mar. 11, 2010),

"information becomes a distraction, a diversion, a form of entertainment, rather than a tool of empowerment."<sup>230</sup>

In *The Future of the Internet—and How to Stop It*, Jonathan Zittrain foresaw that generative computers and their networks have had their day in the sun. Instead, he predicted, "sterile *appliances* tethered to a network of control" would increasingly appeal to consumers by sleekly encasing existent innovation.<sup>231</sup> Adversely though, such packaging restricts user contributions and outside innovation.

The iPad does not offer an array of features that have become standard on laptop computers including a camera, firewire, usb ports, and Adobe's Flash software. Other functions are limited, as no alternate browser is provided and multi-tasking is curtailed. While some critics accept these limitations in light of the accompanying ease of use, others have decried the closed nature of the system.<sup>232</sup> A new category of device, the iPad is "not nearly as

grabbing what's in the window"). <sup>230</sup> See Liz Goodwin, *Tech-Savvy Obama Tells Grads Apple iPads Hurt Democracy*, YAHOO! NEWS (May 10, 2010, 1:19 PM), http://news.yahoo.com/ s/ynews/20100510/pl\_ynews/ynews\_pl1976 (reporting on an address to the graduating class at Hampton University in Virginia on May 9, 2010).

http://www.whitehouse.gov/the-press-office/remarks-president-export-importbanks-annual-conference (pledging to "aggressively protect" intellectual property and implement the Anti-Counterfeiting Trade Agreement); Doug Palmer, *U.S. to Target Foreign Websites in Anti-Piracy Push*, REUTERS (June 22, 2010, 3:49 PM), http://www.reuters.com/article/idUSTRE65L3YN20100622 (demonstrating that Vice President Biden has been less subtle, recently calling unauthorized downloading "smash and grab, no different than a guy walking down Fifth Avenue and smashing the window at Tiffany's and reaching in and grabbing what's in the window").

<sup>&</sup>lt;sup>231</sup> JONATHAN ZITTRAIN, THE FUTURE OF THE INTERNET—AND HOW TO STOP IT 3 (2008). <sup>232</sup> See, e.g. Farhad Manjoo I Love the iPad: Apple's New Tablet is the

<sup>&</sup>lt;sup>232</sup> See, e.g., Farhad Manjoo, I Love the iPad: Apple's New Tablet is the Computer I've Always Wanted, SLATE, Jan. 27. 2010, http://www.slate.com/ id/2242786 (complaining that "[i]n portrait mode, the on-screen keyboard is too small for typing quickly with two hands. You get a bigger keyboard when you rotate the iPad sideways to landscape mode, but then you've got another problem—it's too wide to hold it and type at the same time"); Melissa J. Perenson, Apple iPad Delivers on Entertainment, but Lacks Productivity Punch, PCWORLD, Apr. 3, 2010, http://www.pcworld.com/article/

<sup>193422/</sup>apple\_ipad\_delivers\_on\_entertainment\_but\_lacks\_productivity\_punch.h tml; Felix Salmon, *Magazines on the iPad*, REUTERS (Mar. 15, 2010, 5:34 PM), http://blogs.reuters.com/felix-salmon/2010/03/15/magazines-on-the-ipad/

<sup>(</sup>describing the iPad ethos as "a closed system with lots of control — the exact opposite, really, of the internet, which is an open system where it's very hard indeed to control the user experience"); Omar Wasow, *The Techies Are Wrong About the iPad: Steve Jobs is Right Again. It's a Computer for the Rest of Us*, THE ROOT (Apr. 1, 2010, 6:10 AM), http://www.theroot.com/views/techies-are-wrong-about-ipad?page=0,0 ("iPad offers a convenient way to consume and enjoy digital media without being tethered to a computer all day."); Tim Wu, *The Apple Two: The iPad is Steve Jobs' Final Victory over the Company's Co-Founder Steve Wozniak*, SLATE, Apr. 6, 2010, http://www.slate.com/id/

good for creating stuff" as a PC but "infinitely more convenient for consuming it."<sup>233</sup>

Even purchased media is restricted on the iPad. Consider ebooks, sales of which have doubled this year, overtaking hardcover sales on Amazon.<sup>234</sup> Whereas Amazon's Kindle editions may be annotated, purchased, read on, and synced to numerous devices, ranging from laptops to BlackBerries, Apple iBooks may only be purchased and read on the iPad, and notation is disabled.<sup>235</sup>

## C. Accommodating the Generative Consumer

#### 1. Recognizing Generativity

Paradoxically, restrictive DRM schemes are proliferating as users are more inclined to digitally produce than ever before. The DMCA and intellectual property law generally are based on the premise that two discrete groups must be balanced: creative authors (or inventors) and receptive audience members (or users).<sup>236</sup> These historically ill-defined categories are now breaking down, and the regulatory regime must be revamped.<sup>237</sup>

The emergent class I call the "generative consumer" is increasingly visible online, but it has been not been adequately recognized. Nina Elkin-Koren has addressed some of the issues, but the "consumer-participants" she seeks to accommodate only make creative digital uses for their "personal benefit alone." Generative consumers, on the other hand, strive, not for selfish

<sup>2249872/</sup>pagenum/all/#p2.

