

**A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012**

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14 Yale J.L. & Tech. 162 (2012)

ABSTRACT

Scholars who discuss copyright often observe that the voices for stronger copyright have more financial and political capital than their opponents and thus tend to win in Congress. While those facts are historically true, since the turn of the century, the politics around the issue have shifted substantially and become much messier and less predictable. This study illustrates this changing policy dynamic via a detailed political and legislative history of the major proposals regarding digital rights management and related areas of copyright, from 1987 to the present day. In 1987, there was no organized opposition to copyright's expansion. Within fifteen years, however, there was a substantial coalition of opposition, including public intellectuals, allied journalists, and newly-founded nonprofits. By the mid-2000s, this coalition had substantially slowed the expansion of copyright and even won substantial legislative support for proposals to limit copyright's reach. Despite being badly outspent and having far fewer allies in Congress, the "strong fair use" coalition had fought the "strong copyright" coalition to a draw in two key debates in the mid-2000s. In early 2012, the strong copyright coalition tried to push through a pair of bills with far-reaching implications for the Internet ecosystem—and it looked like they would ultimately prevail, until Internet activism led millions of voters to contact Congress in opposition. By looking at the political histories of all of these proposals in one place, this article shows an unmistakable trajectory in the politics of

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DEBATES, 1987-2012

copyright, from an era of relatively easy inter-industry negotiation toward an era in which copyright industries face a permanent, principled opposition, emboldened by having executed the largest online protest in history.

TABLE OF CONTENTS

INTRODUCTION	165
I. AUDIO HOME RECORDING ACT (AHRA): 1987 TO 1992. 169	
A. <i>Legal Threats and a Legislative Compromise</i>	170
B. <i>The AHRA's Effects and Political Significance</i>	173
II. DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA): 1995	
TO 1998..	176
A. <i>Addressing the Looming Internet Threat</i>	176
B. <i>Crafting the DMCA</i>	180
C. <i>DMCA: Impact and Political Significance</i>	183
III. INTERLUDE: 1999 TO 2002.....	186
A. <i>The Peer-to-Peer Explosion</i>	186
B. <i>Senator Hollings's Proposal</i>	189
C. <i>NGOs Take a Central Role</i>	192
D. <i>Scholars Step into the Spotlight</i>	195
IV. DMCA REFORM.....	198
A. <i>Reform Proposals</i>	198
B. <i>Outcome and Significance</i>	200
V. BROADCAST FLAG.....	201
A. <i>Bottling Digital Broadcasts</i>	202
B. <i>Lowering the Broadcast Flag</i>	204
C. <i>Few Salute the Audio Flag</i>	206
VI. AFTER DRM: FROM THE DISC TO THE WHOLE WIDE	
WEB.....	208
A. <i>Boucher's Efforts End</i>	209
B. <i>Domain Seizures: COICA, ICE, and SOPA/PIPA</i>	211
C. <i>The Legacy of the SOPA Blackout</i>	218
CONCLUSION.....	222

INTRODUCTION

The industries that produce and distribute copyrighted works have a long, well-documented history of fearing new media technologies. The best-known example came in a congressional hearing in 1982, when Motion Picture Association of America (MPAA) chief Jack Valenti proclaimed, “I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.”¹ While not matching Valenti’s hyperbole, Jason S. Berman, President of the Recording Industry Association of America (RIAA), expressed the same concern in a 1990 hearing. “[F]or many years, the music industry has been gravely concerned about the devastating impact of home taping... [which] presently displaces about one third of the industry’s sales... [at a cost of] nearly \$1 billion per year.”² Berman predicted the negative economic impacts from new digital audio tape (DAT) systems would be even stronger.³ Even these were hardly the first protests against new media. Mark A. Lemley writes, “I sometimes suspect there was an association of monastic scribes who protested the printing press.”⁴ He then ticks off several examples in the series of allegedly threatening new media technologies of the twentieth century, from the player piano and the gramophone to radio broadcasting, cable television, and the photocopier.⁵

The standard lesson from these examples is that each new technology became either a minor nuisance to the incumbent content providers or—as has been the case more often—an important development that actually expanded the market for licensed works. The more recent deluge of digital technologies, including especially the Internet, may well present an exception to this rule, but along with many others, I am quite skeptical.⁶ The

¹ *Home Recording of Copyrighted Works: Hearing on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705 Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the H. Comm. on the Judiciary*, 97th Cong. 8 (1982) (statement of Jack Valenti, President, Motion Picture Association of America).

² *Digital Audio Tape Recorder Act of 1990: Hearing on S. 2358 Before the Subcomm. on Commc’s of the S. Comm. on Commerce, Sci., & Transp.*, 101st Cong. 86-87 (statement of Jason Berman, President, RIAA).

³ *Id.*

⁴ Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. ON TELECOMM. & HIGH TECH. L. 125, 125 (2011).

⁵ *Id.* at 126-28.

