Generation, Yes? Digital Rights Management and Licensing,
from the Advent of the Web to the iPad

by

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“Generation, Yes? Digital Rights Management and Licensing, from the Advent of the Web to the iPad.” A thesis submitted by Reuven Ashtar in conformity with the requirements for the degree of Masters of Law, Graduate Department of Law, University of Toronto, November 2010.

ABSTRACT

The Article discusses digital-era courts’ distortion of (para)copyright principles, deeming it borne of jumbled underlying legislation and a misplaced predilection for adopting licensing terms—even at the expense of recognized use exceptions. Common law evolutionary principles, it is shown, have been abandoned just when they are most needed: the ethereal rightsholder-user balance is increasingly disturbed, and the incipient “generative consumer” is in thrall, not liberated. Finally, the Article puts forth a proposal for the reestablishment of the principle of substantially noninfringing use, showing it to be in the interests of innovation, democracy, and the greater public interest.
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* The author thanks Abraham Drassinower for his guidance and wisdom
I. INTRODUCTION

TO THE READER

PRAY thee, take care, that tak' st my book in hand,

To read it well— that is, to understand.

- Ben Johnson

This machine is manufactured by us...and is licensed for use only for the term of the patent...and only with sound records, sound boxes and needles manufactured by us; and our records and sound boxes are licensed only for use with our machines....Title shall remain in [us]; also the right to repossess the said patented goods upon the breach of any of the conditions ...[and the right] to inspect, adjust and repair this machine .... Any excess use, or violation of the conditions, will be an infringement of the said patents.

-Victor Talking Machine Company

[You are granted a limited non-exclusive license to use the iPad Software on a single Apple-branded iPad.... [but no] rights to use Apple proprietary interfaces and other intellectual property in the design, development, manufacture, licensing or distribution of third party devices and accessories, or third party software applications, for use with the iPad. ... You may not and you agree not to, or to enable others to, copy... decompile, reverse engineer, disassemble, attempt to derive the source code of, decrypt, modify, or create derivative works of the iPad Software or any services provided by the iPad Software, or any part thereof....

-Apple Inc.
The Digital Millennium Copyright Act’s (DMCA’s) anticircumvention provision has been in effect for less than a decade, but its design and jurisprudence have been fraught with contradiction from the get-go. Rightsholders have combined technical protection measures with expansive licenses to construct an “über-copyright law,” in contravention of legislative history and centuries of precedent. The phenomenon, I contend, is particularly deleterious in light of the coincident emergence of the “generative consumer,” whose non-infringing uses should be encouraged, not hindered, under digital copyright law.

I open the Article, in Part II, by scrutinizing the DMCA’s legislative history, showing that the anticircumvention provision was meant to permit a range of traditional uses. Yet Congress’s built-in exemptions were rendered toothless due to the law’s flawed design and its drafters’ failure to anticipate interoperability-limiting behaviour by rightsholders. Then, in Part III, I sketch out the arc of DMCA case law, demonstrating that pre-digital common law, which capably addressed potentially-infringing technology, has unjustifiably been overridden. Courts’ predilection to allow the four corners of “licensing” agreements to supersede rights and exceptions is shown to be particularly problematic.

Part IV looks at a century’s worth of licensing precedent and finds historical opposition to rightsholder attempts to supersede intellectual property doctrine through contract—particularly when license-ownership and copyright-patent boundaries are blurred to their advantage. Since devices like the iPad distort such distinctions so drastically, I argue, it is

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4 17 U.S.C. §§ 512, 1201–1205. Passed on October 12, 1998, the DMCA became effective on November 29, 1999; the anti-circumvention provision (Section 1201) came into effect on October 28, 2000.

increasingly vital not to let related contractual schemes become public law. This is particularly true in light of the advent of a class of generative consumers that needs interoperability and control more than ever.

I conclude by introducing a pair of remarkable recent declarations, by the Librarian of Congress and the Fifth Circuit, which not only sanction non-copyright infringing uses, but also question the entire DMCA rightsholder schema. While it is too early to declare a circumvention law sea change, I contend, the time has come to clarify the range of permitted digital uses.

II. SECURING PEACE FOR THE INDUSTRIES

A. The Walled Garden: “Paradise” Found

Less than ten inches of rain fell on Persia yearly, its hot arid plains inhibiting urban development. Then, in the 7th century BCE, Qanats—subterranean conduits coupled with vertical shafts—were invented. Since they required limited investment and no energy source but gravity, an extensive network bringing melting mountain snow inland was quickly established, and the Achaemenid Empire flourished. Qanats provided the vast majority of Iran’s water supply well into the twentieth century, including all of Teheran’s.

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7 Patrick Taylor, THE OXFORD COMPANION TO THE GARDEN 328 (Oxford 2006) (noting that qanats may transfer water from various sources, including wells.)

8 Amélie Kuhrt, THE PERSIAN EMPIRE, 1 (Routledge 2007) (establishing that by stretching into modern-day Europe, Africa, and Asia, the Achaemenid, or Persian, Empire (559-330 BCE) became the “earliest and largest of the known ‘world empires’”); H.E. Wulff, Qanats of Iran, 218:4 SCIENTIFIC AMERICAN, 94-100.

In *Oeconomicus*, one of the earliest known works of economics, Xenophon praises the invention through a flowery story; retold in the digital context, it may serve as an introduction to the age-old balance between protection and innovation. Set in Cyrus the Younger’s wonderful *qanat*-watered garden, the anecdote details a 401 BCE visit by Lysander, a Spartan military envoy.

In stark contrast to the land outside, the walled garden was shady, lush, and filled with exotic animals and vegetation. Game was bred and hunted, and plants were grown and widely exported: pistachios to Aleppo, sesame to Egypt, rice to Mesopotamia, alfalfa to Greece, and red rose attar to China.\(^\text{10}\) Xenophon dubbed the garden *paradeisos*—a term later used for the Garden of Eden in Greek translations of the Bible—translating the Persian *pairidaeza* (‘‘pairi” meaning around and “daeza” meaning wall).\(^\text{11}\)

Such gardens exemplified the Achaemenid rulers’ role in expanding irrigation, promoting fertility, and dispensing justice.\(^\text{12}\) Lysander was struck by “the beauty of [the prince’s] chains and armlets”, and, astonished to hear that the prince both designed the vegetation and planted it with his own hands, embraced and declared him “justly prosperous”.\(^\text{13}\)

*Oeconomicus* was written for an Athenian audience recovering from the Peloponnesian War, and intended to affect public policy by highlighting the role of innovation in agriculture and wealth generation. The conflict with Sparta had caused massive agrarian problems, as supplies of

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\(^\text{10}\) Taylor, 328; Penelope Hobhouse, et al., *GARDENS OF PERSIA* (Kales Press 2004), 51.


\(^\text{12}\) Michel Conan et al., 28 *BOTANICAL PROGRESS, HORTICULTURAL INNOVATION AND CULTURAL CHANGES* (Dumbarton Oaks 2007), 14.

\(^\text{13}\) Xenophon, trans. Bernard John Hayes, *OECONOMICUS* (Cambridge 1888), 18 [Xenophon].
labourers and grain plummeted. Yet Athenians also learned they could remain comfortable behind their walls by inventively specializing in agricultural and manufacturing trades, gaining nourishment from both ground and sea. The treatise ties private interest to public fortunes, and is analogous to the balancing act we face in protecting digital media, technology, and innovation.

Xenophon’s rhetoric evokes today’s “Digital Rights Management” challenge: agriculture, like digital media, “stimulates the labourers to defend the land under arms, too, by producing the crops in the open country for the strongest to take.” No other art “makes greater returns to those who ply it…[;] welcomes its devotee more gladly, holding forth to him who approaches it the attainment of whatever he requires … [or] receives strangers more ungrudgingly”.

Crop protection policy questions are analogous to those related to safeguarding digital innovation. Should the regime “not afford sufficient protection to the country, he who … has charge of the industries [may complain] because they cannot work for the want of protection.” But if the regime were to send troops and “secure[] peace for the industries, the … land [may prove] thinly inhabited and unfilled”. Rightsolders would like stringent legal protection laid atop their technical protection measures, but overprotection may stifle traditional and innovative uses.

14 Pomeroy, 46-50.
15 Xenophon, 19; Sarah Pomeroy, XENOPHON, OECONOMICUS: A SOCIAL AND HISTORICAL COMMENTARY (Oxford 1994), (explaining that Xenophon’s attribution of these lines to Socrates is indeterminate. Socrates did not document his own thoughts, and while Xenophon may have known him as well Plato did, the discrepancies between their representations are at the core of the so-called “Socratic Problem”), 21-30.
16 Xenophon, 16.
B. Inventing, then Sharing, the World Wide Web

Millennia later, the ground-breaking digital network completing the agriculture/media analogy was conceived. Tim Berners-Lee envisioned the World Wide Web (the Web) as a global system for sharing information over the Internet. On the Web, mechanisms storing information would be segregated from those displaying it, as a “browser” mediated individuals’ interactions with hypertext documents.17

Berners-Lee’s mathematician parents met while developing the world’s first commercially-sold computer—the Ferranti Mark I—and their passion for computing and problem-solving rubbed off on him.18 Working at the European Organization for Nuclear Research (CERN), he billed the Web as a way to reduce the inefficiencies caused by “incompatibilities of platforms and tools” within the organization, which “le[d] to waste[d] time, frustration and obsolete answers”.19 Proposing the project, in March 1989, he contended it would not only be useful at CERN but would also “be a boon for the world in general”.20

The invention lived up to CERN’s expectations and, in a remarkable two page statement, the organization magnanimously “relinquish[e]d all intellectual property” in its own source

19 Tim Berners-Lee et al., WORLDWIDEWEB: PROPOSAL FOR A HYPERTEXT PROJECT, available at http://www.w3.org/Proposal.html.
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, 1993.21

CERN’s altruism was reciprocated when, in May 2010, it flipped the switch on another remarkable invention, the Large Hadron Collider—the world’s largest machine, propelling protons at 99.99% of the speed of light—aiming to recreate Big Bang conditions and explain human existence.22 Over the project’s fifteen-year duration, unprecedented amounts of data would need to be stored and analyzed by thousands of scientists working around the globe. But as a government-funded academic institution, CERN could scarcely afford to buy or even lease sufficient computer storage, so it asked for help from other research bodies and private citizens. Tens of thousands of computers have been volunteered, and they are jointly harnessed through a distributed computing network referred to as “the Grid.”23

C. Man Makes the Clothes? Jefferson, Clinton, and the White Paper

President Clinton soon set out to fix rules of the road for the “Information Superhighway,”24 tasking a Working Group25 with updating the Copyright Act in February,
1993. Ironically, the Group invoked a Jeffersonian metaphor for its mandate: determining whether the coat worn in copyright law’s boyhood still fits in digital adulthood. Praising existent copyright law and its role, over centuries, in bettering society, the Group’s White Paper, released in September, 1995, purported to offer nothing but “minor clarification and limited amendment”. In light of “onrushing technology”, and the need to maintain the existent balance of rights, it concluded, the “the coat is getting a little tight. There is no need for a new one, but the old one needs a few alterations.”

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

Superhighway” on January 11, 1994 in an address before the Academy of Television, Arts, and Sciences. “[H]e most likely contemplated the creation of a state-of-the-art ‘smart’ highway system with no potholes or structural limitations.”

The Information Infrastructure Task Force was instituted to deal with what it called the National Information Infrastructure—of which the Internet was one component.


Jefferson was notoriously critical of strong intellectual property protections; see, eg. Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in THOMAS JEFFERSON, WRITINGS, at 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….”)

See White Paper, 13.

Ibid., 212.

Ibid., 17.

Ibid.

Ibid. (two types of “balance” are pledged in the same breath: the new act will “provide the necessary balance of protection of rights — and limitations on those rights … in order to maintain the balance of the law”.)

Ibid. 212.
“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…’”\textsuperscript{34}

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….”\textsuperscript{35} The discrepancy 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 in the attribution.

Jefferson did not “state” (ie, express definitely or clearly)\textsuperscript{36} a willingness to readily change laws in light of technological advances. Rather, he wrote a particularly private,\textsuperscript{37} bold,\textsuperscript{38}...
and issue-specific response—expressing support for a state constitutional convention to eliminate gross inequalities in the Virginia Constitution’s representation scheme, against which he had railed for decades. Recent scholarship has deemed it one of Jefferson’s most “wildly misconstrued remarks”, often marshaled under the banner of legislative revision. I contend that Jefferson’s actual plea should inform DMCA analysis: recognizing the “moderate imperfections” in harmonizing the Internet’s effects on copyright law, we can “accommodate ourselves to them and find practical means of correcting their ill effects.” The Group was right to praise the way in which copyright law has adjusted in light of technological change over the hundreds of years, but 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 technical protection measures. The circumvention legislation enacted in its wake, which stringently prohibits non-infringing use, runs counter to the purposes of intellectual property and the public interest, and is especially deleterious when combined with stringent licensing schemes.


40 Alan Pell Crawford, TWILIGHT AT MONTICELLO: THE FINAL YEARS OF THOMAS JEFFERSON (Random House 2008), 130.

41 See White Paper, 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.”)
D. Brokering the DMCA—Negotiation, Hollywood-Style

Despite the Administration’s vigorous efforts, Congress did not bite when the legislation was first floated, and the Group’s bill failed to even make it out of committee.\textsuperscript{42} Opposition came from several quarters, with the most effective and well-funded resistance emanating from the technology industry.\textsuperscript{43} It deemed the proposed law’s anti-circumvention provisions—which did not mandate copyright infringement—draconian and incompatible with age-old copyright principles.\textsuperscript{44} The bill criminalized products due to their “primary purpose or effect” rather than just their designers’ intentions,\textsuperscript{45} so hard- and software developers strenuously demanded protection from liability for users’ potentially illicit behaviour.\textsuperscript{46}

Moreover, the sector contended, innovation necessitates explicit allowances for constructive uses of protected works, such as security research and reverse engineering.\textsuperscript{47} While

\textsuperscript{42} Over multiple attempts in 1995 and 1996; see, eg, Ruth Okediji, \textit{The Regulation of Creativity Under the WIPO Internet Treaties},” 77 Fordham Law Review, 2379, 2387 [Okediji].


\textsuperscript{44} \textit{Ibid}.\textsuperscript{45}

\textsuperscript{45} 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 section 106.”)

\textsuperscript{46} See Pamela Samuleson, et al., \textit{A Reverse Notice and Takedown Regime to Enable Fair Uses of Technically Protected Copyrighted Works},” 22 Berkeley Tech. L.J. 981, 998-1001 (2007) [Samuelson, Berkeley].