 <sup>&</sup>lt;sup>233</sup> David Pogue, *Looking at the iPad From Two Angles*, N.Y. TIMES, Apr. 1, 2010, at A1, *available at* http://www.nytimes.com/2010/04/01/technology/ personaltech/01pogue.html.

personaltech/01pogue.html.<sup>234</sup> See Association of AMERICAN PUBLISHERS, AAP REPORTS PUBLISHER BOOK SALES FOR AUGUST (2010); Claire Cain Miller, *E-Books Top Hardcovers* at Amazon, N.Y. TIMES, July 20, 2010, at B1, available at http://www.nytimes.com/2010/07/20/technology/20kindle.html.

<sup>&</sup>lt;sup>235</sup> See Rafe Needleman, *If You Can, Buy Your iPad Books from Amazon*, CNET (Apr. 5, 2010, 11:39 AM), http://www.cnet.com/8301-31361\_1-20001763-254.html.

<sup>&</sup>lt;sup>236</sup> See, e.g., David Nimmer et al., *The Metamorphosis of Contract into Expand*,
87 CAL. L. REV. 17 (1999).

<sup>&</sup>lt;sup>237</sup> See Okediji, supra note 33, at 2384 (finding that the "presumptive cloak woven from notions of an authorial process in which literary works emerge solely from the mind of a single person called an 'author,' rather than a 'user,' has hung heavily on the copyright frame and powerfully shaped considerations of copyright's allocation of proprietary rights" but is now "the subject of increasing scholarly criticism"); see also Peter Jaszi, On the Author Effect: Contemporary Copyright and Collective Creativity, 10 CARDOZO ARTS & ENT. L. J. 293 (1992); Peter Jaszi, Toward a Theory of Copyright: The Metamorphoses of "Authorship", 1991 DUKE L.J. 455 (1991).

intake, but for personalized dissemination of content, and even forms and platforms. Let me explain.

My definition of generativity is two-pronged, including both the propensity to: (i) reproduce, modify or disseminate others' works; and (ii) create one's own original works.<sup>238</sup> Examples of the former include retweeting—posting an original author's tweet alongside his or her user name<sup>239</sup> —or posting a *New York Times* article on one's Facebook profile. Instances of the latter include a singer-songwriter posting a performance on YouTube. Of course, many generative contributions fall somewhere in between, such as a fan subconsciously repeating a musician's tweet without attribution, posting footage of a concert, or lip-syncing the latest hit.

Although it did not adequately prepare a legal platform for the generative consumer, the White Paper did foresee its arrival. It predicted that the Web would enable individuals who had predominantly been consumers to "become authors and providers [thanks to] easier, more sophisticated communication and publishing tools."<sup>240</sup> Are brief written statements like 140character tweets genuine authorial products? Certainly. In fact, new forms of concise expression can spur innovation. Nearly a century ago, Ernest Hemingway wrote six-word story,<sup>241</sup> Marcel Duchamp signed a urinal,<sup>242</sup> and Kazimir Malevich painted a black square against a white background.<sup>243</sup> These works spawned the flash fiction, ready-made, and Suprematism genres, respectively.

Numerous inventive forms of generativity are entirely dependent on the Web. Twitter's significance is evidenced by the Library of Congress's decision to archive all of the public tweets

<sup>&</sup>lt;sup>238</sup> See Entry for "generativity", OXFORD ENGLISH DICTIONARY (3d ed. 2010), http://www.oed.com:80/Entry/269537 (defining generativity as the ability to be either: (i) "procreative, reproductive" or (ii) "productive, creative; originating, causative").

<sup>&</sup>lt;sup>239</sup> See, e.g., Meeyoung Cha et al., Measuring User Influence in Twitter: The Million Follower Fallacy (2010), http://an.kaist.ac.kr/~mycha/docs/

icwsm2010\_cha.pdf (finding that retweeting may be a better metric of influence than number of followers).

<sup>&</sup>lt;sup>240</sup> WHITE PAPER, *supra* note 21, at 9.