⁶ See, e.g., WILLIAM PATRY, *HOW TO FIX COPYRIGHT* (2012). Patry points out that 2010 was a banner year for the movie, music publishing, and book industries. *Id.* at 7. He also argues that, while record industry revenues have indeed declined, this is due primarily to the unbundling of music. “The decline

standard lesson provides a valuable backdrop for those who contend that the Internet should be allowed to grow without copyright-minded regulations; after all, if the “content industry . . . has a Chicken Little problem,”⁷ the sky is probably not falling this time, either.

While the standard lesson about the shortsightedness of the content industries is a valuable one to draw from this history, there is another lesson as well—a story about the political trajectory of copyright that helps us in our role as political observers rather than as gladiators. Here, the lesson focuses on which of two broad fates greets each new technology: whether the law accepts each new technology into the mix, or the law becomes a tool to limit, ban, or otherwise render each harmless. Here, the recent past really is different. Until the 1980s, new technologies were either accommodated via minor changes in copyright law or begrudgingly accepted despite some marginal infringement. Phonographs and radio airplay became and remain lucrative sources of mechanical royalties for composers. TV broadcasters moaned when pioneer CATV systems retransmitted their signals, but, in the decades since, retransmission fees have added substantially to the bottom lines of broadcasters; they are expected to reach \$3 billion per year by 2015.⁸ Photocopiers, viewed with trepidation by book and periodical publishers, were accommodated by adjustments to the copyright statute and the creation of a new organization for collecting royalties,⁹ and, rather than shrinking profits, journal publishers have seen their profits balloon.¹⁰ “The VCR made possible the home video market, a market which today generates more than double the revenues collected at the box office—at a time when box office admissions have also shown

in CD sales and the increase in digital singles sales have nothing to do with piracy, and is instead a reflection of record companies’ inability to continue their long-standing practice of forcing consumers to buy CDs and therefore albums.” *Id.* at 68.

⁷ Lemley, *supra* note 4, at 132.

⁸ Joe Flint, *Broadcast Networks Will Rake In Retransmission Fees, Report Says*, L.A. TIMES BLOGS: COMPANY TOWN (Nov. 1, 2011), <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2011/11/broadcast-networks-retransmission-consent-fees.html>.

⁹ Christopher Jensen, Note, *The More Things Change, the More They Stay the Same: Copyright, Digital Technology, and Social Norms*, 56 STAN. L. REV. 531, 551-52 (2003).

¹⁰ For instance, in 2010, journal publisher “Elsevier reported a 36 percent profit on revenues of \$3.2 billion.” Thomas Lin, *Mathematicians Organize Boycott of a Publisher*, N.Y. TIMES, Feb. 13, 2012, <http://www.nytimes.com/2012/02/14/science/researchers-boycott-elsevier-journal-publisher.html>.

strong growth.”¹¹ It is easy to paper over the acrimony, including lawsuits and lobbying, that greeted these formerly new technologies, but still, each of these stories ultimately ended with content companies accepting the new technology.

The movie industry’s strategic response to the VCR, however, represents something of an inflection point in content industries’ strategies. If they had followed the previous historical examples, the motion picture industry would have sought a modest change in the copyright statute, for instance by collecting royalties on machines and blank tapes. Instead, they went to court to have the VCR effectively banned, and in the case that resulted—*Sony v. Universal City Studios*—four members of the Supreme Court were ready to do just that.¹² Jack Valenti was not just expressing concern about infringing uses of a new technology; he was attacking the technology itself. This attack failed—barely—but it put technology innovators on notice that the content industries would try to act as gatekeepers not only at the box office and record store, but in the electronics shop as well. This focus on technology and technological innovators has continued to this day, and the copyright lobby has continued to adopt an aggressive stance toward each new technology. The *Sony* decision was a setback to this agenda; as the majority famously wrote, “the sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses.”¹³ Yet the content industries were not to be dissuaded, and their efforts have eroded *Sony* to the point that media technologies are developed amidst a fear of legal liability.¹⁴ Copyright has shifted from a law that regulated only copying behavior into a system that regulates copying technology, driven by content industry fears that new technologies—especially the Internet—will effectively destroy their business models.¹⁵

Spearheading this effort to ban or neuter new media technologies via stronger copyright law are the media conglomerates that dominate the entertainment industry. The lobbying groups for the movie studios (MPAA) and record

¹¹ Fred von Lohmann, *Fair Use as Innovation Policy*, 23 BERKELEY TECH. L.J. 829, 840-41 (2008) (citation omitted).

¹² *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 457 (1984).

¹³ *Id.* at 442.

¹⁴ Peter S. Menell & David Nimmer, *Legal Realism in Action: Indirect Copyright Liability's Continuing Tort Framework and Sony's De Facto Demise*, 55 UCLA L. REV. 143 (2007).