\textsuperscript{47} \textit{Ibid}.\textsuperscript{45}
such circumvention exceptions were accordingly incorporated into the legislated DMCA a few years later, they have, as I will demonstrate, largely been hollowed out 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 Organisation (WIPO) members at their December, 1996 conference in Geneva. At that point, WIPO’s legislative process had already taken years and “intense, breathtaking negotiations of Hollywood-style epic proportion”.48 National and industry players in academia, science, and the content, technological, and telecommunications industries battled over the resolution finally embodied in the WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty.49

Here too, a critical mass objected to inflexible anti-circumvention provisions. Resultantly, signatory states were not obligated to implement specific laws domestically, but rather to ratify the law through individual national schemes, such that each gave (i) “adequate protection” to intellectual property protected through technical measures, and (ii) “effective remedies” against those who circumvent, or facilitate the circumvention of, said measures.50

The agreed-upon document was premised not on a need to implement a severe lockdown schema, but rather on the recognition that a balance exists “between the rights of authors and the

48 Okediji, 2389.


larger public interest, particularly education, research and access to information”, and that it must be maintained.\textsuperscript{51} DMCA jurisprudence has failed to maintain such an equilibrium.

Once the international treaties were put in place, attention shifted once again to the United States, as the House Judiciary and Commerce Committees wrangled over the draft DMCA for months.\textsuperscript{52} President Clinton’s effort was 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 in decades. The bill and its centerpiece, § 1201, the anti-circumvention provision, promised to provide “global protection from piracy”.\textsuperscript{53}

Proponents pledged it would spur creativity, as the Internet would be harnessed to constructively distribute media “that are the fruit of American creative genius”.\textsuperscript{54} The \textit{casus belli} was identified as the newfound ease by which “digital technology enables pirates to reproduce and distribute perfect copies of works”.\textsuperscript{55} instantly, worldwide.\textsuperscript{56}

\textsuperscript{51} WCT, preamble.
\textsuperscript{56} S. Rep. No. 105-190, 8 (1998).
In this incarnation, the entertainment and software industries’ vociferous support overwhelmed opposition by weaker factions including scientists, librarians, and academics.\(^57\) Indeed, for better or (more likely) worse, lobbying\(^58\) is rampant in intellectual property matters, and the copyright realm in particular.\(^59\) Congress, it has been said, “seems willing to give copyright owners whatever they ask for, at least as long as there is no large vested interest making demands on the other side.”\(^60\) Writing in 1996, William Patry, an eminent scholar 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.”\(^61\)

Partially as a result of lobbying, and partially due to the rapidly changing nature of intellectual property, interests tend to be gauged in present-day, rather than forward-looking,

\(^{57}\) See Steven P. Calandrillo et al., The Dangers of the Digital Millennium Copyright Act: Much Ado About Nothing?, 50 Wm.& Mary L. Rev. 349, 354 (2008).

\(^{58}\) See Neil W. Netanel, Why Has Copyright Expanded? Analysis and Critique in NEW DIRECTIONS IN COPYRIGHT LAW, Vol. 6, (Fiona Macmillan, ed., Edward Elgar 2008), 3 [Netanel] (defining lobbying as a group’s attempts to influence governmental action seeking “rents,” “greater profits than could otherwise be reaped in a competitive market”), 4, (describing the resultantly “strong incentive for socially wasteful spending on lobbying and litigation to maintain and expand those rents”). See also Mark Lemley, Property, Intellectual Property, and Free Riding, 83 Texas Law Review, 1031, 1064 (2005) [Lemley, Property] (explaining that economic theory “suggests that in seeking to that capture such profits”, “private parties will spend up to the total value of the benefit”.)

\(^{59}\) See Natanel, 3 (noting that “[c]opyright industries and trade associations engage in extensive lobbying. Aided no doubt by Hollywood’s visibility and cachet, they have achieved considerable success in attaining their agenda.”)

\(^{60}\) Lemley, Property, 1063-4 (declaring that this is the “cost of government-granted intellectual property rights”).

\(^{61}\) W.F. Patry, Copyright and the Legislative Process: A Personal Perspective, Cardozo Arts and Entertainment Law Journal 14 (1996), 141; see also David Nimmer, Appreciating Legislative History: The Sweet and Sour Spots of the DMCA Commentary, 23 Cardozo L. Rev. 909, 970 [Nimmer] (explaining that he shares Patry’s “ire,” castigating the process by which the 104th Congress produced the Digital Performance Right in Sound Recordings Act of 1995, finding that the interested parties produced “an abominable deformation to the Copyright Act by foisting that amendment onto the public.”)
terms. Legislative myopia is evident throughout the DMCA, even in key elements such as its approach to interoperability—a cornerstone of intellectual property and the related areas of antitrust and telecommunication regulation.  

The Commerce Committee sought to ensure that the resultant law would not diminish device interoperability “in the consumer electronics environment”. Regrettably, deliberations displayed a measure of naiveté as “playability” problems were expected to be side-stepped as content providers would consult “product designers… about the design and implementation of technological protection measures.”

Congress failed to anticipate the interoperability-limiting behaviour that has emerged. It sought to “encourag[e] the introduction in the market of exciting new products”, by “regulating the use of information—not the devices or means by which the information is delivered or used by information consumers”. The scheme was designed to protect “technology neutral”

62 See, eg, Mark A. 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.)

63 See Urs Gasser, et al. Breaking Down Digital Barriers: How and When ICT Interoperability Drives Innovation”, Berkman Center Publication Series (2007): Pamela Samuelson et al. Should Copyright Owners Have to Give Notice of Their Use of Technical Protection Measures?, 6 J. on Telecomm. and High Tech. L. 41, 47 (2007-8) [Samuelson, Notice] (noting that “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.” Such “network effects” increase the value of the overall network for each individual user.)


66 Microsoft’s Zune portable music player is, for instance, designed not to work with Mac operating systems; Apple’s iTunes Store files are only playable with Mac products such as the iPod; and the iPod only plays iTunes files and unprotected formats like mp3s.

67 H.R. Rep. No.105-551, Part 2, (2d Sess. 1998) at 40. (The two products it expresses particular concern 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.)
rightsholder powers,\textsuperscript{68} accommodating user rights\textsuperscript{69} and the public interest.\textsuperscript{70} To that end, it targeted § 1201 at those breaking into “black boxes,” not those creating or using devices with sanctioned “substantial noninfringing” uses.\textsuperscript{71} But these principles were obscured in the law’s final formulation and then totally eclipsed by jurisprudence.

\textit{E. A Witches’ Brew}

The resulting legislation has been described as an “intoxicating brew … concentrated to the point of being indigestible”\textsuperscript{72} and its focal point, § 1201, the anti-circumvention provision, exemplifies such stodginess. Prohibitions and allowances are woven into an intricate web. § 1201 prohibits individuals from “circumventing”, or getting around, “technical measures”—technical protection measures (TPMs) or, more colloquially, digital locks. The law does not permit non-copyright-infringing circumvention, so having a right to access or use protected work by virtue of ownership or intended “fair” use is not a valid excuse. Instead, legislators sought to

\begin{itemize}
  \item \textsuperscript{69} \textit{Ibid.} 22 (1998).
  \item \textsuperscript{70} \textit{Ibid.}
  \item \textsuperscript{71} \textit{Ibid.}, 18, 22 (1998); 144 Cong. Rec. at S9936 (statement of Sen. Ashcroft); see also 144 Cong. Rec. at H7094 (statement of Rep. Bliley) (noting that § 1201(a)(2) is “aimed fundamentally at outla[w]ing 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”). These principles emanate from the Patent Code, which was applied to copyright law by the Supreme Court when analogizing copyrights and patents to establish the validity of using a “substantial noninfringing uses” defence to contributory copyright liability. \textit{Sony Corp. of Am. v. Universal City Studios, Inc.}, 464 U.S. 417, 440 (1984) (citing the exception for “substantial non-infringing use[s]” in the Patent Code, 35 U.S.C. § 271(c)) [\textit{Sony}].
  \item \textsuperscript{72} Nimmer, 912.
\end{itemize}
achieve the same result—facilitating rightful access and use—by tailoring a series of flexible exceptions. In practice however, the exceptions are toothless.

Subsection (a)(1)(A) prohibits circumventing “a technological measure that effectively controls access to a work protected under this title.” Critics have explained that this wording suggests “not every TPM is subject to legal protection. The word ‘effective’ is clearly meant to limit the parameters of legal protection afforded to TPMS.” The underlying WIPO treaties frame DRM-protection as a contracting party obligation (not an authorial right), and under Article 11, the US only became obligated to legislate “adequate” legal protection and “effective” legal remedies as it saw fit: anticircumvention provisions were not mandated.

Congressional debate rightly recognized that “the treaties themselves... give us all of the latitude that we need to protect our traditional legal approaches to the fair use doctrine.” The European Parliament, which originally intended to link circumvention with copyright infringement, reached the same conclusion, stressing that anticircumvention laws are “not absolute and ... freedom of expression and the public interest ...may prevail over the

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73 Italics in original, Kerr et al., 35.
74 Akester, 118.
75 See Pamela Samuelson, Regulating Technologies to Protect Copyrighted Works, Communications of the ACM, 39(7), 17-22 (1996) [Samuelson, Regulating].
77 “The provision prohibits activities aimed at an infringement of a copyright, a related right or a sui generis right in databases granted by Community and national law; this would imply that not any circumvention of technical means of protection should be covered, but only those which constitute an infringement of a right, i.e., which are not authorised by law or by the author.” According to Article 6 in the Explanatory Memorandum of the Commission’s Proposed Information Society Directive. - Proposal for a European Parliament and Council Directive on the harmonization of certain aspects of copyright and related rights in the Information Society (COM/97/628 final). See Akester 122-3.
restrictions”. A recent international survey confirms that there is no obligation on signatories “to provide ‘adequate legal protection and effective legal remedies’ against acts of circumvention which concern acts permitted by law.”

Yet judicial interpretation has been monolithic, undoing the DMCA drafters’ intentions by construing any act of circumvention as *prima facie* illicit. Take the metaphor used by legislators to make the ethereal concept of what constitutes a TPM understandable: § 1201(a) circumvention, or digital lock picking, they explained, is the “electronic equivalent of breaking into a locked room in order to obtain a copy of a book.” Courts have construed this to mean that even circumventors who own the proverbial book may not enter a room to leaf through it.

In fact, Congress explained that the prohibition on circumvention embodied in § 1201 (a)(1), “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”. The law was designed to provide a right to circumvent any TPM for non-infringing access. Although the legislators strove to avoid “any misunderstanding about the scope of this legislation, especially the very limited scope of the device provisions…and the very broad scope of the

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78 153 Amendment 3, Recital 6a, new text following EP vote.
81 See, eg, *Pearl Investments*, 257 F. Supp. 2d at 350 (citing *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 316 (S.D.N.Y. 2000)); but, see also, *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d at 549 (*Lexmark II*) at 547 (finding that such a conception would be like claiming that a locked back door prevents access by the purchaser of a house who receives a key to the back door and finds that the front door does not contain a lock).
83 Credence to such a notion is lent by the discussion related to subsection (a)(2): “an individual would not be able to circumvent in order to gain unauthorized access to a work, but would be able to do so in order to make fair use of a work which he or she has acquired lawfully.”
exceptions to section 1201(a)(1), courts have generally taken the opposite approach in their interpretation of such key terms as “effectiveness” (of TPM protection).

A second limitation, embodied in subsections (B)-(E), details an exception process by which the Librarian of Congress (LoC) is to undergo a “rulemaking proceeding,” every three years to determine whether users of specific classes of protected works are, or are likely to be, sufficiently “adversely affected by virtue of such prohibition in their ability to make noninfringing uses of that particular class of works” to justify an exception. The LoC may then elect to make subsection (A) inapplicable to such classes for a period of three years.

The rulemaking process was meant as a “fail-safe”, monitoring and responding to marketplace needs and technical developments in promoting the public interest, but – until the most recent batch—it has proven neither forward-looking nor effective. Some rightsholders have fought such exceptions off tooth and nail. At the latest hearings, for instance, the MPAA made its case against a proposed exemption extending an allowance for film studies professors to circumvent DVD TPMs known as the Content Scramble System (CSS) to educators and students.

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85 See, eg, Lexmark II, 549 (explaining that rightsholders need not raise “an impervious shield…. Otherwise the DMCA would apply only when it is not needed”).
86 In consultation with the Register of Copyrights and Assistant Secretary for Communications and Information of the Department of Commerce.
87 H.R. Rep. No. 105-551, pt. 2, at 22 (1998), 36 (“Given the threat of a diminution of otherwise lawful access to works and information…a ‘fail-safe’ mechanism is required.”)
88 DMCA, Section 1201(a)(1)(C).
in any course. Aiming to show the ease of conducting non-circumventing fair use, an industry representative set up a completely darkened room, high definition camcorder, and flatscreen TV, using “VLC” editing software—which actually circumvents CSS itself—to edit a Harry Potter film.

The penultimate batch featured six three-year exemptions, only three of which were not renewals of existing ones, out of the seventy-four proposed. Obsoleteness seemed to be a criterion: allowances were made for circumventing obsolete computer programs, games, and physical locks, and the allowance for testing security flaws only applied to CDs, not DVDs and other media.

The latest set of rulemaking exemption is, as I discuss below, surprisingly user-friendly, but the perennial problem remains: even the limited granted exemptions are practically useless, as while circumvention is legalized, rightsholders may still sue for breach of contract and, more significantly, the tools required to circumvent remain prohibited under section 1201(a)(2).

89 Expanding it beyond just film studies courses; the exemption was granted, as I describe below.

90 Ironically, the MPAA is staunchly opposed to using camcorders to record its movies. It recently launched a “major initiative to stop camcorder piracy….” Called the ‘Make a Difference’ campaign” in India; available at http://www.mpaa.org/press_releases/mpaa%20chief%20dan%20glickman%20launches%20anti%20ca mc ord%20initiative%20in%20india.pdf


92 The rejected proposals showed “no evidence of harm, or no harm involving access control devices, and their proponents complained only of insubstantial inconvenience”. Exemptions were granted to: (1) make compilations of video clips for film and media studies courses; (2) archive obsolete computer programs or games; (3) bypass “dongles,” or hardware locks, that are obsolete; (4) use read-aloud functions or screen readers with e-books; (5) connect wireless telephone handsets to communication networks; and (6) test for or correct security flaws in works distributed on compact discs. EXEMPTION TO THE PROHIBITION ON CIRCUMVENTION OF COPYRIGHT PROTECTION SYSTEMS FOR ACCESS CONTROL, 70 Fed. Reg. 68,472, 68,473-77. (Nov. 27, 2006), available at http://www.copyright.gov/fedreg/2006/71fr68472.html (amending 37 C.F.R. § 201.40).

93 Its coup de grace on the obsoleteness front is delivered in its final subsection, which features absolute restrictions on a range of analogue devices, including video cassettes, recorders and camcorders.
Devising an exemption process has likewise eluded the treaties’ other signatories. The UK’s method, by which users may complain about unaccommodating DRM, has never been utilized, as potential applicants have either not known about it, or found it “onerous” and “impractical”. The European Union’s triennial report system, which allows for adverse TPM effects to be assessed, has not resulted in a single exception.

Subsection (a)(2) comprehensively prohibits “trafficking” in anything enabling circumvention. The same ineffective limitation apply here as in subsection (A): TPMs must “effectively control access” to the work, and the prohibited technology must be “primarily designed or produced for the purpose of” circumvention.