<sup>&</sup>lt;sup>241</sup> Hemingway is said to have won a \$10 bet he made in the early twenties by composing, "For sale: baby shoes, never worn." *See* Luisa Valenzuela, *Introduction: A Smuggler's Sack, in* SUDDEN FICTION LATINO: SHORT-SHORT STORIES FROM THE UNITED STATES AND LATIN AMERICA 19-20 (Robert Shapard, James Thomas & Ray Gonzalez, eds., 2010).

<sup>&</sup>lt;sup>242</sup> See Tate Collection, Fountain by Marcel Duchamp, http://www.tate.org.uk/servlet/ViewWork?workid=26850 (last visited Mar. 30, 2011).

<sup>&</sup>lt;sup>243</sup> See The State Hermitage Museum: Exhibitions, http://www.hermitagemuseum.org/html\_En/04/b2003/hm4\_1\_30.html (last visited Mar. 30, 2011).

since the microblogging site's March 2006 inception,<sup>244</sup> and around sixty five million new tweets are posted daily.<sup>245</sup> Wikipedia, a non-profit collaborative encyclopedia in keeping with CERN's vision, is the world's fifth most popular website.<sup>246</sup> Working in over 270 languages, volunteers have contributed to and edited more than 17,000,000 articles as of early 2011, and the site continues to grow.<sup>247</sup>

When *Time* named its person of the year "You," in 2006, it disavowed "solitary geniuses" in the Thomas Edison and Steve Jobs vein, exalting the generative consumer instead, telling "a story about community and collaboration." YouTube and Wikipedia, it declared, are emblematic of "the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes."<sup>248</sup>

To be fair, no such collaborative space is an egalitarian utopia. On Twitter, the vast majority of users pen fewer than ten lifetime posts, and the median number of lifetime tweets is one.<sup>249</sup> Ninety percent of the content is created by the top ten percent of Twitter users and the top fifteen percent of Wikipedia users.<sup>250</sup> Still, growing numbers of global Web users are digitally generating.<sup>251</sup>

<sup>&</sup>lt;sup>244</sup> See Monica Hesse, *Twitter Archive at Library of Congress Could Help Redefine History's Scope*, WASH. POST, May 6, 2010, http://www.washingtonpost.com/wp-dyn/content/article/2010/05/05/AR201005055309.html.

<sup>&</sup>lt;sup>245</sup> Heidi Blake, *Twitter Hits Two Billion Tweets a Month*, TELEGRAPH (London), June 9 2010, http://www.telegraph.co.uk/technology/twitter/ 7812501/Twitter-hits-two-billion-tweets-a-month.html.
<sup>246</sup> See, e.g., Jonathan Fildes, *Jimmy Wales says Wikipedia Too Complicated For*

<sup>&</sup>lt;sup>246</sup> See, e.g., Jonathan Fildes, *Jimmy Wales says Wikipedia Too Complicated For Many*, BBC News (Jan. 13 2011, 7:05 PM), http://www.bbc.co.uk/ news/technology-12171977.

<sup>&</sup>lt;sup>247</sup> Wikipedia: About, http://en.wikipedia.org/wiki/Wikipedia:About (last visited Mar. 29, 2011). The Wikipedia About Page was last updated on March 12, 2011.

<sup>&</sup>lt;sup>248</sup> Lev Grossman, *Time's Person of the Year: You*, TIME, Dec. 13, 2006, http://www.time.com/time/magazine/article/0,9171,1569514,00.html#ixzz0w20 zkZKf.

<sup>&</sup>lt;sup>249</sup> Bill Heil and Mikolaj Piskorski, New Twitter Research: Men Follow Men and Nobody Tweets, HARV. BUS. REV. BLOG (June 1, 2009, 2:15 PM), http://blogs.hbr.org/cs/2009/06/new\_twitter\_research\_men\_follo.html. 250 Id.

<sup>&</sup>lt;sup>251</sup> See INTERNATIONAL TELECOMMUNICATIONS UNION, THE WORLD IN 2010: ICT FACTS AND FIGURES (2010), available at http://www.itu.int/ITU-D/ict/material/FactsFigures2010.pdf (noting that the number of Internet users doubled to two billion from 2005 to 2010, and that adoption rates are increasing in the global south).