¹⁵ JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 54-82 (2008).

companies (RIAA) are the best-known and most active, but other content producers such as print publishers, music publishers, sports leagues, and some in the software and video game industries also lend their efforts. Along with their political allies, such as many members of Congress and other government officials, I call this group the “strong copyright” (or SC) coalition.¹⁶

While the SC coalition had faced little organized resistance before, the dawn of the twenty-first century saw the growth and flourishing of a coalition deliberately designed as a political counterweight. This coalition generally argues against the expansion of copyright and for the broadening of exceptions, limitations, and affirmative defenses, especially fair use; thus, I call this coalition the strong fair use (or SFU) coalition.¹⁷ The SFU coalition is not merely anti-copyright, however. Its rallying cry is two-fold: freedom of expression and freedom to tinker.¹⁸ SFU advocates argue that copyright has grown to a degree that it has fundamentally compromised these freedoms, leaving our society with less speech and less innovation as a result. With these powerful motivating ideals in hand, the SFU coalition rose from virtual nonexistence to serious political impact in under a decade. That transition is an important inflection point in the political history of copyright law.

The content industries, on the other hand, have looked at digital technology with trepidation, seeing not a vehicle for greater speech and innovation, but a threat to their business models. As a key component of their strategic response, the SC coalition has sought to use digital technology to prevent unauthorized access to and use of copyrighted works. These digital technologies collectively referred to as Digital Rights Management (DRM), include techniques such as encryption and watermarking that can keep works locked in a technological box, branded with ownership identity, or otherwise distributed in such a way as to slow or discourage unapproved uses.

While working on a study¹⁹ of the representations of the DRM policy debate across congressional hearings, newspapers,

¹⁶ Bill D. Herman, *Taking the Copyright Online: Comparing the Copyright Debate in Congressional Hearings, in Newspapers, and on the Web*, 17 J. COMPUTER-MEDIATED COMM. 354 (2012).

¹⁷ Herman, *supra* note 16.

¹⁸ The former is the title of a book by an SFU-allied communication scholar. KEMBREW MCLEOD, *FREEDOM OF EXPRESSION: RESISTANCE AND REPRESSION IN THE AGE OF INTELLECTUAL PROPERTY* (2007). The latter is the title of a well-regarded blog founded by an SFU-allied computer scientist, Ed Felten. *FREEDOM TO TINKER*, <https://freedom-to-tinker.com> (last visited Apr. 1, 2012).

¹⁹ BILL D. HERMAN, *THE BATTLE OVER DIGITAL RIGHTS MANAGEMENT: A MULTI-METHOD STUDY OF THE POLITICS OF COPYRIGHT MANAGEMENT*

and the web—including an exploration of the SFU coalition’s heavy use of Internet advocacy—I was surprised to find no previous research tying together the political histories of these very related debates. This study does just that, exploring the twists and turns that characterized each of what I consider the 4 major DRM policy debates of the past 25 years. It examines the debates leading up to the passage of the Audio Home Recording Act (AHRA)²⁰ and the Digital Millennium Copyright Act (DMCA),²¹ as well as stalled efforts to mandate a DRM technology called the “broadcast flag” and attempts to reform the DMCA. I explore each of these debates in detail, laying bare the technological, economic, and political background, the specific policy proposals advanced, and some of the political forces that helped shape each outcome. Because these DRM debates have also been shaped by and have helped to shape other key developments in the politics of copyright, I also have two additional sections, one exploring the key years between the passage of the DMCA and the beginning of the later debates, and the other discussing important developments in the last five years.

By looking at these milestones in the evolution of digital copyright in one place, this study tells an as-yet untold story about the trajectory of copyright advocacy in general. It also sets out a roadmap for observers to better understand the contemporary copyright debate, as well as to be better equipped for anticipating where it is headed. In particular, it is only by understanding the coalitions that are party to the debate, as well as their evolving political and communication strategies, that one can have a full grasp of the significance and likely future direction of copyright in the digital era. While this understanding carries several lessons, the emerging significance of nonprofit actors such as NGOs and scholars is an under-appreciated phenomenon that bears special emphasis. These actors have fundamentally reshaped the politics of copyright, making possible what was formerly impossible and making far more difficult what was once taken for granted.

I. AUDIO HOME RECORDING ACT (AHRA): 1987 TO 1992

In the early 1980s, electronics manufacturers began developing devices to record and play Digital Audio Tape (DAT).

TECHNOLOGIES (UMI Dissertation No. 3363366) (2009), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1357203.

²⁰ Audio Home Recording Act, 17 U.S.C. §§ 1001–1010, Pub. L. No. 102-563, 106 Stat. 4237 (1992).

²¹ Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

DAT promised consumers the ability to make their own recordings with the fidelity of compact discs (CDs)—the latter being a read-only medium at the time. Yet not everybody was excited by the prospect of consumers having the capacity to make perfect digital copies—let alone copies of copies.

A. Legal Threats and a Legislative Compromise

The music industry, already having advanced the complaint that “Home taping is killing music,”²² was quite scared of DAT. As the *New York Times* observed:

[T]he president of the Recording Industry Association of America, Stanley Gortikov, . . . characterized the Japanese-dominated audio hardware industry as an “assassin” bent on destruction of the largely American recording industry. “We are already losing billions to home taping,” Mr. Gortikov said recently . . . “Imagine what it will be like if the tape copy is equal to the original.”²³

DAT decks were expected to arrive on U.S. store shelves by 1987,²⁴ but the recording industry used lobbying, threatened and actual litigation against Sony, and market pressure to stop the manufacturer from importing DAT machines.²⁵ The recording industry was far better prepared for a court fight. “The RIAA held a million dollars in readiness for legal fees and let it be known that it was financially girded for battle. . . . [Also,] Japanese manufacturers of DAT recorders, mindful of already strained trade relations with the United States, wanted to avoid the publicity resulting from a lawsuit, even one they would likely win.”²⁶ Additionally, record labels could and did refuse to release music in

²² Jim Sullivan, *Rock the Boat*, *Billy Bragg*, BOSTON GLOBE, Oct. 28, 1988, at 51.