Subsection (3) is supposedly definitional, but its nomenclature is cryptic. To “circumvent” a technological measure (TPM) means to “avoid, bypass, remove, deactivate, or impair [it], without the authority of the copyright owner”. A TPM “effectively controls access” to the underlying work, if it, in the “ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.” My case law analysis will demonstrate the folly of the DMCA’s failure to define key terms like “access,” “control,” and “effectiveness.”

94 Akester, 104-5.
96 “No person shall manufacture, import, offer to the public, provide, or otherwise traffic”.
97 Any “technology, product, service, device, component” or part thereof.
98 § 1201(a)(1), (2).
Under the banner of “Additional Violations,” section (b) is framed in a nearly-identical manner to section (a) but addresses “rights” (or “copy”) control, rather than “access” control measures, prohibiting technology: “primarily designed or produced for the purpose of circumventing” TPMs which “effectively” protect copyright owner rights. In practice, the copy-access distinction is murky, and since a breach of the former would necessitate a breach of the former but the converse is not true, litigation has focused on breaches of rights or copy controls under (a).

The difficulty in reconciling sections (a) and (b) is emblematic of the flaws in the legislative crafting, since § 1201(b) could be seen to “strengthen a copyright owner’s abilities to protect its recognized rights, while § 1201(a) strengthens a copyright owner’s abilities to protect access to its work without regard to the legitimacy (or illegitimacy) of the actions that the accused access enables.”

Section (c) serves as a classic illustration of how exceptions to copyright infringement are made dysfunctional under DMCA jurisprudence. While it states that nothing in § 1201 shall “affect rights, remedies, limitations, or defenses to copyright infringement, including fair use”, it provides no positive right and been rendered ineffectual. A “general equitable defense”, fair use is statutorily protected under § 107, and expansively affirmed by cases like Sony. Indeed, the White Paper relies heavily on the latter case and avers not change in it, and the DMCA

\[99\] Chamberlain Group, Inc. v. Skylink Techs., Inc., 381 F.3d 1178, 1199 (Fed. Cir. 2004) [Chamberlain III].


\[101\] Sony, 433.

\[102\] White Paper, 17 (“Preserving the framework does not require, however, a dramatic increase
legislators earnestly tried to integrate fair use. They affirmed that one may circumvent TPMs “in order to make fair use of a work”, reasoning that Section 107 need not be updated as it is “technologically neutral, and therefore… fully applicable in the digital world as in the analog world.” They failed to realize that their bill would be construed to modify copyright law, adding “a wholly separate tort of unauthorized circumvention, to which the fair use defense is inapplicable.”

Other exceptions are ineffective by design. An exemption granted to research institutions mandates that their exempted use may only be for “good faith” determinations of whether they would like to actually pay in order to acquire a copy of the work in question; no other copy may be “reasonably available”.

Caveats related to encryption research feature a tangle of “permissible acts” and qualifications, including requirements that researchers attempt to gain authorization before undertaking it, and provide rightsholders with “findings and documentation” afterward. There is also a vague list of factors to be evaluated when seeking to determine whether the research conducted was legitimate, including whether the findings were “disseminated in a manner reasonably calculated” to advance encryption techniques, and the legitimacy of the researchers’ training. There is no explanation of who is to conduct the inquiry, or when.

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.”

105 Nimmer, 729.
A slew of other exemptions are hollowed out by a “sole purpose” requirement—which is practically unattainable. Reverse engineering, for instance, may only be undertaken for the sole purpose of figuring out which program elements are required to facilitate interoperability and then only analyzing those. Likewise, circumventing TPMs (or TPM-riddled devices) capable of “collecting or disseminating personally identifying information reflecting the[ir] online activities” must be done for the sole purpose, and have the sole effect, of identifying and disabling those discrete capabilities.

F. DRM and the Nature of Control

Before turning to the nature of controls at issue, a word on definitions is warranted. Anti-circumvention laws address breaches of “technical protection measures” (TPMs),\textsuperscript{106} in the context of “digital rights management” (DRM) systems.\textsuperscript{107} Such definitional terms are

\textsuperscript{106} See, eg, Ian Kerr, \textit{If Left to Their Own Devices ... How DRM and Anti-circumvention Laws Can Be Used to Hack Privacy}, in IN THE PUBLIC INTEREST: THE FUTURE OF CANADIAN COPYRIGHT LAW 167, 721 (Michael Geist ed., 2005) (defining a TPM as a “technical measure meant to prevent unauthorized use and or access to, (i) copying, (ii) distribution, (iii) performance, and iv) display”).

\textsuperscript{107} See eg, Akester, 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 metadata (including, for example, the identity of the copyright owner and the price for usage of the work”); I also consider licensing schemes a form of DRM.
contentious; while I side with those who consider DRM an umbrella term subsuming TPMs, some designate it as a “specific class of TPMs”.

Others consider the terms fungible, with rationales ranging from the confused to the ideological. “DRM” nomenclature is even used by some 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. Others simply adopt “TPM,” considering it a more “neutral term … that avoids resolving the ambiguity about whose ‘rights’ matter in the context of DRM.”

Throughout the Article, “DRM” stands for any system employing TPMs on their own, or in combination with, licensing terms. Later DMCA case law highlights the significance of the DRM-licensing nexus, so I find the dearth of commentary on it surprising. A voluminous international DRM survey, for instance, recently found that certain problems “do not stem from DRM but from the fact that licences may override copyright law, remaining outside the scope of this study.”

108 See eg, Kerr, 172 (“A TPM can be used on its own, or as a building block in a larger system of technological and legal mechanisms, often referred to as DRM”); TK Armstrong, Digital Rights Management and the Process of Fair Use, 20 Harv. J.L. & Tech. 49 (2006) [Armstrong].


110 Ibid. (explaining that the terms are “commonly used interchangeably.”)

111 Netanel, 84.

112 Samuelson, Notice, 42.

113 Akester, 36-7.
I will demonstrate that the adverse effects of the courts’ interpretation of the DMCA have trebled due to their tendency to take licensing agreements at face value. Resultantly, users may only use TPM-entwined works with rightsholder authorization, as “licenses on which that authority is conditioned become the public ‘law’ for those works.”

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)”.

DRM advocates assert that it is not information that “wants to be free,” but certain individual who want media gratis. The Internet and mass digitization, the argument goes, have, just as the White Paper and DMCA drafters anticipated, facilitated an unprecedented ability to copy and share media.

Rightsholders endure rampant unauthorized downloading by individuals from various backgrounds who “seem to share a subjective belief that copyright infringement is not morally wrong” whereas physical theft is. But neither the anti-circumvention provisions nor legal
victories founded on other legal grounds have effectively curbed the illicit phenomenon.118 Perhaps the content industry will soon have another avenue to pursue, via the enigmatic Anti-Counterfeiting Trade Agreement, which would reportedly target ISPs119—a White Paper-approved strategy—120 but, in any event, anti-circumvention laws have not stemmed the trend.

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 e-reader 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?

Cohen began, “An illegal download is — to use an ugly word — illegal.” “But”, he continued, “in this case, 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

118 See A&M Records, Inc. v. Napster, Inc, Napster, 239 F.3d at 1014 (9th Cir. 2002) (where the court found direct copyright infringement and contributory infringement liability) and MGM Studios, Inc. v. Grokster, Ltd. 545 U.S. 913 (2005) (where decentralized networks like Grokster’s were held contributory liable). In both instances, shortly after the rightsholders’ courtroom victories, the number of file-sharers, files shared, and new networks rose. After the RIAA responded by suing individual file-sharers the number of number of peer-to-peer network users doubled within two years; see Manesh, 31.

119 See http://www.businessweek.com/technology/content/feb2010/tc20100222_165816.htm (describing how ACTA drafts would reportedly make ISPs liable for their networked users’ file transfers).

120 See White Paper, 117 (explaining that ISPs are better placed to monitor and prevent infringement than rightsholders); ibid., 114-24 (recommending that ISPs be held strictly liable for their users’ infringement, due to the RAM copies retained on their servers; ibid., 109-14 (proposing contributory and vicarious liability schemes; see also Samuleson, Berkeley, 988.)
buying a CD, then copying it to your iPod.\textsuperscript{121} Analogously, piracy rates may be as much as ten times greater on the iPad than the iPhone, and one explanation may be that consumers are reluctant to pay for a slightly different version of the very product they have already purchased for their iPads.\textsuperscript{122}

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.\textsuperscript{123} DRM, they contend, can “cure this market failure by protecting authors’ works through technological and contractual means.”\textsuperscript{124} Controls enable differential pricing,\textsuperscript{125} and such price discrimination benefits the public both directly through choice and “indirectly by increasing the transactional efficiency of the market for expressive works.”\textsuperscript{126} Critics castigate the “rhetoric of free riding”\textsuperscript{127} as an implement for rightsholders “to capture the full social value of their goods”,

\begin{footnotesize}
\begin{enumerate}
\item[See, eg, Stan Liebowitz, \textit{The Myth of Copyright Inefficiency}, 32 REGULATION, 28, 28 (2009) [Liebowitz] (“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?”); See also, \textit{Lemley}, Property, 1037-8.\textsuperscript{123}
\item[Bell, 582-3.\textsuperscript{124}
\item[Harold Demsetz, Toward a Theory of Property Rights, 57 Am. Econ. Rev. Papers & Proc. 347 at348 (1967) (“A primary function of property rights is that of guiding incentives to achieve a greater internalization of externalities.”)\textsuperscript{125}
\item[Bell, 587; see also Sobel, 670-2.\textsuperscript{126}
\item[\textit{Lemley}, Property, 1032. Incidentally, in \textit{Grokster’s} oral arguments, Justice Souter asserted: “I know perfectly well that I can buy a CD and put it on my iPod, but I also know if I can get music without buying it, I’m going to do so.” Transcript of Oral Argument at 14, \textit{Grokster}, 125 S. Ct. 2764 (No. 04-480), available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/04-480.pdf.\textsuperscript{127}]}
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since a competitive market would merely afford them the opportunity to reclaim their costs and a reasonable return on their investment.\textsuperscript{128}

Like extreme anti-DRM arguments, pro-DRM rhetoric can be vague. An early warning went: “Stifling [D]RM would stifle the wide variety of new expressions and experiences that the digital intermedia promise to inspire, promote, and provide.”\textsuperscript{129} Similarly, the White Paper offered little proof for its promise that the “public will [pay less and] also have access to more copyrighted works … if they are not vulnerable to the defeat of protection systems.”\textsuperscript{130}

Outspoken economist Stan Liebowitz’s calculus has been imprecise: “How much revenue do the firms creating the legitimate software or movies receive from these illicit markets? The answer, quite clearly, is zero – there are no dollars, direct or \textit{indirect}, being paid by pirates to Microsoft for illicit copies of Word, or Pixar for illicit copies of The Incredibles.”\textsuperscript{131} But what about network effects with Microsoft software? Or merchandise purchases by the parents of Pixar-film-watching kids? Or the studio’s potential commercial tie-ins?

There seems to be less evidence to suggest that “gains that [D]RM provides to copyright owners would thus pass on to consumers in the form of reduced access fees” and more choice for

\textsuperscript{128} Lemley, Property, 1032.
\textsuperscript{129} Bell, 584.
\textsuperscript{130} White Paper, 230.
consumer,\textsuperscript{132} than that dominant players can be tempted to use DRM to charge consumers more, create barriers to market entry for competitors, and reduce interoperability.\textsuperscript{133}

Theoretical utility aside, there are practical problems in designing proper DRM systems, as controls are more effective at tracking and obstructing use than permitting exemptions.\textsuperscript{134} While it is technically simple to “add a few lines of code saying, for example, that if a user is a researcher or a student” they are permitted to freely copy, the difficulty lies in: “creating a DRM that is custom built” in advance for myriad particular situations or individuals 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.\textsuperscript{135}

Resultantly, DRM systems often sacrifice user exceptions in favour of rightsholder control. Privacy concerns also arise as device manufacturers and content providers develop their ability to—openly or surreptitiously—monitor and control use.\textsuperscript{136} The “arms race” between

\begin{itemize}
\item \textsuperscript{132} Bell, 588-9; see also White Paper, 16 (the proposed regime “will provide a wider variety and greater number of choices for consumers, which should increase competition and reduce prices.”)
\item \textsuperscript{133} See Melendez-Juarbe, 191; Jack Shafer, Apple Wants to Own You: Welcome to Our Velvet Prison, April 15, 2010, SLATE, available at http://www.slate.com/id/2250993, (admonishing the “the perimeter mines, tank traps, revetments, and glacis [Steve Jobs] 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.”) [Shafer].
\item \textsuperscript{134} See, eg, Ginsburg,128.
\item \textsuperscript{135} Akester, 86-7.
\end{itemize}
TPM designers and hackers shows no sign of abating as technology advances, and crucially, courts have opted to prop up licensing agreements rather than allowing fair use doctrine to evolve through common law. The next section demonstrates that pre-DMCA common law capably addressed evolutions in technology, according with both commercial and fair use principles.

III. DMCA JURISPRUDENCE

A. Sony, Innovation & Vigorous Commerce

When the Copyright Act was revamped in 1976, Congress issued an imperative not “to freeze the doctrine [during] period[s] of rapid technological change”. The DMCA revamp was intended to uphold this, ushering “copyright law into the information age,” by “foster[ing] competition and innovation in the computer and software industry”, all the while maintaining a balance between creators and users.

Yet DMCA courts have failed to reconcile traditional approaches to technological

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137 Seltzer, 25 (noting that “closed software and hardware can engage in the arms race, appearing secure until a smarter hacker comes along”); see also, 34 Ian Kerr, CANADIAN HERITAGE, TECHNICAL PROTECTION MEASURES: Part I—Trends in Technical Protection Measures and Circumvention Technologies by Ian Kerr et al. (Heritage Canada 2005) 6, 24 [Kerr].


139 Chamberlain Group, Inc. v. Skyline Techs., Inc., 381 F.3d 1178, 1202-03 (Fed. Cir. 2004) [Chamberlain III].


development under the statute. The problem has been described as one of “prescriptive parallelism,” and the challenge inherent in disallowing the TPM-entwined digital environment to disturb the delicate “traditional copyright balance of rights and exceptions”. In the analogue environment, where the equilibrium of rights and exemptions was established, copyright doctrine permitted any access that did not extend to the “ideas” and “discoveries” contained within a work of authorship, but such filtering has become increasingly difficult.

Technological development is a double-edged sword: while it has the potential to “spur[] evolution in the creation and marketing of works of authorship [and] parallel evolution in the modes of interaction with those works”, when deployed with, or in the form of TPMs, it can obstruct traditional uses, including fair, non-infringing, and privileged ones.

Just before the digital revolution, in 1984, the Supreme Court reacted to the issue of technology facilitating potential copyright infringement, checking “[t]he monopoly privileges that Congress may authorize.” As a “limited grant”, copyright, it emphasized, is only intended to motivate authorial and inventive activity, through “the provision of a special reward”. Sony had pioneered the Betamax system, which allowed users to “time-shift” television programming by recording it on analogue cassettes. The court deemed such uses “fair,” and Sony not liable for contributory infringement, as its Betamax device facilitated substantial non-infringing uses.

142 Samuelson, Berkeley, 1041-2.
143 17 U.S.C. § 102(b).
145 Samuleson, Berkeley, 986.
146 Sony, 429.
147 Ibid.
Copyright, it affirmed, “has never accorded [its] owner complete control over all possible uses of his work.”