Digital generativity carries particularly serious democratic ramifications in the news arena.<sup>252</sup> A recent study found that technology has transformed the traditional news producer-consumer relationship, as consumers have been empowered to engage as active participants.<sup>253</sup> Most people access the Web wirelessly—on devices like the iPad—and such users are 36% more likely than wired ones to "participate" online, by creating, editing, commenting on, or disseminating news items.<sup>254</sup>

The very meaning of reporting has shifted, as new media websites have gained organization and clout, traditional newspapers have shifted in the opposite direction,<sup>255</sup> and politicians increasingly rely on social-networking tools.<sup>256</sup> Beyond news, all forms of media no longer depend on central hubs, as more chaotic distribution results from countless "[b]logs, Web sites and video aggregators [that] serve as cultural curators."<sup>257</sup>

If anything, the fuzziness of authorial borders enhances Web users' pervasive urge to generate. A District Judge presiding over a custody case recently saw fit to update his Facebook status

<sup>&</sup>lt;sup>252</sup> WHITE PAPER, *supra* note 21, at 9 (forseeing the Internet as "dramatically increas[ing] the opportunity for democratic participation in government").

<sup>&</sup>lt;sup>253</sup> KRISTEN PURCELL ET AL., PEW RESEARCH CENTER, PEW INTERNET & AMERICAN LIFE PROJECT, UNDERSTANDING THE PARTICIPATORY NEWS CONSUMER: HOW INTERNET AND CELL PHONE USERS HAVE TURNED NEWS INTO A SOCIAL EXPERIENCE 8 (2010), http://www.pewinternet.org/~/media//Files/ Reports/2010/PIP\_Understanding\_the\_Participatory\_News\_Consumer.pdf. <sup>254</sup> Id. at 30, 44.

<sup>&</sup>lt;sup>255</sup> See, e.g., Raffi Khatchadourian, *No Secrets: Julian Assange's Mission for Total Transparency*, THE NEW YORKER, June 7, 2010, http://www.newyorker.com/reporting/2010/06/07/100607fa\_fact\_khatchadouria n; Rebecca Mead, *Rage Machine: Andrew Breitbart's Empire of Bluster*, THE NEW YORKER, May 24, 2010, http://www.newyorker.com/reporting/2010/

<sup>05/24/100524</sup>fa\_fact\_mead (describing the power of Internet news sites run by Wikileaks and Andrew Breitbart, respectively); James Rainey, *An E-Model for Journalism in Seattle*, L.A. TIMES, Mar. 20, 2010, http://www.latimes.com/entertainment/news/la-et-onthemedia20-

<sup>2010</sup>mar20,0,3328672.column (describing how the 146-year-old *Seattle Post-Intelligencer*, which revamped itself as an online-only publication, now involves amateur citizen journalists and many hyper-local blogs).

<sup>&</sup>lt;sup>256</sup> See Jake Coyle, In Social Media Election, The GOP Capitalizes, MSNBC.COM (Nov. 3, 2010, 6:46 PM), http://www.msnbc.msn.com/id/

<sup>39996605/</sup>ns/technology\_and\_science-tech\_and\_gadgets/ (describing how a huge number of political campaigns in the 2010 election used social media and Internet resources).

<sup>&</sup>lt;sup>257</sup> Damian Kulash, Jr., Op-Ed., *WhoseTube?*, N.Y. TIMES, Feb. 19, 2010, http://www.nytimes.com/2010/02/20/opinion/20kulash.html. Kulash, the frontman of OK Go, whose videos regularly go viral, criticizes his label's decision to disable embedding of its bands' videos, explaining that the label misunderstands "how the Internet works." *Id*.

to declare that he had to choose between "two good parents."<sup>258</sup> Recognizing a need to end its ban on service members' use of social networking services, the military, in one fell swoop, also condoned Wikis, blogs, mash-ups and, "similar collaborative, information sharing-driven Internet-based capabilities where users are encouraged to add and/or generate content."<sup>259</sup>

There are now tens of thousands of troop-generated videos online, and a YouTube search for "US" and "soldiers" highlights the creativity at their core. <sup>260</sup> Three of the top five are whimsical: a montage of soldiers dancing, a humorous take on laundry day, and a choreographed performance of Lady Gaga's "Telephone."<sup>261</sup> The latter features eight soldiers, replete with elaborate props and costumes. On assignment in Afghanistan, the creators appended an apologetic caveat: "Right now this is the temporary version, we have more scenes to cut, and edit, however with guys always on mission it is harder to film than you think."<sup>262</sup> Production values notwithstanding, the video garnered five million views in just three weeks.