²³ Will Crutchfield, *Next Home Stereo Advance: Digital Tape Cassettes in 1987*, N.Y. TIMES, Oct. 24, 1986, <http://www.nytimes.com/1986/10/24/arts/next-home-stereo-advance-digital-tape-cassettes-in-1987.html>.

²⁴ *Id.*

²⁵ Menell & Nimmer, *supra* note 14, at 161-62.

²⁶ Hans Fatel, *Harmony Envelops the DAT*, N.Y. TIMES, Aug. 6, 1989, <http://www.nytimes.com/1989/08/06/arts/sound-harmony-envelops-the-dat.html>.

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

DAT format, greatly diminishing the potential demand for the machines.²⁷

Starting in 1987, the recording industry supported legislation to require that DAT recorders sold or imported into the U.S. include copy-control technologies.²⁸ CBS Records developed a system that depends on very minor changes to the audible sound. The change likely would have been inaudible to most listeners—but audible for the very audiophiles who were the primary target market.²⁹ Congressional hearings considering early legislation met substantial electronics industry resistance,³⁰ and the lack of inter-industry consensus around a workable technology kept these proposals from serious consideration. Tensions between the recording industry and electronics manufacturers eased when Sony purchased CBS Records in January of 1988.³¹ Still, the legal threats kept DAT decks out of U.S. stores.

In 1989, the industries came to terms, apparently clearing the legal cloud around DAT.³² The terms of the agreement required DAT decks to include a different copy control technology. This system, the Serial Copy Management System (SCMS), does not alter the audible sound of recordings; rather, it adds an inaudible, one bit signal that indicates whether the tape is an original or a copy. Using SCMS-equipped recorders, consumers can make a perfect digital copy of an original recording but cannot make copies of copies. Allowing only first-generation copies represented a compromise between the industries; in return for this limitation, record labels agreed not to sue DAT manufacturers or users over home recording.³³

²⁷ Andrew Pollack, *Digital Tape Machines Expected by July*, N.Y. TIMES, Jan. 8, 1990, <http://www.nytimes.com/1990/01/08/business/digital-tape-machines-expected-by-july.html?pagewanted=all&src=pm>.

²⁸ Hyangsun Lee, *The Audio Broadcast Flag System: Can It Be a Solution?*, 12 COMM. L. & POL'Y 405, 452 (2007).

²⁹ Andrew Pollack, *Move to End Digital Tape Dispute*, N.Y. TIMES, Jan. 16, 1988, <http://www.nytimes.com/1988/01/16/business/moves-to-end-digital-tape-dispute.html?pagewanted=all&src=pm>.

³⁰ *Digital Audio Tape Recorders: Hearing on H.R. 1384 Before the House Subcomm. on Commerce, Consumer Prot., & Competitiveness*, 100th Cong. (1987); *Digital Audio Tape Recorder Act of 1987: Hearing on S. 506 Before the Senate Comm. on Commerce, Sci., & Transp.*, 100th Cong. (1987).

³¹ Peter J. Boyer, *Sony and CBS Records: What a Romance!*, N.Y. TIMES MAG., Sept. 18, 1988, <http://www.nytimes.com/1988/09/18/magazine/sony-and-cbs-records-what-a-romance.html?pagewanted=all&src=pm>.

³² Andrew Pollack, *Accord Clears the Way for Digital Tape Recorders*, N.Y. TIMES, July 26, 1989, <http://www.nytimes.com/1989/07/26/business/accord-clears-the-way-for-digital-tape-recorders.html?pagewanted=all&src=pm>.

³³ *Id.*

Both industries sought legislation codifying this deal.³⁴ However, record companies were not the only music industry group with a legal threat in store; songwriters and music publishers were not satisfied by the proposed accord and used their own legal threat against DAT:

The National Music Publishers Association [NMPA], a New York group representing music copyright holders . . . thinks [SCMS] does not restrict copying enough and can be circumvented easily. The organization favors charging buyers of tape machines and blank tapes a royalty fee that would go to compensate the songwriters and music publishers.³⁵

Backed by the NMPA,³⁶ songwriter Sammy Cahn filed a lawsuit accusing Sony of contributory infringement.³⁷ Had it gone to court, the case would have faced long odds; the parallel with *Sony v. Universal*³⁸ was almost exact. Despite the weakness of the *Cahn* suit, Sony decided against another extended legal fight and “settled about a year into the litigation”³⁹ in June of 1991.⁴⁰ In addition to implementing SCMS, the manufacturers agreed to pay a copyright royalty on DAT decks and blank tapes. Further, they agreed to support new legislation that would require SCMS and the collection of royalties for all digital audio recording devices.⁴¹ In return for the electronic industries’ support, the music industry agreed to statutory language that, first, gives consumers the explicit legal right to make noncommercial recordings for personal enjoyment, and, second, gives manufacturers the legal right to help them do so.⁴²

There were voices of resistance during the legislative process, and some of their reasons for opposing the bill were

³⁴ See *supra* note 2.