While the Court has affirmed these *Sony* principles repeatedly, it has unjustifiably refused to apply them in the DMCA context. In 1991, it affirmed *Sony*, framing copyright not as a reward for labour, but as a tool to promote the arts and sciences, such that while authors are entitled to their personal expression, others may freely build upon it.

A decade later, it considered media at the nexus of various forms of intellectual property in a unanimous holding. In *Dastar*, the court focused on reverse passing off, considering elements of trademark, copyright, and patent. Justice Scalia warned that legally protecting expired copyrights would restrict works from entering the public domain, “creating a species of mutant copyright law that limits the public’s federal right to copy and use” once-copyrighted works.

Scalia’s language—proclaiming that, “The rights of a patentee or copyright holder are part of a ‘carefully crafted bargain’”, and that the law “does not exist to reward manufacturers for their innovation in creating a particular device; that is the purpose of the patent law and its

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150 *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 123 S. Ct. 2041 (2003) [Dastar]; the facts are complicated, but the case concerned a television show the copyright for which had lapsed, which was subsequently repackaged, rebranded, and sold by a competitor.

151 Under Section 43(a) of the Lanham Act.

152 *Dastar*, 2048.

period of exclusivity‖—applies to the Lanham Act, not the DMCA. But it is illuminating, as in today’s media and technology landscape the DMCA enables rightsholders to bound patent up with copyright, a scenario vividly incarnated, I will show, with the iPad.

Explicitly discussing the Sony safe harbor in the 2005 Grokster decision, the Court strongly affirmed it: “where an article is ‘good for nothing else’ but infringement, there is no legitimate public interest in its unlicensed availability”, but, conversely, fair use “absolves the equivocal conduct of selling an item with substantial lawful as well as unlawful uses.... It leaves breathing room for innovation and a vigorous commerce.”

Studies bear out that Sony principles lead to innovation and vigorous commerce, as the fair use industries are growing far more rapidly than content ones. The White Paper seemed to foresee and approve of this; Sony is the only case cited in its “recommendations” section, as it emphatically contends that history and good policy are aligned, concluding that “consumer access to and enjoyment of both copyrighted works and new technologies is an attainable goal”. Yet courts have chosen to rule Sony inapplicable to DMCA, as intellectual property protections

154 Ibid.
155 Grokster, 933.
grows ever stronger and a “clear and negative interface” between fair use and DRM emerges.

What happened to traditional copyright and Sony principles? Early DMCA rulings interpreted the law in a pro-rightsholder manner, and more recent ones have not only relied on that precedent, but allowed the four corners of licensing agreements to supersede traditional copyright rights and exceptions. I now move to discuss DMCA courts’ anti-circumvention 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 construed the law by simply turning to, and upholding, rightsholder licenses.

B. Early DMCA Jurisprudence: Drawing Lines in the Sand

The DVD CCA (DVD Copy Control Association)—a collective of members from the film, consumer electronics, computer, and software industries—administers the first widely-known DRM tool. CSS encrypts DVD and Blue-ray Disc content, such that authorized players can only unscramble programming once a “secret handshake” is undertaken. The protection also ensures that playable (ie, decrypted and unscrambled) copies of the work cannot be made.

157 See, Lemley, Property, 1042 (“By virtually any measure, intellectual property rights have expanded dramatically in the last three decades.”)


159 Jim Taylor et al. DVD DEMYSTIFIED (McGraw-Hill 1998), 11-27 (explaining that CSS was developed and released by Matsushita and Toshiba in the US in October 1996, while DVDs first there in March 1997).
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 terms while deliberating. Licensees agree not to innovate and to even exclude three-decade-old video technology, including the ability to skip or record certain content. Since the first anti-circumvention case, several others, and much of the LoC Rulemaking Exemption process revolved around CSS, it is a sensible place to begin our DMCA case law analysis.

In 1999, a fifteen-year-old Norwegian became frustrated by his inability to view protected movies on his PC’s Linux operating system. With two collaborators, he formed the “Masters of Reverse Engineering,” and, true to their word, they reverse engineered a CSS-equipped DVD-player. Their stated goal in creating the “DeCSS” program was to circumvent CSS solely in order to play legitimately-purchased movies on their own computers.

Hundreds of US web sites celebrated the program’s release and posted links to it. One of these was 2600: the Hacker Quarterly, which was run by Eric Corley—who went by Emmanuel Goldstein, after the protagonist of George Orwell’s 1984. DVD CCA sued Corley alongside 20 other individuals and 72 websites; not for infringing copyright, but for enabling others to bypass access controls by making DeCSS available.

The case, Reimerdes, became the first to consider § 1201, and it revolved around the concept of TPM effectiveness. The court determined that a construction of the term “effective” whereby the statute “protects only successful or efficacious technological means of controlling

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160 See Realnetworks, Inc. v. DVD Copy Control Association, Inc. 641 F.Supp.2d 913 [Real].
access—would gut the statute if it were adopted.”\(^\text{161}\) Such a reading, it explained, would mean that any circumvented TPM would be said to have been ineffective.\(^\text{162}\)

Instead, the court chose a construction whereby effectiveness results whenever a TPM is employed with the intention of controlling access. This reading was arrived at by referring to the “common sense” approach ostensibly preferred by the Judiciary Committee: “if, in the ordinary course of its operation, a technology actually works in the defined ways to control access to a work”, it is effective.\(^\text{163}\) But, in my eyes, it is inconsistent to say that, on the one hand, a TPM need only be intended to prevent circumvention to be effective and, on the other, that it must regularly function in preventing circumvention. Subsequent decisions have, on the whole, affirmed this rationale though, such that claimants do not need to create “an impervious shield…. Otherwise the DMCA would apply only when it is not needed”.\(^\text{164}\)

The Reimerdes court condemned Corley for making the program available, since he knew it could decrypt movies for both Linux and Windows machines and allow them to be freely copied.\(^\text{165}\) While Corley was not accused of reverse engineering himself, the court saw fit to declare that had he done so, in order to fit within the 1201(f) exemption he would have had to develop DeCSS with the “sole” purpose of achieving interoperability—an unrealistic prospect.

\(^\text{161}\) Universal City Studios v. Reimerdes, 111 F. Supp. 2d 294, 316 (S.D.N.Y. 2000) [Reimerdes].

\(^\text{162}\) Ibid.


\(^\text{164}\) Lexmark II, 549; but see, MGE UPS Inc v GE Consumer and Industrial, Inc. 2010 WL 2820006 (5th Cir. 2010) [MGE].

\(^\text{165}\) Reimerdes, 320.
Responding to Corley’s argument that CSS prevents both legitimate and illegitimate access to the work in question, the court maintained that Congress “would have said so” had it intended for the fair use defence to apply.\(^\text{166}\) The tone for DMCA litigation was thus set by the declaration that §1201 applies even in the absence of copyright infringement. Acknowledging that this created a disconnect with \textit{Sony}, the latter was declared overruled by the DMCA the two conflict.\(^\text{167}\) CSS, the court concluded, justifiably blocked “fair uses of copyrighted works as well as foul.”\(^\text{168}\)

321 Studios created a pair of software programs that enabled purchasers to make back-up copies of DVDs by circumventing CSS. Confident in their products’ legitimacy but chastened by Corley’s experience, the company brought a preemptive suit to either have the programs declared non-DMCA infringing or the anti-circumvention provision declared unconstitutional on First Amendment grounds, rather than fair use ones.

The court rebuffed the claims in a near-recitation of \textit{Reimerdes}: “the downstream uses of the software by the customers of 321, whether legal or illegal, are not relevant to determining whether 321 itself is violating the statute.”\(^\text{169}\) Any restrictions on speech were ruled reasonable, as (analogue) copying CSS-protected works was still permitted, even though they would not “be

\(^{166}\) \textit{Ibid.}, 322.

\(^{167}\) \textit{Ibid.}, 323.

\(^{168}\) \textit{Ibid.}, 304.

\(^{169}\) 321 Studios, 307 F. Supp. 2d at 1097 [321].
as easy, as exact, or as digitally manipulable as plaintiff desires".\textsuperscript{170} Corley’s First Amendment-centric appeal met with the same fate, as the court deemed circumvention a \textit{prima facie} DMCA violation, automatically designating its speech illegal and thus undeserving of First Amendment protection.\textsuperscript{171}

Elcomsoft followed the First Amendment lead to no avail. The company’s software stripped TPMs from Adobe Acrobat PDF and eBook files, such that the resultantly “naked” files could be easily copied, printed, and electronically disseminated.\textsuperscript{172} The court rebuffed it, finding no constitutionally protected right to make back-up copies.\textsuperscript{173} Recognizing that the “rights of a copyright owner are intertwined with the rights of others”,\textsuperscript{174} it chose not to accommodate the latter, deeming § 1201 violations occurring in the absence of copyright infringement, “part of the sacrifice Congress was willing to make” in enacting the DMCA.\textsuperscript{175}

The fair use elements of the holding echo the Corley appeal’s, where consumers were deemed free to: comment on films, quote portions of their underlying screenplays, and record films while viewing them, using microphones and still or video cameras. As in 321, that “the

\begin{itemize}
\item \textsuperscript{170} \textit{Ibid.}, 1101-02.
\item \textsuperscript{171} Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001) [Corley]
\item \textsuperscript{172} United States v. Elcom 203 F. Supp. 2d 1111, 1118 (N.D. Cal. 2002) [Elcom].
\item \textsuperscript{173} \textit{Ibid.}, 1135.
\item \textsuperscript{174} \textit{Ibid.}, 1121.
\item \textsuperscript{175} \textit{Ibid.}, 1125.
\end{itemize}
resulting copy will not be as perfect or as manipulable as a digital copy” was considered a reasonable restriction on fair use.\textsuperscript{176}

Likewise, \textit{Elcom} found that while engaging in fair use may be more difficult with PDF-like formats, users are still permitted to quote from, and compare, protected works.\textsuperscript{177} Concerns relating to the proliferation of TPM were dismissed; even constraints on public domain work were said to be subscribe to by the “user/purchaser … [who] acquiesced in this restriction when purchasing/licensing the work.”\textsuperscript{178}

\textbf{C. Middle Period: Foreseeing Monopolies}

The first durable-good TPM litigated was Chamberlain’s “rolling code” garage door opening system. Its receiver was activated by a frequency that increased by a factor of three with every click of the remote control transmitter. Competitor Skylink manufactured a transmitter with an authentication key bypass, and Chamberlain alleged a § 1201(a)(2) violation—as the rolling code’s authentication software was copyrighted and the rolling code an effective TPM.

At trial, Chamberlain claimed it designed the rolling code specifically for consumer benefit, as it would serve to foil robbers using “code grabber” devices capable of identifying, and then transmitting, frequencies receivers are attuned to. Since even plaintiff experts were unable

\textsuperscript{176} Corley, 459.
\textsuperscript{177} \textit{Ibid.}, 1134-5.
\textsuperscript{178} \textit{Ibid.}, 1141.
to provide a single instance of the phenomenon, however, this was rejected as a theoretical concern by the court.\textsuperscript{179}

Unlike \textit{Reimerdes}, which turned on TPM efficacy, “authorization” proved determinative. At the district court level, the rolling code software’s changing frequencies were deemed effectively protective. Chamberlain acknowledged that it did not explicitly prohibit purchasers from programming competing universal transmitters. But, it contended, the product’s website and warranty had implied terms forbidding purchasers from using competing aftermarket products.

The district court refused to find an implicit restriction, especially in light of “longstanding industry practice” of universal transmitter sales.\textsuperscript{180} Instead, it sided with Skylink’s contention 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.”\textsuperscript{181} Consumers, the district court proclaimed, may reasonably expect to replace the original product with a competing universal one without violating federal law; they are therefore free to forego the benefits of a product’s warranty and use the purchased product as they wish.\textsuperscript{182}

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

\textsuperscript{179} Chamberlain III, 1183-4.

\textsuperscript{180} \textit{Ibid.}

\textsuperscript{181} Chamberlain Group, Inc. v. Skylink Techs., Inc., 292 F. Supp. 2d 1023, 1032 (N.D. Ill. 2003) [Chamberlain I].

\textsuperscript{182} Chamberlain Group, Inc. v. Skylink Techs., Inc., 292 F. Supp. 2d 1040, 1046-7 (N.D. Ill. 2003) [Chamberlain II].
software were said to have an “inherent legal right” to use their copy. Moreover, Chamberlain’s DMCA construction was rejected as it “would allow virtually any company to attempt to leverage its sales into aftermarket monopolies—a practice that both the antitrust laws, and the doctrine of copyright misuse” prohibit. The DMCA, as part of the Copyright Act, does not limit the scope of the antitrust laws, either explicitly or implicitly.

Purporting to consider the statute’s “plain language”, the Federal Circuit actually created a novel test for § 1201 evaluations, the language of which is found in neither the statute nor legislative history. It placed the onus on copyright holders to show a “reasonable relationship” between the circumvention and use of the copyrighted work. The court conceded that the construction “may create some uncertainty and consume some judicial resources”; indeed, the laconic principle has barely been followed.

Crucially, the decision’s precedential value lies in a narrow holding: the product’s warranty and website did not render users unauthorized, but this is only due to the fact that

183 Chamberlain III, 1202.
184 Ibid.
185 Ibid., 1201.
186 Ibid., 1194.
188 Chamberlain III, 1204.
189 Ibid., 1203.
190 But see MGE.
Chamberlain did not bar such use explicitly: \textsuperscript{191} rightsholders can expressly dictate terms for consumer use. The court warned that not adopting its “reasonable relationship” scheme would “allow any copyright owner, through a combination of contractual terms and technological measures, to repeal the fair use doctrine with respect to an individual copyrighted work”. \textsuperscript{192} While the 6\textsuperscript{th} Circuit’s \textit{Lexmark} holding soon became anti-circumvention jurisprudence’s pro-consumer high watermark, the prophecy came to embody the landscape shortly thereafter.

Lexmark manufactured a printer and replacement cartridges that used an authentication sequence TPM called a “Printer Engine Program” (PEP). It sold condition-free full-price cartridges in addition to PEP-mounted discounted ones that had to be returned to the company to be replaced. \textsuperscript{193} Static Control created and sold a microchip that overrode PEP, allowing its cartridges to interoperate with the printer. The district court determined that since the microchips bypass the printer’s authentication sequence without Lexmark’s authorization, Static Control was liable under § 1201(a)(2). \textsuperscript{194}

The district court noted that while “access” is not defined by the legislation, it may be gleaned from its “ordinary, customary meaning”. \textsuperscript{195} Using a dictionary, it declared this to be “the

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{191} Chamberlain III, 1187.
\item \textsuperscript{192} Chamberlain III at 1178.
\item \textsuperscript{193} \textit{Ibid.}, note 41.
\item \textsuperscript{194} Lexmark I, 253 F. Supp. 2d 943, 974 (E.D. Ky. 2003) [Lexmark I].
\item \textsuperscript{195} \textit{Ibid.}, 967.
\end{enumerate}
\end{footnotesize}
ability to enter, to obtain or to make use of”. But this disregards the fact that “access” tends to have a more discreet meaning in copyright inquiries: the ability to “see, hear, or copy a copyrighted work” and “thus having the opportunity to copy” it. Digital copyright law involves a more elaborate definition still, since access requires the mediation of a machine making the underlying software code humanly-cognizable; such technological nuances are trebled in the context of DMCA interpretation.