The White Paper recognized that loci such as YouTube would do more than just broaden cultural horizons by also "provid[ing] opportunities for the development of new markets for cultural products."<sup>263</sup> While rightsholders were once quick to take down infringing content and the site's system more readily allows them to do so, an increasing number now opt to leave it up accompanied by ads. Two billion such videos are now viewed weekly, a 50% increase from the previous year, resulting in the site's expectant profitability after years in the red.<sup>264</sup>

Justin Bieber is living proof that allowing generativity to translate into a "corresponding economic success require[s] users' ability to access and fully engage creative content across a

<sup>&</sup>lt;sup>258</sup> Allison Petty, Social Networking Web Sites Raise Ethical Issues For Judges, Lawyers, CHI. DAILY L. BULL. (Feb. 3, 2010), http://www.allbusiness.com/ legal/trial-procedure-judges/13862837-1.html (explaining that this was discovered after counsel involved, the judge's Facebook "friend", responded by penning his own status update: "I have a wise Judge." The judge was reprimanded).
<sup>259</sup> Memorandum, Responsible and Effective Use of Internet-Based Capabilities

<sup>&</sup>lt;sup>259</sup> Memorandum, Responsible and Effective Use of Internet-Based Capabilities (Feb. 25, 2010), http://www.defense.gov/NEWS/DTM%2009-026.pdf.

<sup>&</sup>lt;sup>260</sup> See Neal Ungerleider, War Is Gaga: A Brief History of Soldiers Posting Ridiculous Dance Routines on the Internet, SLATE, Apr. 30, 2010, http://www.slate.com/id/2252545/.

<sup>&</sup>lt;sup>261</sup>YouTube search conducted by author on Nov. 16, 2010.

<sup>&</sup>lt;sup>262</sup> Malibumelcher, Telephone Remake, YouTube, http://www.youtube.com/ watch?v=haHXgFU7qNI (last visited Apr. 23, 2010).

<sup>&</sup>lt;sup>263</sup> WHITE PAPER, *supra* note 21, at 8.

<sup>&</sup>lt;sup>264</sup> Claire Cain Miller, *YouTube Ads Turn Videos Into Revenue*, N.Y. TIMES, Sept. 3, 2010, at B1, *available at* http://www.nytimes.com/2010/09/03/ technology/03youtube.html.

spectrum of formats and devices."<sup>265</sup> As a twelve-year-old in a small Ontario town, he placed second in a local YMCA singing competition thanks to his Chris Brown and Usher covers. His mother uploaded videos of the performance onto YouTube for the benefit of relatives who had missed it.

Scooter Braun, an entrepreneur eager to start his own record label and management company, was searching for a different artist affiliated with Usher when he chanced upon them. No name or contact information accompanied the footage, but the would-be impresario zealously searched online for other videos, photos, and recordings involving the contest venue, a theatre outside which Bieber busked, and the school he attended, finally finding and signing him.<sup>266</sup>

Today, Bieber's albums break sales records, his videos are the most watched online,<sup>267</sup> and associates like his mother and friends have strong online presences (Braun was even arrested for taking too long to tweet).<sup>268</sup> Users have been remarkably generative with regard to all things Bieber, from covers to parodies. Resultantly, there are more Google hits for "Justin Bieber" than all of the following *combined*: "The Beatles," "Adolf Hitler," "financial crisis," "global warming," and the five most popular prospective 2012 GOP presidential candidates.<sup>269</sup>

<sup>&</sup>lt;sup>265</sup> Okediji, *supra* note 33, at 2380.

<sup>&</sup>lt;sup>266</sup> Platinum-Selling Pop Sensation Justin Bieber Scores #1 Album in the US with My World 2.0, Universal Music Group (Apr. 5, 2010), http://www.universalmusic.com/artist-news/platinum-selling-pop-sensation-justin-bieber-scores-1-album-in-the-us-with-my-world-20.

<sup>&</sup>lt;sup>267</sup> William Wei, *15 Ways Justin Bieber is Taking over the World*, BUS. INSIDER (May 14 2010, 4:21 PM), http://www.businessinsider.com/15-reasons-you-should-know-who-justin-bieber-is-2010-5#youtube-and-web-video-his-music-videos-are-unstoppable-viral-forces-3#ixzz0oCs264N4.

<sup>&</sup>lt;sup>268</sup> Megan K. Scott, *Justin Bieber's Manager Arrested in Mall Frenzy Case*, BILLBOARD, Mar. 24, 2010, http://www.billboard.com/news/justin-bieber-s-manager-arrested-in-mall-1004077906.story#/news/justin-bieber-s-manager-

arrested-in-mall-1004077906.story. Scott describes how fans got unruly when Bieber failed to show up for an appearance at a mall, and refused to disperse, citing Bieber's tweet—"On my way to Roosevelt Field Mall in Long Island, NY to sign and meet fans! I'm pumped. See u there."—as evidence that he was en route. The police asked Braun to tweet that the artist would not be coming, but it took him an hour and a half to do so. Once he tweeted, fans dispersed within minutes, but by then five had been hospitalized. Charges of reckless endangerment and criminal nuisance were laid for delaying the tweet.