³⁵ Andrew Pollack, *Suit Seeks to Bar Sale of New Audio Players*, N.Y. TIMES, July 11, 1990, <http://www.nytimes.com/1990/07/11/business/suit-seeks-to-bar-sale-of-new-audio-players.html>.

³⁶ *Id.*

³⁷ *Cahn v. Sony Corp.*, No. 90 Civ. 4537 (S.D.N.Y. July 9, 1990).

³⁸ *Sony Corp. Of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

³⁹ Menell & Nimmer, *supra* note 14, at 162 (citations omitted).

⁴⁰ Lee, *supra* note 28, at 452.

⁴¹ Eben Shapiro, *Accord on Digital Taping Now Faces Congress Debate*, N.Y. TIMES, July 12, 1991, <http://www.nytimes.com/1991/07/12/business/company-news-accord-on-digital-taping-now-faces-congress-debate.html>.

⁴² 17 U.S.C. § 1008 (2006).

insightful or even prescient.⁴³ Well-reasoned though they were, however, these opponents were not part of any substantially mobilized resistance and thus went unheeded. For instance, consumer groups expressed their doubts but participated with resignation; rather than opposing the bill outright, they described it as a regrettable necessity in the face of the music industry's legal threats. The National Consumers League appeared at one hearing and backed the bill on these terms.⁴⁴ Consumers Union representatives appeared in two *Washington Post* articles, describing the royalty as unfair but assessing the bill as the only means to get DAT into the market.⁴⁵ Scholarly opposition was more genuinely against the bill as drafted, but their participation was also light; law professor Jessica Litman opposed the bill,⁴⁶ as did Philip Greenspun, then a research assistant at MIT—though he was also serving as president of a small technology company.⁴⁷ With such minor resistance and all the major affected industries signing on, the bill sailed into law in 1992.⁴⁸

B. The AHRA's Effects and Political Significance

The AHRA was outdated quickly after it became law. In order to avoid royalties on their products, computer companies had helped to make sure that the act did not regulate general-purpose computers, software, or blank computer media.⁴⁹ As today's consumer well knows, this demarcation between personal media equipment and computing equipment did not hold for long. By the

⁴³ See, e.g., *Digital Audio Tape Recorder Act of 1990: Hearing on S. 2358 Before the Subcomm. on Commc's of the S. Comm. On Commerce, Sci. & Transp.*, 101st Cong. 169-80 (1990) (statement of Philip Greenspun, President, IsoSonics Corp.) (arguing, *inter alia*, that neither DAT nor the AHRA would substantially change the amount of infringement and that consumers would generally not adopt DAT).

⁴⁴ *Audio Home Recording Act of 1991: Hearing on S. 1623 Before the Subcomm. on Patents, Copyrights, & Trademarks of the H. Comm. on the Judiciary*, 102nd Cong. 74 (1991) (statement of Linda F. Golodner, Executive Director, National Consumers League).

⁴⁵ Stephen Levine, *The Digital Duel Could Be Ending; Manufacturers, Music Industry Reach Pact*, WASH. POST, July 11, 1991, at B8; John Burgess, *Bill Imparts the Sound of Music; Congress Settles Long-Standing Dispute Over Digital Recording*, WASH. POST, Oct. 9, 1992, at F1.

⁴⁶ *Audio Home Recording Act of 1991, Hearing on H.R. 3204 Before the Subcomm. on Intellectual Prop. & Judicial Admin. Of the H. Comm. on the Judiciary*, 102nd Cong. 178 (1992) (statement of Jessica Litman, Professor of Law, Wayne State University).

⁴⁷ See *supra* note 43.

⁴⁸ Audio Home Recording Act, 17 U.S.C. §§ 1001–1010, Pub. L. No. 102-563, 106 Stat. 4237 (1992).

⁴⁹ *Id.* §1001.

mid 1990s, computer CD burners allowed music fans to engage in unlimited serial copying without paying royalties, and the PC as home entertainment center was already becoming a reality.⁵⁰ The courts also found that the act does not regulate MP3 players,⁵¹ a ruling that helped keep costs low for the iPod and all its progeny.

In 1992, policymakers and interested industries envisioned a future for digital music that looked like a higher-fidelity version of what was then the present—one in which media consumption was tethered to standalone media players playing special-purpose media. What happened instead was nothing less than a home entertainment revolution based around computer-based copying and consumption, all of which falls outside the act's regulatory bounds. It began with computer-based, royalty-free burning of CDs for playback on home and car CD players. Then the invention and explosive adoption of peer-to-peer systems such as Napster put the PC squarely in the center of music consumption.⁵² By persuading the record labels to sign on to the iTunes music store in 2002,⁵³ Apple provided the first commercially successful means of collecting on the Internet distribution of music, but there was no putting the Internet genie back into the bottle—and certainly no going back to the era of the standalone music player.