Public policy and antitrust law do favour competition, the court continued, but only when “legitimate”. It denounced Static Control’s interoperating cartridges, since they “could result in a multitude of harms to Lexmark”, including “fewer customer orders, reduced margins, potential market share loss,” damaging reputation and customer relations.

In stark contrast, the Sixth Circuit found that since Lexmark had not directed security efforts—such as encrypting the code of its authentication sequence—the TPM was not effective and no illicit circumvention had taken place. It was the consumer’s purchase of the Lexmark printer, rather than the company’s, or the purely technical process of, authentication that spelt access. Congress, the court declared, did not “express an interest in creating liability for the

198 Ellis v. Diffie, 177 F.3d 503, 506 (6th Cir. 1999) (“Access is essentially ‘hearing or having a reasonable opportunity to [view] the plaintiff[‘s] work and thus having the opportunity to copy’” (quoting *Tree Publ’g Co. v. Warner Bros. Records*, 785 F. Supp. 1272, 1274 (M.D. Tenn. 1991)).
199 Lexmark I, 973.
201 Lexmark II, 549.
circumvention of technological measures designed to prevent consumers from using consumer goods while leaving the copyrightable content of a work.”

The court acknowledged that the authentication sequence blocks one form of access: the ability to make use of the printer by making it function (by barring PEP access). But, determinatively, it “does not block another relevant form of ‘access’”—the ability to obtain a copy and make use of the “literal” elements of the program (ie, its code). This, the court reasoned, meant that a finding of DMCA circumvention here would be akin to claiming a locked back door prevents access to the house by a purchaser who had both received a back-door key and discovered the front door contained no lock.

As in the Chamberlain appeal, the rationale was laid out in a novel and intricate scheme. Copyright protection was said to operate on “two planes,” one literal and the other non-literal. In the case at hand the former was said to be the code itself, and the latter the “visual or audio manifestation generated by the code’s execution”. Since Lexmark’s copyrightable expression only functioned on the literal plane, the output of which was solely functional, there was no actionable circumvention.

A critical flaw inherent in the methodology is that had the literal elements been inaccessible (through encryption, say) then an application of information would be required for

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203 Ibid., 549.
204 Ibid., 547.
205 Ibid., 547.
206 Ibid., 548.
207 Ibid., 549.
access, resulting in illegitimate circumvention. Judge Merritt’s concurrence proposes an alternative scheme that would alleviate this—shifting the burden to have future claimants “show the requisite ‘primary purpose’ to pirate a copyrighted work rather than to ensure” interoperability.\(^{208}\)

A second fundamental deficiency in the ruling is its 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.\(^{209}\) Subsequent case law showcases how rightsholders have, as per Judge Merritt’s prediction, “us[ed] the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves just by tweaking the facts of this case”.\(^{210}\)

\[\textbf{D. Later Jurisprudence: Licenses Reign Supreme}\]

\textit{Davidson}, decided shortly after \textit{Chamberlain} and \textit{Lexmark}, eerily embodies such concerns vis-à-vis rightsholder deployment of comprehensive contractual and technological measures. Plaintiff Blizzard produced video games and ran a free online multiplayer gaming site for them at Battle.net.\(^{211}\) Paradoxically, a surge in the site’s popularity adversely affected the user experience, as there were increased instances of system crashes, profanity, and cheating.\(^{212}\)

\(^{208}\) \textit{Ibid.}, 553.

\(^{209}\) \textit{Ibid.}, 530 (the majority only mentions it in passing). Non-Prebate cartridges were sold without a discount, and not subject to restrictive agreements such that they could be refilled however the consumer liked. But see \textit{Ibid.} 563 (Judge Feinkens—who concurred in part and dissented in part—found that the requirement would likely be found valid and enforceable if properly considered).

\(^{210}\) \textit{Ibid.}, 553.

\(^{211}\) Davidson & Associates v. Jung, 422 F.3d 630, 633 (8th Cir. 2005) [Davidson II].

\(^{212}\) \textit{Ibid.}, 635.
Frustrated, the defendants, a group of volunteer gaming enthusiasts, established an alternative non-profit site for playing their Blizzard games at bnetd.org.\footnote{Ibid.}

Blizzard game purchasers received a CD-ROM copy containing a unique CD key,\footnote{Davidson & Assocs. v. Internet Gateway, 334 F. Supp. 2d 1164, 1169-70 (E.D. Mo. 2004) [Davidson I].} and Battle.net’s TPM checked the key with each user log-in facilitating a “secret handshake.”\footnote{Ibid., 1184.} The defendants actually wanted to implement the handshake on their server to verify that gamers were using legitimately-purchased copies, and contacted Blizzard to that end (asking for a list of CD keys to check against), but they were rebuffed. This resulted in the defendants’ castigation, as the “bnetd.org emulator did not determine whether the CD key was valid or currently in use by another player” such that unauthorized copies could be played on it.\footnote{Davidson II, 642}

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 in their own copies was authorized.\footnote{Ibid., 1184.} The court disagreed, finding a § 1201(a) violation: while the defendants “lawfully obtained the right to use a copy of the computer programs”, 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.\footnote{Ibid., 1185.}
The defendants challenged the EULA and TOU on the grounds that: (i) their prohibition on reverse engineering violated fair use rights, and (ii) their prohibition on “matchmaking” services was anticompetitive.\textsuperscript{219} The court succinctly declared that “[r]everse engineering as a fair use is firmly established”,\textsuperscript{220} but then dispensed of both challenges by finding fair uses could be contracted around.

Whereas Chamberlain found such conduct could constitute copyright misuse, Davidson found that the stringent terms in the EULA and TOU did not since: the agreements’ language neither prevented the defendants from competing with Blizzard by developing their own video games nor demanded they only buy Blizzard games; the defendants were free to terminate the licenses at any point; and lastly, the court was reluctant to apply copyright misuse to this “contract” claim, finding it customarily reserved for copyright infringement cases.\textsuperscript{221}

The latter point implicates the defendants’ argument that any violations should be classified as contractual, not DMCA, ones. The court recognized a disjuncture between two district court interpretations of reverse engineering prohibitions under state law and licensing contracts. Vault Corp. v. Quaid Software, Ltd.,\textsuperscript{222} the decision cited by the defendants, found a restriction in Vault’s license agreement—disallowing decompilaiton and disassembly—unenforceable, as it “conflict[ed] with the rights of computer program owners under § 117 and

\begin{footnotes}
\item[219] Ibid., 1180 (matchmaking is the principle of allowing players to come together in playing the same online game)
\item[220] Ibid., (referencing Bowers v. Baystate Tech., Inc., 320 F.3d 1317, 1325 (Fed.Cir.2003) to the effect that reverse engineering is a Section 107 fair use).
\item[221] Ibid.,1182-3.
\item[222] 847 F.2d 255 (5th Cir.1988).
\end{footnotes}
clearly touche[d] upon an area of federal copyright law.” But the court relied on *Bowers* instead, a holding that “private parties are free to contractually forego the limited ability to reverse engineer a software product under the exemptions of the Copyright Act.”

Thus, whereas *Lexmark* effectively ignored its shrinkwrap licence, *Davidson* and subsequent decisions took theirs 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. The only outlet users were provided with to opt out of a contractual term was to return the game within the thirty-day period provided within them. By not returning their games, the defendants accepted the agreements wholesale, waiving rights including fair use and reverse engineering. The court thus began the trend of overturning legislated and common law defences by simply looking to the rightsholder’s contractual stipulations.

Blizzard returned to court over World of Warcraft (WoW), which was then the world’s most popular multiplayer game, with over 10,000,000 active subscribers and annual revenues in excess of $1.5 billion. Blizzard’s copyrighted software involved both a “game client” and a

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223 Davidson I, 1180-1 (citing 269-70)
225 Davidson I, 1170-1.
“game server.”\textsuperscript{228} The former was accessible to any consumer who made a one-time purchase and loaded it onto her personal computer; the latter was maintained by Blizzard and only accessible to consumers who also paid a monthly fee. Users had to agree to the TOU and EULA before accessing either service, and were then permitted to play, advancing through levels as they attained experience and equipment in a savage alternate universe.

MDY created and sold “Glider,” a bot program that could play WoW for users while they were away from their gaming systems, enabling them to gain equipment and advance through levels more rapidly.\textsuperscript{229} MDY branded itself as an innovator enhancing users’ gaming experience—Glider even enabled some disabled people to play.\textsuperscript{230} Blizzard contended that the program disrupted its “carefully balanced competitive environment”, with some of its users mining virtual good and selling them on real auction sites.\textsuperscript{231}

The court found that MDY violated 1201(a)(2) by circumventing two Blizzard TPMs: (i) “scan.dll,” which scanned the user’s computer for unauthorized programs upon log-in, and (ii) “resident,” which checked periodically during play.\textsuperscript{232} The decision purported to simply affirm \textit{Lexmark}, lengthily quoting its literal/nonliteral distinction, but it added a “dynamic” sub-element to the latter category in order to make the anti-circumvention charge stick.

\textsuperscript{228} MDY Industries, LLC v. Blizzard Entertainment Inc. 2008 WL 2757357 (D.Ariz.), 1 [Blizzard I].
\textsuperscript{229} Ibid.
\textsuperscript{230} Ibid.
\textsuperscript{231} Ibid.
\textsuperscript{232} Ibid.,
As far as the “literal” elements were concerned, the opinion went, Blizzard’s game client code could be taken from users’ hard drives and freely viewed or copied (onto a hard drive, CD, or other media). Since neither scan.dll nor resident controlled access, 1201(a)(2) did not apply to the game’s literal elements.\(^{233}\) But, the court, continued, the literal elements constituted only a fraction of the software.

A markedly different tone was adopted for the nonliteral elements. WoW, the analysis began, featured more than 400,000 such elements, including graphics and sounds.\(^{234}\) MDY’s contention that users, rather than Blizzard, controlled these elements was rejected. Yes, the court agreed, users may access and “call up” discrete elements stored on their own drives without logging in or bypassing the TPMs, but such activation takes place in a “void,” whereas it is “the combination of these components as prompted by the Blizzard server that creates the dynamic WoW environment.”\(^{235}\)

This rationale also led to the rejection MDY’s contention that the elements were neither fixed nor copyrightable and thus not “work[s] protected by this title” as required by 1201(a)(2). User interaction was found not to defeat the copyrightability of audio-visual game displays.\(^{236}\)

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\(^{233}\) *Ibid.*,.

\(^{234}\) At 965.

\(^{235}\) At 965.

\(^{236}\) At 966-7.
such that Glider users engage Blizzard’s access controls, resulting in both 1201(a)(2)\textsuperscript{237} and 1201(b) violations.\textsuperscript{238}

As in *Davidson*, the court then turned to see whether MDY infringed Blizzard’s copyright or breached its contract. It tersely determined that the license (the EULA and TOU) was “limited” and thus not superseded by federal law: the document’s title “‘Grant of Limited Use License’—makes clear that the license is limited, as does the later reference to a ‘limited, non-exclusive license.’”\textsuperscript{239} Users violated the license by both using bots and allowing Glider to copy parts of the game onto RAM, such that “the act that exceeds the scope of the license and the act that violates Blizzard’s copyright are the same.”\textsuperscript{240}

The defense of copyright misuse, which was invoked in *Chamberlain* but resisted in *Davidson*, “prevents copyright holders from leveraging their limited monopoly to allow them control of areas outside the monopoly.”\textsuperscript{241} The court rejected MDY’s claim that Blizzard’s bot prohibition amounted to copyright misuse by preventing licensees from using “independently created and noninfringing third party software.”\textsuperscript{242} The analysis was straightforward here too:

\textsuperscript{237} At 964–6.
\textsuperscript{238} At 968.
\textsuperscript{239} Blizzard I, 5.
\textsuperscript{240} Ibid., 7.
\textsuperscript{241} Ibid.
\textsuperscript{242} Ibid.
Glider infringed copyright, the Blizzard license was limited, and there was “no evidence that Blizzard has sought to bar third parties from developing competing games.”

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” where doing so is an “essential step” in the program’s utilization. An amicus brief suggested that WoW purchasers own the program within the meaning of the section such that they were permitted to use Glider as they wished. Again, the court simply turned to the EULA and found that the “limited license” specifically and effectively limited such use.

RealNetworks (Real) chose, like 321, to be proactive and bring a preemptive suit against the DVD CCA and related Hollywood studios in seeking a declaratory judgment that its “RealDVD” neither breached the DVD CCA license nor violated the DMCA. RealDVD allowed for audio-visual content to be time- and space-shifted, much as the Betamax device did in pre-digital Sony, and Real made significant efforts to legitimate it.

Real’s marketing was directed at lawful DVD owners, encouraging them to make backup copies in preparation for loss or, more likely, damage (discs scratch easily). Its EULA specifically forbade users from copying discs they do not own—including borrowed or rented

\[243\] Ibid.,
\[244\] Ibid.
\[245\] Ibid., 8.
\[246\] Ibid., 9.
\[247\] Real, 913.
ones. Perhaps most significantly, while its device did strip CSS as it stored movies, it also placed even stronger encryption, the “Advanced Encryption System” on exported copies, such as burned DVDs. Still, 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 RealDVD would primarily be used for legitimate purposes.

Real invoked MDY’s argument that any violation would only be a breach of contract, not copyright or the DMCA, but the court simply found both by placing the infringing act outside of the scope of the license. Acknowledging that no licensee had ever been found guilty of a DMCA violation, it found that “no licensee has been so bold”, and that licensed devices are not shielded from DMCA liability when performing unlicensed functions. Tellingly, this was framed 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.”

Congress, reasoned the court, designed § 1201 to apply “products like RealDVD [that] are expressly designed to circumvent technological measures for purposes of thwarting the rights of copyright owners’ to decide who may gain access to their copyrighted works in digital format

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248 Ibid., 927.
249 Ibid., 936.
250 Ibid., 934.
251 See, eg, Combe v Combe [1951] 2 KB 215 at 220, estoppel “is a shield not a sword”.
252 Real, 936.
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, announcing that the statute “did expand the existing rights of copyright owners… by creating new grounds for liability”, and dispensing with fair use arguments by defanging Sony—“‘substantial noninfringing use’ reasoning has no application to DMCA claims.” While the court recognized a novel implicit “user exemption” in the DMCA, it immediately folded it into a paper tiger: “while it may well be fair use for an individual consumer to store a backup copy of a personally-owned DVD on that individual’s computer, a federal law has nonetheless made it illegal to manufacture or traffic in a device or tool that permits a consumer to make such copies.”

Citing Reimerdes and Elcom, the court thus came full circle, with the absurd result 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 is”. The state of the law, it decreed, is that while it is not unlawful to circumvent for to

253 Ibid. (italics mine).
254 Ibid., 941.
255 Ibid., 941.
256 Ibid., 942.
257 Ibid., 943 (citing Reimerdes, 325).
conduct such limited fair use, it is unlawful to traffic in tools enabling it, and only Congress can disturb this “balance.”