<sup>&</sup>lt;sup>269</sup> See Jim Rutenberg, *Poll Finds Lack of Passion for Republican Candidates*, N.Y. TIMES, Apr. 22, 2011, at A16, http://www.nytimes.com/ 2011/04/22/us/politics/22republicans.html (noting that the top GOP candidates are Mike Huckabee, Sarah Palin, Newt Gingrich, Mitt Rmoney, and Donald Trump). A Google search for "Justin Bieber" yields 232,000,000 hits; meanwhile, a Google search for Mike Huckabee, Sarah Palin, Newt Gingrich, Mitt Romney, Donald Trump, The Beatles, Adolf Hitler, Financial Crisis, and

## 2. Blips in the Night?

The LoC embraced the generative consumer with its latest rulemaking exemptions for jailbreaking and CSS circumvention.<sup>270</sup> The former allows consumers to circumvent smartphone TPMs that prevent third-party software applications from being installed, for the sake of interoperability. The LoC focused its analysis on the modification of Apple's operating system on devices like the iPhone and iPad. Evaluating Apple's user agreements, the LoC found that while the contracts Apple identified as a "license" allowed it to retain ownership of the operating systems, it also granted users ownership of the purchased devices. Since program copies are "fixed in hardware of the device, it is unclear what ownership status" they merit.<sup>271</sup>

Finding the state of the law at the license-ownership juncture in "a state of flux,"<sup>272</sup> the LoC still chose to proceed with a fair use analysis, finding all four factors coming down on the side of consumers. It concluded that providing an exception was sufficiently compelling and accordant with the legislative interest in interoperability. Under the first factor, the "purpose and character" of the operating system modification were found to be private, noncommercial, and conducted solely for the sake of increasing the functionality of the modifier's device.<sup>273</sup>

Second, the nature of the copyrighted work was found to favor modification, as allowing operating systems to interoperate with third-party programs was deemed both customary and noninfringing. Were Apple seeking to deploy a restrictive business practice by limiting the programs consumers could run, the LoC sternly declared, it would have "no basis for copyright law to assist" it.<sup>274</sup>

Turning to the third factor, the amount and substantiality taken, jailbreaking was shown to involve a trivial amount, "fewer than 50 bytes of code out of more than 8 million bytes, or approximately 1/160,000 of the copyrighted work as a whole."<sup>275</sup>

Global Warming combined total 226,620,000 (Google searches conducted by author on Apr. 24, 2011).

<sup>&</sup>lt;sup>270</sup> See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,825, 43,827-33 (July 27, 2010) (to be codified at C.F.R. pt. 201) (outlining the exemptions granted, including for computer programs affecting cell phones' ability to connect to authorized networks, good faith security research on video games, and malfunctioning or obsolete dongle-protected computer programs).

<sup>&</sup>lt;sup>271</sup> *Id.* at 43,829. <sup>272</sup> *Id*.

<sup>&</sup>lt;sup>273</sup> Id.

<sup>&</sup>lt;sup>274</sup> *Id*.

<sup>&</sup>lt;sup>275</sup> *Id.* at 43,830.

Lastly, looking at the fourth factor, "the effect of the use upon the potential market for or value of the copyrighted work," the LoC determined that lawful jailbreaking would inevitably *increase* overall device sales, since smartphone purchases would be a prerequisite for accessing either App Store apps or third-party ones.<sup>276</sup>

Some critics have encouraged Apple to turn its walled garden into a "rainforest" by permitting customers and developers to utilize a space beyond its own App Store, reasoning that the vast majority would continue to use it by virtue of its increased safety and ease.<sup>277</sup> The company seems reluctant to do so, and has threatened to void the warranties of jailbroken devices.<sup>278</sup> It might also choose to go on the offensive, by either suing jailbreakers under contract—though, as the Registrar notes, the validity of the relevant licensing restrictions is in doubt—or remotely rendering jailbroken devices malfunctioning "bricks" (though such a course of action would be a public relations disaster).<sup>279</sup>

The rationale underlying the CSS exemption is even more radical. Consumers have been granted permission to circumvent DVD TPMs for the sake of incorporating "short portions of motion pictures into new works for the purpose of criticism or comment" in educational uses, documentary films and noncommercial videos.<sup>280</sup> The educational provision expands its predecessor, which only applied to film studies professors. Any college or university instructor or student may now make use of the exemption, and the noncommercial subsection applies to practically all of the generative consumer production I describe above.

Some uses were found to require high-quality portions of movies, and the LoC stipulated non-circumventing alternatives should be utilized when sufficient. Decisively though, consumers themselves have been empowered to decide when heightened

<sup>&</sup>lt;sup>276</sup>*Id*.