Because policymakers and the electronics and music industries understandably did not foresee this revolution in how music would be acquired, distributed, and consumed, the AHRA was drafted in such a way that it quickly became irrelevant. DAT decks and other regulated technologies, such as the Sony MiniDisc, never caught on with consumers; consumers greatly preferred unregulated computer-based CD burners.⁵⁴ Since AHRA-regulated technologies never achieved widespread adoption, the legislative history of the act has received light treatment by legal scholars, and commentators who do discuss it have dismissed it as a minor step on the route to more substantial DRM regulation.⁵⁵

⁵⁰ Dan Stets, *Pump up the PC*, PHILA. INQ., April 11, 1996, http://articles.philly.com/1996-04-11/business/25659510_1_full-motion-video-computer-altec-lansing.

⁵¹ *Recording Industry Ass'n of America v. Diamond Multimedia Systems, Inc.*, 180 F.3d 1072 (9th Cir. 1999).

⁵² JOHN ALDERMAN, *SONIC BOOM: NAPSTER, MP3, AND THE NEW PIONEERS OF MUSIC* (2001).

⁵³ JACK GOLDSMITH & TIM WU, *WHO CONTROLS THE INTERNET?: ILLUSIONS OF A BORDERLESS WORLD* 118-21 (2006).

⁵⁴ Pieter Kleve & Feye Kolff, *MP3: The End Of Copyright As We Know It?*, PROCEEDINGS OF THE IASTED INTERNATIONAL CONFERENCE LAW AND TECHNOLOGY (LAWTECH'99) AUGUST 9-12, 1999, HONOLULU, HAWAII, 32-37, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1138651.

⁵⁵ See Molly Shaffer Van Houweling, *The Digital Broadcast Migration: Rewriting the Telecommunications Act: Communications Law Reform: Communication's Copyright Policy*, 4 J. ON TELECOMM. & HIGH TECH. L. 97,

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

The AHRA is historically significant as the first DRM regulation of any kind, as well as the first copyright law mandating the adoption of a specific technology.⁵⁶ On both counts, the AHRA thus represents the first step in copyright's transition into a vehicle for regulating devices. After the AHRA, it became illegal to make and sell stand-alone digital audio recording devices with unrestricted functionality—this even though unrestricted devices would have had the kinds of substantial noninfringing uses that the Supreme Court ruled as exculpatory in *Sony*.⁵⁷

The passage of the AHRA also shows how DRM policy debates through the end of the twentieth century continued to follow the industry-led legislation process that Jessica Litman identifies in copyright generally.⁵⁸ As in other instances, Congress urged the affected industries to reach a generally acceptable compromise and, once one was reached, passed it as law. The motivation for record companies and music publishers was clear enough; the former wanted to reduce the number of illicit digital copies competing with their official recordings, and the latter wanted another source of licensing revenues. Technology companies supported the bill—not on principle, but because they wanted to design and sell their products without being sued. Even though Sony and others disliked the need for protective legislation, they grudgingly accepted it as better than unending litigation. By the early 1990s, the electronics industry was practically begging for the AHRA's passage so they could finally import DAT decks—a technology that had already been available abroad for years by that point.⁵⁹

Finally, the debate also foreshadowed the battle lines that would be hardened in later debates. The AHRA is the first effort to use copyright law to shape product design, growing from supporters' belief that if technology can cause them problems in the form of easier copying, other technology—backed by law—can also solve that same problem. In contrast, opponents argued that

106 n.51 (2005); *see also* Lee, *supra* note 28, at 411 n.197. Had AHRA-regulated technologies become widely adopted, the act would have been more significant. It is the more recent changes in the music industry, rather than the text of the act itself, that made it relatively unimportant.

⁵⁶ Van Houweling, *supra* note 55, at 102 n.27.

⁵⁷ *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984).

⁵⁸ JESSICA LITMAN, *DIGITAL COPYRIGHT* 23 (2001). (“About one hundred years ago, Congress got into the habit of revising copyright law by encouraging representatives of the industries affected by copyright to hash out among themselves what changes needed to be made and then present Congress with the text of the appropriate legislation.”).

⁵⁹ Pollack, *supra* note 35 (observing that, as of July 1989, DAT decks had “been available in Japan, and to a limited extent in Europe, for about two years”).

DRM and a law against its circumvention would inconvenience customers, drive up prices, and prevent noninfringing uses, all while failing to prevent infringement to any significant degree. These battle lines grew more entrenched during the debate leading up to and following the passage of the DMCA.

II. DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA): 1995 TO 1998⁶⁰

The Digital Millennium Copyright Act, or DMCA,⁶¹ is the most sweeping revision to copyright law of the last 30 years “and arguably represents the most dramatic change in the history of U.S. copyright law.”⁶² The Act was an effort “to bring U.S. copyright law ‘squarely into the digital age,’ . . . [and] [t]he primary battleground in which the [Act] achieved this goal is its first title.”⁶³ This title⁶⁴ was billed as an implementation of two World Intellectual Property Organization treaties,⁶⁵ which the United States signed in 1996.