IV. LICENSING GENERATIVITY

A. The Court’s Approach to Intellectual Property Licensing

Contemporary case law has thus revolved around the license-TPM nexus, as the general rule by which federal copyright law preempts state contract law (under the Supremacy Clause) has been effectively displaced in DMCA jurisprudence. Courts have had to choose between deeming purchases “licenses,” permitting contractual terms to reign over copyright exceptions, or “sales”—regardless of vendor characterization—impinging upon freedom of contract and rightsholders’ ability to protect their work. Producers of digital content, have, from the outset, framed them as licenses rather than as sales, and while the general legal landscape remains murky, DMCA courts have roundly approved.

_258 Ibid., 943 (citing Elcom, 1125)._  
_259 Ibid., 943._  
_260 U.S. CONST. art. VI, cl. 2._  
_261 See, eg, 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.”))_  
_262 See Michael Seringhaus, E-Book Transactions: Amazon ‘Kindles’ the Copy Ownership Debate, 12 Yale J.L. & Tech. 147, 181 [Seringhaus]._  
_263 See Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 96 n.7 (3d Cir. 1991) (when “form licenses were first developed for software, it was, in large part, to avoid the federal copyright law first sale doctrine.”)_  
_264 See Seringhaus, 150._
Lexmark practically ignored the shrinkwrap agreement placed on the product’s box.\textsuperscript{265}

When Chamberlain, the other decision generally heralded as pro-consumer\textsuperscript{266}, is read carefully, it actually stands for license sovereignty. While the Federal Circuit upheld the district court’s pro-consumer result,\textsuperscript{267} it decreed that the rightsholder could have foisted restrictive terms,\textsuperscript{268} and even provided a blueprint for “leverag[ing] sales into aftermarket monopolies”.\textsuperscript{269} Purchasing users, the analysis goes, “expressly consent[]” to license terms, forfeiting all fair use rights, “by clicking ‘I Agree.’”\textsuperscript{270} Even public domain works entwined in e-book TPM have been sanctioned by courts, as users “acquiesce[] in this restriction when purchasing/licensing the work.”\textsuperscript{271}

Licenses thus become “public law,”\textsuperscript{272} as for DMCA courts, “the act that exceeds the scope of the license and the act that violates [the rightsholder’s] copyright are the same.”\textsuperscript{273}

Brian Carver laments that by “allowing copyright owners to both retain title to copies of their copyrighted works and forbid the use of those copies in conjunction with third-party software”,

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\textsuperscript{265} Lexmark International, Inc. v. Static Control Components, Inc.387 F.3d 522, 530 (6th Cir. 2004) (mentioning it in passing). But see \textit{ibid}. , 563 (Judge Feinkens, who concurred in part and dissented in part, found the license would likely be valid and enforceable).

\textsuperscript{266} Eg. Elkin-Koren, 1132 (calling Chamberlain and Lexmark “dream cases”).

\textsuperscript{267} Chamberlain II, 1040 (based on consumer rights stemming from purchase including a right to replace original components with competing ones, and to forgo warranty terms and use products as they see fit.)

\textsuperscript{268} Chambelain III, 1187 (on its website, warranty, or elsewhere).

\textsuperscript{269} \textit{Ibid}. , 1202

\textsuperscript{270} \textit{Ibid}. , 1178.

\textsuperscript{271} United States v. Elcom 203 F. Supp. 2d 1111 at 1125 (N.D. Cal. 2002).

\textsuperscript{272} Seltzer, 21.

\textsuperscript{273} Blizzard I, 6.
courts enable rightholders to “control those external markets with a stroke of the pen.”

Surveying a century of case law, I find that pre-DMCA courts not only refused to allow such licensing to displace public law, but also blasted rightsholder attempts to do so. I conclude by pointing to the most recent batch of LoC rulemaking exemptions and a Fifth Circuit decision, both of which align with history rather than DMCA precedent.

Combining the DMCA with licensing dangerously blurs copyright-patent boundaries, effectively granting rightsholders a century’s worth of protection, creating aftermarket monopolies, and cutting against core copyright principles. The Copyright Clause is the only Constitutional provision that limits Congress’s powers through stipulations, including to whom monopolies may be granted, to what end, and for what duration; this circumscription likely stems from the Framers’ skepticism of Monopolies. A “subtle and esoteric area of the

274 Brian Carver, Why License Agreements Do Not Control Copy Ownership: First Sales and Essential Copies, BTLJ (March 19 version, forthcoming 2010), 8 [Carver].

275 See 17 U.S.C. § 302(a), (c) (extending copyright for the life of the author plus seventy years, or the shorter of ninety-five years from publication or 120 years from creation in the case of works for hire.)

276 U.S. Const. art. I, § 8, cl. 8 (intended “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.”)

277 Ibid. (authors and inventors—notably, rightsholders are often neither.)


279 See, eg, 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) (“The 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.”)

law,” copyright should “evolve[] in response to technological change”—281 and it has done so effectively until the advent of digital age paracopyright.

While technology has radically transformed in the Internet era, the courts have could have applied Sony principles to the quagmire, as I discuss above. I now move to show that courts have been historically weary of licenses purporting to grant more powers than intellectual property laws provide, especially when copyright-patent hybrids are created. Jefferson’s appeal that we deal with the Copyright Act’s moderate imperfections and practically accommodate ourselves to them is remarkably applicable to our DRM-licensing nexus.

In a recent unanimous decision, Quanta, the Supreme Court surveyed the history of its rulings on postsale restrictions by patent holders.282 While a 1912 decision permitted such restrictions on the use of patented articles,283 it was “shortly lived” as the Court refused to apply it just a year later.284 Then, taking note of an increasing tendency by patent holders “to limit the use of their products and thereby using the patents to secure market control of related, unpatented items”,285 it “explicitly overruled” the decision in 1917.286

The overruling case, Motion Picture Patents, concerned a patent for a mechanism facilitating the consistent threading of film through projectors, resulting in significantly less

281 White Paper, 7.
284 In See Bauer & Cie v. O’Donnell, 229 U. S. 1, 14–17 (1913), a price-fixing provisions incorporated in licensing terms.
286 Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U. S. 502, 518 (1917) [Motion Picture Patents].
wear.\textsuperscript{287} The patent holder (a trust which was Thomas Edison’s brainchild) labeled its projectors with a notice precluding projection of films not made by it.\textsuperscript{288} \textit{Quanta} affirmed both the court’s approach: “Observing that ‘the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is ‘to promote the progress of science and useful arts’”,\textsuperscript{289} and its conclusion: “the right to vend is exhausted by a single, unconditional sale, the article sold being thereby carried outside the monopoly of the patent law and rendered free of every restriction which the vendor may attempt to put upon it.”

Reflecting on the decision’s significance, Brian Carver insists it means 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 are invalid”.\textsuperscript{290} Others do not share his confidence, finding that the case “left open the questions of whether patent owners can contract around the principles of exhaustion”.\textsuperscript{291} Carver resolves the contradiction by finding that rightsholders have spellbound the courts, using licensing purporting “to reserve title in the tangible object itself, while allowing every other feature of the transaction to look like a sale (or vending)”, magically “avoid[ing] over a century of Supreme Court precedent and Congressional policy.”\textsuperscript{292} My survey of the case law bears out this claim.

\footnotesize

\textsuperscript{287} Ibid., 505.

\textsuperscript{288} Ibid., 505-7.

\textsuperscript{289} Ibid., 511 (quoting U. S. Const., Art. I, §8, cl. 8).

\textsuperscript{290} Ibid., 516.


\textsuperscript{292} Carver, 48.
A century ago, Bobbs-Merrill prominently displayed a notice in copies of The Castaway, under its copyright notice, declaring: “The price of this book at retail is one dollar net. No dealer is licensed to sell it at a less price, and a sale at a less price will be treated as an infringement of the copyright.”\textsuperscript{293} Macy’s bought books at bulk wholesale prices, and proceeded to sell them for 89 cents each—upending the publisher’s aftermarket monopoly machinations. The Supreme 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”\textsuperscript{294}. When individuals purchase iPads for hundreds of dollars,\textsuperscript{295} I argue, they acquire similar control.

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.\textsuperscript{296} It also developed a hierarchical licensing regime, instituting an extensive “License Contract” with its distributors, only granting them rights: “to use [the device] for ‘demonstrating purposes’” and to enable dealers to convey a “license to use the machine” upon members of the general public upon receipt of a “royalty” of at least $200. Victor purported to retain title throughout and attached a host of conditions including a right to inspect or service

\textsuperscript{293}Bobbs-Merrill Co. v. Straus 210 U.S. 339, 342 (1908)
\textsuperscript{294}Ibid., 349-50.
\textsuperscript{295}See \url{http://store.apple.com/us/browse/home/shop_ipad/family/ipad} (iPad prices range from $499-$829).
the machine at any time, and even repossess it upon any “excessive use or violation of the [licensing] conditions”. Accepting the device supposedly constituted accepting these conditions.

The Court lambasted the scheme to brand such sales as licenses. Victor’s ostensible “royalty,” for instance, was found 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’”. Courts would have to be “perversely blind” to declare such full-price restrictive sales “license notices,” as such attempts “have been hateful to the law from Lord Coke’s day to ours [and] obnoxious to the public interest.”

_Hush-A-Phone Corp. v. U.S._ considered a tariff’s prohibition on an innovative “foreign attachment.” AT&T sued the author of a cup-like device that attached to the telephone handset and provided its users with increased privacy, better call quality, and a quieter office environment. The court rejected both the suit and the underlying 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.” Inconveniencing the user by forcing him to cup his hand rather than utilize a

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297 **Ibid.** at 500.

298 **Ibid.** at 500-1. See R. Kent Newmyer, _Supreme Court Justice Joseph Story: Statesman of the Old Republic_ (University of North Carolina Press 1985), 41 (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 would be familiar to readers of the judgment, and it had just been cited approvingly by Mr. Justice Hughes writing 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 -5 (1911). (Quoting sec. 360: “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.”)

device freeing his hand to write “or do whatever else he wishes, is neither just nor reasonable”. 300

A decade later, in Carterfone, the FCC applied Hush-A-Phone to a more sophisticated mechanism, finding “no material distinction” between the foreign attachment principle and “interconnection devices.” 301 The Carterfone connected two-way radio users with telephone callers through a mobile radio base station. Its internal switching facilitated wireless, two-way “telephone” conversation—302 a boon to managers and labourers on massive oil fields and cattle ranches. 303 AT&T sued under tariff FCC No. 263, “No equipment, apparatus, circuit or device not furnished by the telephone company shall be attached to or connected with the facilities furnished by the telephone company, whether physically, by induction or otherwise.”

The FCC struck down the provisions prohibiting usage of such “customer-provided” interconnecting devices, finding them unreasonable. 304 It emphasized that such rules would place “a clearly improper burden upon the manufacturers and users of other devices.” 305 A subsequent

300 Ibid.
301 In the Matter of Use of the Carterfone Device in Message Toll Telephone Service, 13 FCC2d 420 (1968); 13 Rad. Reg. 2d (P & F) 597, 423-4 [Carterfone].
302 Ibid. at 420.
304 Carterfone, 423.
305 Ibid., 425.
DCC report credited the decision with making “the Internet…the global medium that it is today.”

Both scenarios are, as I will demonstrate, akin to iPad DRM, but it is perhaps the recently-affirmed *Motion Picture Patents* which most vividly invokes it: “A restriction 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 … is plainly void because wholly without the scope and purpose of our patent laws, and because, if sustained, it would be gravely injurious to that public interest, which we have seen is more a favorite of the law than is the promotion of private fortunes.”

Since Internet technology, entertainment, and speech are so entangled with copyright, patent, and DRM on devices like the iPad, the next section shows it is increasingly vital not to let related licensing schemes become public law.

### B. Ipad DRM

I could be bounded in a nutshell, and count myself a king of infinite space

1. IPad Licensing

    The iPad’s (and to a lesser extent, the iPhone’s) DRM scheme is uniquely comprehensive, as a tangle of TPMs is complemented by expansive licensing terms cutting to

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306 The FCC and the Unregulation of the Internet, Jason Oxman, Federal Communications Commission, Washington DC 20554, July 1999, OPP Working Paper No. 31 at 15 (explaining that it did so by enabling consumers to “purchase … install and use [modems] without permission from the telephone company.”)

307 Carterfone, 519.

308 *Hamlet*, Act 2, Scene 2, 259.
core Internet and speech principles, and key distinctions like author-readers and device-software are blurred. Under Apple’s license, purchasers are granted a “non-exclusive license to use the iPad Software on a single Apple-branded iPad”.

Accepting the license terms—a mandatory step in using the device—purchasers consent to a host of conditions, agreeing not to: “copy… decompile, reverse engineer, disassemble, attempt to derive the source code of, decrypt, modify, or create derivative works”. 310 My DMCA case law analysis above suggests that such a license is likely to pass juridical muster such that even where rights may be otherwise granted, statutorily or through common law, they would be superseded by Apple’s license terms.

Still, sales have been record-breaking, 311 and this is in large part due to its treasure of applications (apps), 312 as a virtuous cycle has been established, providing consumers with increasingly tailored applications and developers a large customer-base. There are more than 250,000 different available applications, and billions have been downloaded. 313 App developers are, in a sense, authors and rightsholders, as they produce each application, determine its price, and get paid based on units sold (Apple earns 30 percent of each sale and 40 percent of in-

309 The iPad and iPhone both utilize the same operating system and similar DRM scheme, so much of my argumentation applicable to the two, but due to features like its large screen and lack of phone capabilities, they are more salient with regard to the iPad.
310 iPad License, 2(a)-(c).
312 Applications or “apps” are user-friendly, function-specific programs.
application advertisement revenue). But here too, the iPad, as mediator, scrambles our author-reader dichotomy.

Developers actually occupy an uneasy space in the rightsholding scheme, more akin to licensee than author. As many as one thousand applications are removed from the system daily, and many others are rejected or restricted after being accepted. Apple has carte blanche to refuse to distribute apps “at any time” if, inter alia, it believes doing so is “prudent or necessary” or suspects that the application: infringes anyone’s rights; adversely affects a network, hardware or software; or “overburdens” any service. The developer agreement has restrictions on reverse engineering and creating modified works, like the regular user’s agreement, but it goes farther still with draconian rules including a prohibition on “public statements” about the license or their relationship with Apple.

Indeed, speech is an iPad touchstone. Political cartoonists, for instance, have found themselves muzzled. Pulitzer prize winner Mark Fiore found his “NewsToons” (satirical takes on newsworthy figures like President Obama and Tiger woods) rejected, as did MAD Magazine artist Tom Richmond for his “Bobblehead Rep”—a database of members of Congress featuring

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316 See Shafer.

317 iPad License, 8(a), (b), (d), (j), (l).