<sup>&</sup>lt;sup>277</sup> See Steven Johnson, *Rethinking a Gospel of the Web*, N.Y. TIMES, Apr. 11, 2010, at BU1, *available at* http://www.nytimes.com/2010/04/11/ technology/internet/11every.html? r=1.

 <sup>&</sup>lt;sup>278</sup> Ben Patterson, Apple: Jailbreaking an iPhone Can (Still) Violate Your Warranty, YAHOO NEWS (July 27, 2010, 1:36 PM), http://news.yahoo.com/s/ytech\_gadg/20100727/tc\_ytech\_gadg/ytech\_gadg\_tc3244.
 <sup>279</sup> See, e.g., Steven Musil, Apple Applies for Patent to Kill Jailbroken Devices,

<sup>&</sup>lt;sup>279</sup> See, e.g., Steven Musil, *Apple Applies for Patent to Kill Jailbroken Devices*, CNET NEWS BLOG (Aug. 22, 2010, 10:46 AM), http://news.cnet.com/8301-13579\_3-20014356-37.html#ixzz15T0KuZLH.

<sup>&</sup>lt;sup>280</sup> Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,825, 43,827 (July 27, 2010) (to be codified at C.F.R. pt. 201).

quality is necessary to reach *their goal.*<sup>281</sup> This is antithetical to how courts have traditionally approached the DMCA, as *321 Studios, Corley,* and *Elcom* all stressed that TPMs may not be circumvented regardless of how inexact or inadaptable users find they make the underlying works.<sup>282</sup>

The LoC's approach harkens back to *Sony* principles of substantially noninfringing uses, and the Registrar of Copyrights went even further with her recommendations. While most of the works produced under the noncommercial exemption would likely be infringing, "more than a trivial portion" would not.<sup>283</sup> This, she declared, creates a "cognizable basis" for the exemption under judicial precedent.<sup>284</sup>

Are the exemptions pro-consumer outliers in the *Lexmark* vein, destined to be hollowed out through judicial interpretation? It is too soon to tell, but *MGE* v. *GE*, a Fifth Circuit decision that came down just a week prior, suggests they may not be. MGE manufactured uninterruptable power sources and protected them with "dongles." These TPMs, external pieces of hardware connected to laptops' serial ports, required proper programming in order to activate MGE's software.

Hackers devised a program bypassing the dongles, and while defendant GE/PMI admitted to having used it, the court found no illicit circumvention. "Merely bypassing" a TPM that restricts users from either accessing or using a work, the court declared, "is insufficient to trigger" the anti-circumvention provision. The DMCA, it found, only prohibits access that "violate[s] or impinge[s] on the protections that the Copyright Act otherwise affords copyright owners."<sup>285</sup>

The decision is the new pro-consumer high-water mark, as it essentially affirms a fair use defense for non-infringing circumvention. Since its Section 1201 analysis is lacking in nuance<sup>286</sup> and fails to address the TPM-license nexus, however, the

 $<sup>^{281}</sup>$  *Id.* at 43,828 ("[U]sers must make a reasonable determination that heightened quality is necessary to achieve the desired goal.").

<sup>&</sup>lt;sup>282</sup> See discussion *supra* Section II.B.

<sup>&</sup>lt;sup>283</sup> MARYBETH PETERS, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS IN RM 2008-8, RULEMAKING ON EXEMPTIONS FROM PROHIBITION ON CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS CONTROL TECHNOLOGIES 49 (2010), *available at* http://www.copyright.gov/1201/ 2010/initialed-registers-recommendation-june-11-2010.pdf. <sup>284</sup> Id. at 52.

<sup>&</sup>lt;sup>285</sup> MGE UPS Systems, Inc. v. GE Consumer and Indus. Inc., No. 08-10521, slip op. at 6 (5th Cir. July 20, 2010).

<sup>&</sup>lt;sup>286</sup> See Tim Armstrong, DMCA: Fifth Circuit Inches Closer to 'Fair Circumvention' Defense, INFO/LAW (July 26, 2010), http://blogs.law.harvard.edu/infolaw/2010/07/26/dmca-fifth-circuit-inches-

closer-to-fair-circumvention-defense/ ("lik[ing] the result" but deeming *MGE*'s treatment of the DMCA issues "cursory relative to its importance"); Barry

ruling is not conclusive. Still, like previously proposed DMCAmodifying legislation,<sup>287</sup> *MGE* and the LoC exemptions provide a workable standard for determining circumvention. The Court should elucidate the anti-circumvention provision by legalizing tools facilitating substantially non-infringing uses and noninfringing circumvention itself.