A. Addressing the Looming Internet Threat

The story of this law begins with what James Boyle describes as the “Internet Threat.”⁶⁶ Copyright holders view the Internet as a substantial technological challenge that cannot be addressed through AHRA-style legislation. By 1994, the World Wide Web was spreading into broader use,⁶⁷ and, over the next few years, users started going online by the tens of millions. In

⁶⁰ Portions of this section are adapted from Bill D. Herman & Oscar H. Gandy Jr., *Catch 1201: A Legislative History and Content Analysis of the DMCA Exemption Proceedings*, 24 CARDOZO ARTS & ENT. L.J. 121 (2006).

⁶¹ Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

⁶² TARLETON GILLESPIE, WIRED SHUT: COPYRIGHT AND THE SHAPE OF DIGITAL CULTURE 177 (2007).

⁶³ David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 681-82 (2000) (quoting S. REP. NO. 105-190, at 2 (1998)).

⁶⁴ WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998, 17 U.S.C. §§ 1201-1205 (2006).

⁶⁵ World Intellectual Property Organization Copyright Treaty, Dec. 20, 1996, 36 I.L.M. 65, arts. 11-12 (1997) [hereinafter *WCT*], available at http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html; World Intellectual Property Organization Performances and Phonograms Treaty, Dec. 20, 1996, 36 I.L.M. 76., arts. 18-19 (1997) [hereinafter *WPPT*], available at http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html.

⁶⁶ BOYLE, *supra* note 15, at 54-82.

⁶⁷ CHRISTOPHER M. KELTY, TWO BITS: THE CULTURAL SIGNIFICANCE OF FREE SOFTWARE 223 (2008).

light of this growth, copyright holders came to fear the Internet and developed policy proposals to address the threat of online infringement. Media companies threatened that, unless Congress made the Internet safe for content via stronger copyright protection, copyright holders would not put their works online, depriving the new medium of attractive content. Policymakers generally had little online experience, leaving them open to the myth that the Internet needed content—even at a time when the content online was growing exponentially without major media participation.⁶⁸

The content industry sought to tame Internet distribution via DRM systems backed by the force of law, and Bruce Lehman is the policy actor who gets the most credit for advancing the legal part of the equation. Lehman was Patent Commissioner from 1993 to 1998. Lehman also headed the White House Information Infrastructure Task Force, which released a White Paper⁶⁹ that encouraged copyright holders to deploy DRM systems. Because DRM can be circumvented, the White Paper also called for laws that would prohibit the circumvention of DRM and ban the tools of circumvention.

This was before there was a well-organized and identifiable SFU coalition, but the White Paper caused “dismay among libraries, composers, writers, online service providers . . . and the makers of consumer electronic devices and computer hardware.”⁷⁰ Several law professors also opposed the White Paper proposals. Immediately following its release, American University law professor Peter Jaszi “held informal consultations with like-thinking law professors and representatives of library organizations to see whether there was any possibility of mounting an effective opposition to the White Paper’s proposals.”⁷¹ Jaszi recruited other White Paper opponents, including “library organizations, online service providers, telephone companies, computer hardware and software manufacturers, consumer electronics companies, and civil rights and consumer protection organizations.”⁷² This group of interests agreed to work together, calling themselves the Digital Future Coalition, or DFC.⁷³ The DFC succeeded in mobilizing

⁶⁸ LITMAN, *supra* note 58, at 93-94.

⁶⁹ INFORMATION INFRASTRUCTURE TASK FORCE: WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS & BRUCE A. LEHMAN, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995).

⁷⁰ LITMAN, *supra* note 58, at 93.

⁷¹ *Id.* at 123.

⁷² *Id.*

⁷³ *A Description of the Digital Future Coalition*, DIGITAL FUTURE COALITION, http://www.dfc.org/dfc1/Learning_Center/about.html (last visited Mar. 14, 2008).

substantial—and, from the standpoint of Lehman and the content industries, unexpected—opposition to Lehman’s suggested changes. Nonetheless, this was the first effort at a substantial multi-sector coalition opposed to the interests of the SC coalition. Thus, Jaszi and company were not well positioned to stop these proposals.

The bill contained a categorical ban on the importation, development, and distribution of tools to circumvent DRM.⁷⁴ It also contained bans on the removal or alteration of copyright management information—data that identifies the copyright holder and related information.⁷⁵ The legislation also contained civil penalties of up to \$2,500 per violation of the section 1201 ban on trafficking in tools that circumvent DRM and up to \$25,000 per violation of the section 1202 ban on removal or alteration of copyright management information.⁷⁶ Finally, the bill stipulated criminal penalties of up to \$500,000 or five years in prison for anybody convicted of violating “section 1202 with intent to defraud.”⁷⁷