318 Ibid. 10.4.
depictions of each representative alongside their official contact information.\textsuperscript{319} Apple ruled that both applications “ridicule public figures” in contravention of the developer licensing agreement.\textsuperscript{320} As voluntary public figures, though, such subjects enjoy minimal privacy under US law, and Apple’s policy runs counter to the spirits of democracy and the First Amendment.\textsuperscript{321}

On a similar note, CEO Steve Jobs has taken pride in proclaiming Apple’s “moral responsibility” to keep pornography off the iPad.\textsuperscript{322} The pledge sounds less puritanical than hypocritical when one considers the salacious apps from Playboy and Sports Illustrated which stay on while text-only versions of public domain classics like the \textit{Kama Sutra} are routinely

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  \item \textsuperscript{319} See Michael Cavna, \textit{Why Does Apple Hate Political Satire? Pulitzer winner’s app case stokes larger failure}, Apr 16, 2010, available at \url{http://voices.washingtonpost.com/comic-riffs/2010/04/power_of_the_pulitzer_apple_re.html} [Cavna]
  \item \textsuperscript{320} See 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”; Cavna; Joel Schectman, \textit{20 Rejected iPhone Apps}, September 7, 2009, available at \url{http://images.businessweek.com/ss/09/07/0731_rejected_iphone_apps/index.htm} (noting that a developer who submitted, “Freedom Time”, an application featuring a cartoon image of President GHW 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.”)
  \item \textsuperscript{321} See Scott J. Shackelford, \textit{Fragile Merchandise: A Comparative Analysis of the Privacy Rights for Public Figures} (April 28, 2009), available at SSRN: \url{http://ssrn.com/abstract=1396378}, 26 (explaining—citing \textit{RESTATEMENT (SECOND) OF TORTS} § 652D (1977)—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, or by submitting himself or his work for public judgment, cannot complain when he is given publicity that he has sought, even though it may be unfavorable to him.” Not only may “The legitimate interest of the public in [such an] individual may extend beyond those matters which are themselves made public, and to some reasonable extent may include information as to matters that would otherwise be private.”); \textit{ibid.}, 42 (noting that even involuntary public figures, only enjoy “spotty protection at best”.)
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rejected for “objectionable content”.\textsuperscript{323} Farcically, a version of James Joyce’s \textit{Ulysses}—widely regarded as a 20\textsuperscript{th} century masterpiece\textsuperscript{324} and famously banned for obscenity in 1921—was rejected for a cartoonish depiction of a plump man diving nude.\textsuperscript{325}

While it has no bearing on the process by which Apple, a private company, approve its apps, the rationale for \textit{Fox Television Stations Inc. v. F.C.C.}, the recent 2\textsuperscript{nd} Circuit decision quashing the FCC’s indecency policy, is illuminating.\textsuperscript{326} 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.”\textsuperscript{327}

Other rejected apps raise competition concerns. A prime example is Google’s “Latitude,” which, unlike services like Foursquare—which require that users “check-in” to locations as they arrive—automatically tracks and displays users’ real-time geolocational information. Apple

\textsuperscript{323} See Jim Dalrymple, \textit{Apple rejects iPhone app over access to Kama Sutra}, CNET, May 22, 2009, available at: \url{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).

\textsuperscript{324} It ranks, for instance, as the Modern Library’s best novel of the 20\textsuperscript{th} century, available at \url{http://www.randomhouse.com/modernlibrary/100bestnovels.html}


\textsuperscript{326} \textit{Fox Television Stations Inc. v. FCC}, 06-1760, U.S. Court of Appeals for the Second Circuit (Manhattan).

\textsuperscript{327} \textit{Ibid.}
purported to refuse it for consumers’ benefit, so they are not confused between it and the already-enabled “Google Maps” application, but the latter simply displays static maps.\textsuperscript{328}

Similarly, Camera+ a phototaking app, enabled users to snap shots using a volume button rather than having to press the screen, and to thus avoid shaking the device. Again, Apple claimed to disable the app for user benefit—but users seemed to want the feature, as downloads skyrocketed after the feature was enabled.\textsuperscript{329}

“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. The application was rejected for offering “duplicate functionality.”

In its LoC rulemaking exemption responses, Apple claimed that opening the iPad to third party applications would violate the integrity of its “ecosystem”\textsuperscript{330} and jeopardize its network, but its arguments are vague and unconvincing.\textsuperscript{331} The iPad does not utilize the phone system, and appropriately, as I discuss below, the LoC recently rejected the argument.\textsuperscript{332} This recalls

\footnotesize{\textsuperscript{328} Ibid. \textsuperscript{329} See Aulia Masna, \textit{Camera+ pulled from App Store over hidden feature}, Macworld, Aug 12, 2010, available at: http://www.macworld.com/article/153337/2010/08/cameraplus_pulled.html. \textsuperscript{330} See 43830 Federal Register/Vol. 75, No. 143/Tuesday, July 27, 2010/Rules and Regulations \textsuperscript{331} See Before the U.S. COPYRIGHT OFFICE, LIBRARY OF CONGRESS, In the matter of Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Docket No. RM 2008-8, Responsive Comment of Apple Inc. In Opposition to Proposed Exemption 5A and 11A (Class #1), 9 (“By circumventing access controls on the OS, third parties could gain unauthorized access to the BBP, which could in turn result in gaining unauthorized access to and use of the telephone network or even causing operational damage to the network.”) \textsuperscript{332} See below.}
Carterfone, where over forty years ago, AT&T argued it needed “absolute control” over the phone system, but failed to convince the court that the interconnecting service sufficiently risks causing harm sufficiently such that they “must be prohibited in order to permit the…company to carry out its service responsibilities.”

Traditional competition principles, Aaron Perzanowski convincingly demonstrates, are “unlikely to counteract consistently the power over interoperability conferred by the DMCA.”

Tying, which results when a firm conditions the sale or lease of one product on the customer’s agreement to also take a second product, requires a showing of both “actual coercion” and a high standard “economic power” by the seller. Likewise, the essential facilities doctrine, which is dubious in the IP realm generally, necessitates that claimants demonstrate the essentialness of the facility; monopolist control over it; their own inability to duplicate it; their denial of use; and the feasibility of providing it to them.

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333 Carterfone, 424.
336 Ibid. The anticircumvention cases fail to display anything close to this: in Lexmark, for instance, consumers were free to buy the non-prebate condition-less cartridges, and Blizzard game players were not obligated to join the multiplayer servers.
337 Perzanowski, 1602-3.
Privacy concerns are also exacerbated in the DMCA-licensing 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.339 Mention is not made of how information, including precise real-time geographical location data, is stored and shared.340 While particular fragments of collected data may technically be anonymous, it has been conclusively demonstrated that large specific data sets can be used to identify people based on patterns.341

A corollary issue is security research. In fact, DRM only came to the public consciousness in the wake of a scandal following a researcher’s revelation that Sony had been selling CDs that installed malicious rootkit spyware on listeners’ PCs. The revelation also brought to light the specter of a “liability chill” on security research and its dissemination, as a different graduate student had discovered the feature weeks earlier, but decided—after consulting lawyers—not to publicize his findings for fear of being sued.342 While the LoC subsequently made an exception for such research, it limited it to CDs (although DVDs had been around for

339 iPad license, 4(a).
340 Ibid., 4(b).
341 See Arvind Narayanan, Robust De-anonymization of Large Sparse Datasets (How To Break Anonymity of the Netflix Prize Dataset), In Proc. of 29th IEEE Symposium on Security and Privacy, (2008), 111, 111 available at 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”; Nicholas Carr, 206 (“anonymization provides little real protection in the face of sophisticated data-mining techniques).
over a decade); the latest round of exceptions restricted it further still, to video games playable on PCs.  

More recently, a group of hackers going by “Goatse Security” discovered and publicized a vulnerability related to a security hole on AT&T’s website. The hole exposed iPad users’ email addresses and SIM card identifiers tied to phone company subscriber databases, which could lead to gleaned personal information and even real-time geographical tracking. Compromised accounts included ones belonging to top military personnel, government officials, and private-sector executives. The hackers argued their service was in the public interest, as they ensured the hole was closed before publicizing it, destroying the user information they collected; users, it argued, had “a right to know” and take protective measures such as changing their email addresses, and iPads themselves had become safer.

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.

343 The exception only lasted one period, as latest incarnation only makes them applicable to video games playable on PCs.


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.\footnote{Daniel J. Boorstin, \textit{The Image: A Guide to Pseudo-Events in America} (Harper \& Row 1961), 85 (lamenting the way by which modern tourism cheapened real journey experiences, turning them into “pseudo events.”)}

Daniel Boorstin, who served as Librarian of Congress from 1975-87, considered the book humankind’s “single greatest technical advance”, as it provides its readers with “a private, uniquely qualitative nook”—a refuge “from the flood of contemporaneous mathematicized homogeneity.”\footnote{See Robert D. McFadden, \textit{Daniel Boorstin, 89, Former Librarian of Congress Who Won Pulitzer in History, Dies}, N.Y. Times, March 1, 2004, available at: \url{http://www.nytimes.com/2004/03/01/us/daniel-boorstin-89-former-librarian-of-congress-who-won-pulitzer-in-history-dies.html?pagewanted=1}.} But he would doubtless have disapproved of the Web tourism the iPad’s walled garden confines foster.\footnote{\textit{Ibid}. (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.”)} Likewise, President Obama, not known as an enemy of DRM,\footnote{See, eg, Remarks by the President at the Export-Import Bank’s Annual Conference Omni Shoreham Hotel, Washington, D.C., March 11, 2010 available at \url{http://www.whitehouse.gov/the-press-office/remarks-president-export-import-banks-annual-conference} (pledging to “aggressively protect” intellectual property and implement the Anti-Counterfeiting Trade Agreement); Doug Palmer, \textit{U.S. to target foreign websites in anti-piracy push}, Reuters, June 22, 2010, available at: \url{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.”)} has declared that using the iPad, “information becomes a distraction, a diversion, a form of entertainment, rather than a tool of empowerment”.\footnote{See Liz Goodwin, \textit{Tech-Savvy Obama Tells Grads Apple iPads Hurt Democracy}, \url{http://news.yahoo.com/s/ynews/20100510/pl_ynews/ynews_pl1976May} (reporting on an address to the graduating class at Hampton University in VA on May 9, 2010).}

In \textit{The Future of the Internet—and How to Stop It}, Jonathan Zittrain foresaw that generative computers and the networks they function on have had their day in the sun. Instead,
“sterile appliances tethered to a network of control” would increasingly appeal to consumers by sleekly encasing existent innovation. The downside of such packaging would be that it locks future innovation out, creating a vicious cycle for future innovation and organic user contributions.  

The iPad is the quintessential closed tethered device: a new category of device, it is “not nearly as good for creating stuff” as a PC but “infinitely more convenient for consuming it”. It makes an array of features that have become standard on computers unavailable, including: cameras, firewires, usb ports, Adobe’s Flash software; other features are extremely limited, as no alternate browser is provided and multi-tasking is curtailed. While some critics accept these limitations due to the accompanying ease of use, others have decried the closed

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352 Jonathan Zittrain, The Future of the Internet—And How to Stop It (Yale University Press 2008), 3.


354 David Pogue, State of the Art, Looking at the iPad From Two Angles, March 31, 2010, available at http://www.nytimes.com/2010/04/01/technology/personaltech/01pogue.html?pagewanted=1&partner=rss&emc=rss; Melissa Perenson, Apple iPad Delivers on Entertainment, but Lacks Productivity Punch, April 5, 2010, available at http://www.washingtonpost.com/wpdyn/content/article/2010/04/04/AR2010040400121.html?nav=rcmodule; Farhad Manjoo, I Love the iPad: Apple’s new tablet is the computer I've always wanted, available at http://www.slate.com/id/2242786 (explaining that, “In 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.”)


356 See, eg, Omar Wasow, The Techies Are Wrong about the iPad: Steve Jobs is right again. It's a computer for the rest of us, April 1, 2010, available at 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”).
nature of the system as “the exact opposite, really, of the [I]nternet, which is an open system where it’s very hard indeed to control the user experience.”\textsuperscript{357}

Even purchasing media does not necessarily make it easily usable on the iPad. Consider e-books (sales of which have already overtaken hardcovers’ on Amazon),\textsuperscript{358} whereas Amazon Kindle editions may be annotated and purchased on, read on, and synced to, numerous devices, ranging from laptops to BlackBerries, iPad iBooks may only be purchased, and read, on the device itself, and notation is disabled.\textsuperscript{359}

The walled garden has, “reinvent[ed] the personal computer, supplanting the current way of doing things with a business model in which Apple controls everything and everyone—customers, developers, advertisers. Never in the history of computing has there been a device over which one company has exerted so much control.”\textsuperscript{360} But, paradoxically, consumers have never needed more control, as their generativity, which is at its zenith, is particularly pronounced on mobile devices.

\textit{C. Accommodating the Generative Consumer}

1. Recognizing Generativity


\textsuperscript{359} See Rafe Needleman, \textit{If you can, buy your iPad books from Amazon}, April 5, 2010, available at \url{http://www.cnet.com/8301-31361_1-20001763-254.html}.

\textsuperscript{360} See Lyons.
Troublingly, the trend of increasingly restrictive DRM and licensing schemes is emerging alongside a class I call the “generative consumer.” The DMCA, copyright, and the very concept of intellectual property were founded on the premise that there are two discrete groups that must be “balanced:” creative authors (or inventors) and receptive audience members (or users). But, these historically ill-defined categories are rapidly merging, and they have company.

While she is increasingly visible on the Web, the generative consumer has been insufficiently accommodated and recognized. Nina Elkin-Koren, for instance, identifies the traditional categories of copyright consumers as the passive consumer-shopper and active consumer-author, adding a third aspect: the “consumer-participant,” who creatively “makes use of works for self-consumption—in other words, for their personal benefit alone”. In fact, the hallmark of the generative consumer is not selfish intake, but personalized diffusion.

My definition of generativity is two-pronged, connoting both the power of: (i) reproducing, procreating, or reproducing someone else’s work; and (ii) being more creatively productive. Examples of the former include retweeting—tweeting someone else’s tweet,

361 See, eg, Abraham Drassinower, From Distribution to Dialogue: Remarks on the Concept of Balance in Copyright Law 34 Journal of Corporation Law 991, 992 (2009) (noting the “widespread agreement that copyright is structured as a balance” between authors and users.)
362 See Okediji, 2384 (noting 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.
363 Elkin-Koren, 1138-9 (italics mine).
364 See Oxford English Dictionary (online).
including their handle alongside one’s own, with an “RT” attribution—\textsuperscript{365} or posting, say, a \textit{New York Times} article on one’s Facebook profile. Instances of the latter include a singer-songwriter posting their performance of an original song on YouTube. And, of course, many generative contributions fall somewhere in between, such as a fan subconsciously retweeting a musician’s tweet without attribution, or posting footage of their concert, or lip-syncing their latest hit.