## CONCLUSION

The Internet's current commercial landscape would hardly be recognizable to the DMCA legislators. Users are increasingly interested in, and technologically capable of, engaging with digital platforms, services, and media. The law, though intended to promote interoperability and innovation, threatens to stifle these indiscriminately protecting DRM goals bv measures. Rightsholders, I contend, should be permitted to employ digital locks and restrictive contractual notices to whatever extent they wish. But under the DMCA's anti-circumvention provision, Section 1201, not all digital locks and contractual notices qualify for legal protection. This article has shown that courts have failed to differentiate between DRM measures that qualify for protection under Section 1201, and those that do not, and suggested a pair of filters that will allow the courts to successfully make this distinction.

First, the law has been applied to all digital locks, but I have argued that, correctly interpreted, Section 1201 covers only those locks that *effectively* protect copyrighted works. I have also argued that privileged and non-copyright-infringing circumvention should be allowed. The Fifth Circuit recently adopted this approach, but its unnuanced ruling warrants clarification.<sup>288</sup> Second, digital copyright holders' notices tend to deny a range of traditional and legislated allowances, such as reverse engineering.<sup>289</sup> Although these notices are affixed to items that will be owned, they are strategically called "licenses" in order to avoid preemption under the Supremacy Clause. Courts that uncritically

Sookman, MGE v GE-What Did the 5th Circuit Decide About the Scope of the DMCA TPM Provisions and Was It Right?, BARRY SOOKMAN.COM (July 29, 2010), http://www.barrysookman.com/2010/07/29/mge-v-ge-what-did-the-5th-circuit-decide-about-the-scope-of-the-dmca-tpm-provisions-and-was-it-right/ (critically declaring that MGE fails "to consider the legislative history").

<sup>&</sup>lt;sup>287</sup> See Digital Media Consumers' Rights Act of 2005, H.R. 1201, 109th Cong. § 5(b)(2) (1st Sess. 2005) (proposing that "[e]xcept in instances of direct infringement, it shall not be a violation of the Copyright Act to manufacture or distribute a hardware or software product capable of substantial noninfringing uses").

<sup>&</sup>lt;sup>288</sup> See discussion supra Section III.C.

<sup>&</sup>lt;sup>289</sup> See note 130.

accept these conditions are thereby tacitly sanctioning mutant copyright, allowing unilateral contractual terms to displace the federal Copyright Act.

Section 1201 was intended to enable rightsholders such as Apple to prevent people from copying iTunes songs, not to prevent competitors from creating useful apps, or iPad owners from enjoying them. I have demonstrated that a century of copyright precedent supports the LoC's rationale for denying Apple's claim that it may prohibit iPad jailbreaking by virtue of its licensing, rather than selling, of iPads and their operating systems.<sup>290</sup> Consumers, the Librarian determined, own purchased devices and potentially their operating systems as well, and may also undertake software modification by virtue of fair use principles.

The "license" notices denounced by the Supreme Court in a pair of 1917 rulings merely restricted consumers' passive enjoyment of phonographic records and films.<sup>291</sup> Users of devices like the iPad, on the other hand, are keen and able to generate works of authorship. Though the purpose of legal protection for DRM is to encourage the creation and dissemination of such works,<sup>292</sup> courts have supported inhibitive licenses and digital locks. This tendency is attributable to Section 1201's failure to adequately delineate its prohibitions and exceptions. The provision thus calls to mind the Framers' warning that unclear laws may provide an "unreasonable advantage" to "the moneyed few over the industrious and uniformed mass of the people."293 This is particularly apt in the intellectual property context. Articulating a coherent standard for legitimate circumvention would serve rightsholders, by clarifying the scope of their protections, as well as prospective inventive competitors and generative lay consumers for generations to come.

<sup>&</sup>lt;sup>290</sup> See discussion supra Section III.C.

<sup>&</sup>lt;sup>291</sup> See supra Section III.A (discussing Motion Picture Patents and Victor).

<sup>&</sup>lt;sup>292</sup> See, e.g., WHITE PAPER, supra note 22, at 230 ("[L]egal protection alone will not be adequate to provide incentive to authors to create and to disseminate works to the public. Similarly, technological protection likely will not be effective unless the law also provides some protection for the technological processes and systems used to prevent or restrict unauthorized uses of copyrighted works. The Working Group finds that prohibition of devices, products, components and services that defeat technological methods of preventing unauthorized use is in the public interest and furthers the Constitutional purpose of copyright laws.").

<sup>&</sup>lt;sup>293</sup> THE FEDERALIST NO. 62 (Alexander Hamilton or James Madison), *available at* http://avalon.law.yale.edu/18th\_century/fed62.asp.