While it did not adequately prepare a legal platform for the generative consumer, the White Paper did foresee its arrival: “Individuals and entities that heretofore have been predominately consumers of works can now become authors and providers [on the Web]. It can put easier, more sophisticated communication and publishing tools in the hands of the public, increasing the ability to communicate with, and disseminate works of authorship to, others.”\textsuperscript{366}

Are brief written statements like 140-character tweets actually works of authorship or artistry? Certainly. In fact, new forms of concision can spur innovation. Nearly a century ago, Ernest Hemingway wrote six-word story,\textsuperscript{367} Marcel Duchamp signed a urinal,\textsuperscript{368} and Kazimir Malevich painted a black square against a white background.\textsuperscript{369} These works helped spawn the flash fiction, ready-made, and suprematism genres, respectively. Twitter is also a new literary

\begin{itemize}
  \item \textsuperscript{365} See, eg, Cha, M., Haddadi, H., Benevenuto, F., Gummadi, K.P., \textit{Measuring User Influence in Twitter: The million follower fallacy}, In: ICWSM’10: Proceedings of International AAAI Conference on Weblogs and Social Media (2010) (finding that retweeting may be a better metric of influence than number of followers) [Cha].
  \item \textsuperscript{366} White Paper, 9.
  \item \textsuperscript{367} Hemingway is said to have won a $10 bet he made in the early twenties by composing, “For sale: baby shoes, never worn.” See \textit{Sudden Fiction Latino: Short-Short Stories from the United States and Latin America} (eds. Shapard, Robert, James Thomas and Ray Gonzalez, Norton, 2010), 19-20.
  \item \textsuperscript{368} See TATE COLLECTION | FOUNTAIN BY MARCEL DUCHAMP, available at http://www.tate.org.uk/servlet/ViewWork?workid=26850.
  \item \textsuperscript{369} THE STATE HERMITAGE MUSEUM: EXHIBITIONS available at http://www.hermitagemuseum.org/html_En/04/b2003/hm4_1_30.html.
\end{itemize}
form, as evidenced by the Library of Congress’s decision to archive all public tweets from the medium’s March 2006 inception, and sixty five million new tweets are posted daily.

Similarly, Wikipedia, a non-profit encyclopedic venture that is one of world’s most popular Websites, is also genre-defining. Modeled on Berners-Lee and CERN’s vision, it enables users to collaboratively write and edit an organic comprehensive encyclopedia. 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 on a scale never seen before. It’s about the cosmic compendium of knowledge Wikipedia and the million-channel people’s network YouTube and the online metropolis MySpace. It’s about the many wrestling 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.”

To be fair, the contributory scheme is no egalitarian utopia. On Twitter, the vast majority of users pen fewer than ten lifetime posts, and the median number of lifetime tweets is one. The top ten percent of users account for more than ninety percent of all tweets. On Wikipedia,

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372 Ranked 7th on Alexis.com.


375 Ibid.
it is the top fifteen percent who account for 90 percent of edits.\textsuperscript{376} But online generativity is ever-increasing: across the Web the top 10\% of users account for a more reasonable 30\% of production, and since more people are connecting, there is an ever higher number of contributors and correspondently-generated material.

This trend carries particularly serious democratic ramifications in the news arena. A recent study found that “technology has scrambled every aspect” of the traditional news producer-consumer relationship, as consumers “now have the tools to be active participants in news creation, dissemination, and even the ‘editing’ process.”\textsuperscript{377} Most people now access the Web wirelessly, and such users are 36\% more likely than wired ones to “participate” online,\textsuperscript{378} as nearly two-fifths of them create, comment on, or disseminate news items.\textsuperscript{379}

The very meaning of reporting has shifted, as private individuals’ websites have become more centralized and powerful,\textsuperscript{380} and newspapers have shifted in the opposite direction.\textsuperscript{381} The

\begin{footnotesize}
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\item\textsuperscript{376} Ibid.
\item\textsuperscript{377} See, Kenny Olmstead et al., \textit{Understanding the Participatory News Consumer: How internet and cell phone users have turned news into a social experience}, Pew Research Center, Project for Excellence in Journalism/Pew Internet & American Life Project, (2010), 8.
\item\textsuperscript{378} Ibid., 30.
\item\textsuperscript{379} Ibid., 44.
\end{enumerate}
\end{footnotesize}
White House spreads its message through social-networking tools—including YouTube, WhiteHouse.gov, Twitter—and much of Congress tweets.\textsuperscript{382} Viral stories and videos do not emanate from central hubs, but rather spread chaotically, with “[b]logs, Web sites and video aggregators serv[ing] as cultural curators.”\textsuperscript{383} Uber-interactive Facebook, where every user is a curator, has become (depending on the metric) the most visited website in the US, over the less interactive Google.com.\textsuperscript{384}

This fuzziness of authorial borders is complemented by a pervasive urge to generate. A District Judge presiding over a child support/custody case recently saw fit to update his Facebook status to share that he had to choose between “two good parents”.\textsuperscript{385} And recognizing a need to end its ban on service members’ use of social networking services, the military, at one fell swoop, also condoned Wikis, blogs, “data mashups” and, “similar collaborative information

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\textsuperscript{382} See Dahlia Lithwick and Graham Vyse, Tweet Justice, Should Judges Be Using Social Media? Slate, April 30, 2010, available at \url{http://www.slate.com/id/2252544/}
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\textsuperscript{383} See Damian Kulash Jr. WhoseTube? February 19, 2010, available at \url{http://www.nytimes.com/2010/02/20/opinion/20kulash.html} (in an editorial the frontman of OK GO, whose videos famously go viral, criticizes his label’s decision to disable embedding of its bands’ videos, explaining that the label misunderstands “how the Internet works”).
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\textsuperscript{384} See HITWISE INTELLIGENCE – HEATHER DOUGHERTY – NORTH AMERICA, available at \url{http://weblogs.hitwise.com/heather-dougherty/2010/03/facebook_reaches_top_ranking_i.html}; but Alexia has Google in first place; but, Alexia.com has Google firmly in first place.
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\textsuperscript{385} See Allison Petty, Social networking Web sites raise ethical issues for judges, lawyers, Chicago Daily Law Bulletin, February 3, 2010 (explaining that this was discovered after counsel involved, a judge’s Facebook “friend” responded by penning own status update: “I have a wise Judge.” The judge was reprimanded. \url{http://www.allbusiness.com/legal/trial-procedure-judges/13862837-1.html}).
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sharing-driven Internet-Based capabilities where users are encouraged to add and/or generate content”.

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. Three of the top five are whimsical: a montage of soldiers dancing, a humourous take on laundry day, and a choreographed performance of Lady Gaga’s “Telephone”. The latter features eight soldiers, replete with elaborate props and costumes. On assignment in southwest 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.” Production values notwithstanding, the video garnered five million YouTube views in just three weeks.

Justin Bieber is living proof that allowing such creativity to lead to “corresponding economic success require[s] users’ ability to access and fully engage creative content across a spectrum of formats and devices.” As a twelve-year-old in a small Ontario town, Bieber 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, a young entrepreneur determined to start his own record label and management company, was searching for a different artist affiliated with Usher when he

388 See YOU TUBE – TELEPHONE REMAKE, available at http://www.youtube.com/watch?v=haHXgFU7qNI.
389 See Okediji, 2380.
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’s venue, a theatre outside which Bieber busked, and the school he attended, finally finding and signing him.  

Today, Bieber’s albums break sales records, his videos are the most watched online, and associates such as his mother and friends have strong online presences (Braun was even arrested for taking too long to tweet about him). Users have been remarkably generative with regard to all things Bieber, from covers to parodies. Resultantly, there are more Google hits for him than all of the following combined: the Beatles, Hitler, “financial crisis,” “global warming,” and the most popular prospective GOP presidential candidates.  

2. Blips in the Night?


391 See 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.  

392 See Megan K Scott, Justin Bieber’s Manager Arrested in Mall Frenzy Case, March 24, 2010, available at http://www.billboard.com/news/justin-bieber-s-manager-arrested-in-mall-1004077906.story#news/justin-bieber-s-manager-arrested-in-mall-1004077906.story (describing how fans got unruly when Bieber failed to show up for an appearance at a mall, and they 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 Brown to tweet that the artist would not be coming but it took him an hour and a half to do so. Fans then dispersed within minutes, but by then five had been hospitalized. Charges of reckless endangerment and criminal nuisance were laid for delaying the tweet.  

393 See, eg, videos called Justin Bieber One Time -- Christian Dancing and Singing...So cute! And Justin Bieber "One Time" (Farmingville SPOOF).  

394 See http://www.angusreid.com/polls/view/35841/palin_huckabee_top_choice_for_us_republicans (noting that an August 6 Angus Reid poll shows these are Sarah Palin, Michael Huckabee, Mitt Romney, Rudy Giuliani, and Newt Gingrich). Bieber has 288,000,000 hits (Google search conducted by author on August 31, 2010).
In a remarkable declaration, the LoC has embraced the generative consumer. Its most recent rulemaking exemptions featured broad allowances for circumventing CSS, and “jailbreaking” smartphones, such as the iPhone and iPad—allowing for unapproved third-party apps to be used. These are notable not only for their result but for the underlying rationale.

The former exceptions allows users, who reasonably believe it is necessary, to circumvent CSS for the sake of incorporating “short portions of motion pictures into new works for the purpose of criticism or comment,” in making: (i) educational uses by any university or college professor or student; (ii) documentary film; and (iii) noncommercial videos. This is a radical expansion of the former exception, which only applied to film studies professors, as the noncommercial category applies to practically all of the generative consumer production I describe above.

The Librarian based the allowance on the finding that “some criticism and/or commentary requires the use of high–quality portions of motion pictures in order to adequately present the speech–related purpose of the use.” Where noncircumventing alternatives, such as video capture software, it explained, users should opt for it, only circumventing where they reasonably believe that “hightened quality is necessary to reach their goal.”

395 See Federal Register/Vol. 75, No. 143/Tuesday, July 27, 2010/Rules and Regulations at 43825 [Federal Register] (in its July, 26, 2010 ruling it reaffirmed that computer programs affecting cell phones ability to connect to authorized networks; good faith security research on video games; malfunctioning or obsolete dongle-protected computer programs; and Ebooks when all versions prevent read-aloud function or rendering text into specialized format).

396 Federal Register, 43828.

397 Ibid.
Incredibly, the standard not only harkens back to *Sony* principles, but goes even further. In his recommendations, the Registrar of Copyrights did not “conclude that all, or even most” of the examples the noncommercial exemption advocates proffered constituted transformative fair use, but was still convinced of the measure’s merit since, “*more than a trivial portion* of those examples do qualify as transformative.”398 He concluded that although some exempted videos will be infringing, a “cognizable basis has been established for concluding that some (probably many) are likely to qualify as noninfringing uses under established judicial precedents.”399

The jailbreaking decision allows consumers to circumvent smartphones TPMs that prevent third–party software applications from being installed, for the sole purpose of interoperability. Here too much of the rationale radically upends DMCA precedent. First, the LoC did not accept Apple’s claim that the contracts it formed with purchasers “constituted a sale or license of a copy of the computer programs contained on the iPhone”, deeming ownership statuses unclear. While the contracts did allow Apple to retain ownership of the operation system programs, it explained, they also granted users ownership of purchased devices such as iPads. Since program copies are “fixed in hardware of the device, it is unclear what ownership status is to be given to the particular copy of the computer program contained in the device.”400

400  Federal Register, 43829.
Moreover, the LoC declared that the license-ownership nexus is in “a state of flux”,401 and proceeded to find the fair use argument sufficiently compelling and accordant with a legislative interest in interoperability to merit an exception regardless. The LoC’s analysis of the four fair use factors came down heavily on the side of users.

Under the first factor it found the “purpose and character” of the operating system modification to be private and noncommercial, conducted for the sake of increasing the functionality of the device owned by the modifier. Second, it found the nature of the copyrighted work decisively favouring modification, as it is both customary and noninfringing to allow operating systems to interoperate with third party programs. Were Apple seeking to deploy a restrictive business practice by limiting which programs their users could run, it would have “no basis for copyright law to assist” it in doing so.402

Turning to the third factor, the amount and substantiality taken, it emphasized that jailbreaking generally involves “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.”403 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 increase overall device sales since purchases would still be necessary to access the resultantly wider array of third-party applications.404

401 Ibid.
402 Ibid.
403 Ibid., 43830
404 Ibid.
Some critics have encouraged Apple to see the exemptions’ announcement as an opportunity to allow customers and developers to choose to bypass the App Store, since the vast majority would likely continue to use the store, retaining all the benefits of that closed system (such as safety and ease). The walled garden may thus be turned “into a rainforest.”

While Apple might choose that route, it also has other options at its disposal. It might strike back by: (i) suing modifying users under contract—though, as the Registrar notes, the validity of its licensing restrictions is in doubt, and the company could lose, setting far-reaching judicial precedent; or (ii) remotely rendering jailbroken devices malfunctioning “bricks” (though such a course of action would doubtless be a likely be a public relations disaster).

Are the exceptions mere anomalies—pro-consumer outliers like Lexmark vein—destined to be hollowed out through judicial, or might they be canaries in the DMCA coalmine? It is too soon to tell, but support for the latter is lent by an extraordinary 5th Circuit decision, MGE GE, which came down less than a week before the LoC exemptions. MGE manufactured uninterruptable power sources, and designed a TPM to protect them in the form of a dongle—external hardware connecting to a laptop’s serial port—which would then be verified by MGE software. The court arguably went even further than Lexmark and Chamberlain in curtailing Section 1201. Its analysis revolved around the meaning of “access” has been criticized for its

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406 MGE, 2.
lack of nuance, but its rationale is staggering, as it essentially affirms a fair use defence for non-infringing circumvention: “Merely bypassing a technological protection that restricts a user from viewing or using a work is insufficient to trigger the DMCA’s anti-circumvention provision. The DMCA prohibits only forms of access that would violate or impinge on the protections that the Copyright Act otherwise affords copyright owners.”

Like the LoC’s noncommercial video CSS exemption, and proposed DMCA-modifying legislation, such a standard provides a “cognizable basis” according with precedent and legislative intentions, for sanctioning non-infringing circumvention. It is incumbent upon Congress or the Court to clarify and develop the decision.

V. CONCLUSION

Congress intended to battle global media piracy with the DMCA, but the legislation’s robust language has been mangled by courts, even as rightsholders increasingly wrap their works in elaborate TPM and licensing schemes. Would-be generative consumers find themselves bound up in an anticircumvention regime that has become a noisy contradiction. DRM denies them


408 MGE, 6.

409 Digital Media Consumers’ Rights Act of 2005, H.R. 1201, 109th Cong. § 5(b)(3) (1st Sess. 2005) (“[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.”

410 See Bertrand Russell, THE PHILOSOPHY OF LOGICAL ATOMISM AND OTHER ESSAYS, 1914-19 (Routledge 1986), 228 (laying out a paradox: “You can define the barber as ‘one who shaves all those, and those
ownership, age-old use exceptions, and the tools necessary to even take advantage of the restricted and ephemeral exceptions granted for lawful circumvention. As the Framers foresaw, in both copyright and patent law, “[t]he public good fully coincides… with the claims of individuals”; 411 rightsholders should freely deploy TPMs and stringent licenses, but neither copyright nor paracopyright protections should not be layered atop them.

only, who do not shave themselves.’ The question is, does the barber shave himself? … [Y]ou can only get around [the contradiction] by observing that the whole question whether a class is or is not a member of itself is nonsense, i.e. that no class either is or is not a member of itself, and that it is not even true to say that, because the whole form of words is just noise without meaning.”

411 The Federalist No. 43 at 270-271 (Rossiter ed. 1961).