All DFC members saw this bill as a bad policy idea that would have a net negative effect on society. Many also feared it as a looming legal liability that could threaten them directly, so they mobilized enough constituents to stop the bill’s easy passage. This development surprised Lehman, who was so confident of domestic passage that he had already begun pushing for an international treaty with similar provisions via the appropriate United Nations agency, the World Intellectual Property Organization (WIPO). Yet Lehman used the international momentum to his advantage.⁷⁸ Supporters were able to secure the passage of two related treaties through WIPO⁷⁹ even as the domestic legislation stalled. U.S. delegates advanced a proposed treaty that looked much like the proposed domestic legislation: ban circumvention and ban the tools that make circumvention possible. A critical mass of the negotiators from other countries rejected this proposal—like Jaszi and the DFC, who saw a lot to oppose in such a strong ban. The resulting compromise led to a treaty with much weaker language than the US proposal; it requires only that countries discourage the act of circumvention, and it does not require a ban on circumvention tools or services. On this count, the treaties are

⁷⁴ NII Copyright Protection Act of 1995, S. 1284, 104th Cong. § 1201. The companion House bill was nearly identical. NII Copyright Protection Act of 1995, H.R. 2441, § 1201.

⁷⁵ *Id.* § 1202(b).

⁷⁶ *Id.* § 1203(c)(3).

⁷⁷ *Id.* § 1204.

⁷⁸ LITMAN, *supra* note 58, at 129.

⁷⁹ WCT, *supra* note 65; WPPT, *supra* note 65.

much closer to the traditional contours of U.S. copyright than is the U.S. legislation that passed; before the 1990s, U.S. copyright had regulated copying behavior but not copying technologies.⁸⁰

In a second important compromise with critics, the treaties impose a rather low standard for implementing legislation. A signatory must only “provide adequate legal protection and effective legal remedies” against circumvention of DRM and removal of copyright management information.⁸¹ U.S. law arguably met the treaties’ standard before the DMCA’s passage. It was already illegal to circumvent DRM to conduct copyright infringement, and manufacturers of “black box” devices that only served to circumvent DRM had already been subjected to legal liability for facilitating infringement.⁸² The “Clinton Administration initially considered sending the WIPO Copyright Treaty to the Senate for ratification ‘clean’ of implementing legislation.”⁸³

Rather than merely supporting simple treaty ratification, SC advocates—including congressional allies—made a more sophisticated use of the treaties. They engaged in “policy laundering,” or the use of international law-making bodies to advance one’s domestic agenda.⁸⁴ As Oscar Gandy and I argue elsewhere:

Congress used the [WIPO Copyright] Treaty as an excuse to implement a much more sweeping ban on circumvention. In short, Lehman and the bill’s congressional supporters used WIPO to launder their own interests, running their political capital through the bank of international credibility and treating the final bill as something required by international law.⁸⁵

Despite the SC coalition’s disappointment with the relative weakness of the final treaty language, they took advantage of the documents’ relative vagueness, urging passage of much stronger legislation in the name of compliance with treaty obligations. In congressional hearings in 1997 and 1998, at least 10 witnesses

⁸⁰ Nimmer, *supra* note 63, at 683.

⁸¹ *WCT*, *supra* note 65; *WPPT*, *supra* note 65.

⁸² LITMAN, *supra* note 58, at 131.

⁸³ Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L. J. 520, 530 (1999).

⁸⁴ Herman & Gandy, *supra* note 60, at 130-35 (2006); *see also* Ian Hosein, *The Sources of Laws: Policy Dynamics in a Digital and Terrorized World*, 20 THE INFO. SOC’Y 187, 189 (2004).

⁸⁵ Herman & Gandy, *supra* note 60, at 131.

made this argument.⁸⁶ Several even praised the stronger legislation for its likely effect of getting legislation passed in other countries that would similarly exceed the minimum threshold of WIPO treaty compliance. For instance, Representative Bart Gordon argued, “once we pass something here, it has to go to the international community. . . . They are really waiting for us to see what we are going to do. So whatever we do is the ceiling, not the floor.”⁸⁷ Thus, while the patina of compliance with the treaty gave the bill some extra credibility, even supporters agreed that the bill exceeded what was required.

B. Crafting the DMCA

The final legislation is built around the kind of strong regulation Lehman sought. Section 1201 implements three different bans. The first ban (or the “basic ban”) prohibits circumventing DRM to gain unauthorized access to copyrighted works. It reads, “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.”⁸⁸ For example, if a computer program requires a unique serial number during installation, this makes it illegal for a technically sophisticated user to defeat or hack this requirement and install the software without such a serial number. While doing so for the purpose of infringing copyright was already illegal, this clause bans it for nearly any reason—even if one has misplaced the serial number for a legally purchased software package and intends to install it on just one computer. The statute itself makes few allowances for even the most benign of uses, such as efforts to preserve the data on a decaying disk.

The second ban prohibits manufacturing, importing, and trafficking in tools that would help circumvent access-controlling DRM.⁸⁹ A technology is covered by this ban if it is developed, marketed, or primarily used for such circumvention. This ban (the “access trafficking ban”) prohibits computer-repair services from assisting a librarian in the preservation of software stored on decaying media, and it prohibits librarians from developing a technology to facilitate circumvention.

Some DRM systems do not prevent unauthorized access but instead prevent certain uses of copyrighted works, especially

⁸⁶ *Id.* at 133.

⁸⁷ *The WIPO Copyright Treaties Implementation Act: Hearing on H.R. 2281 Before the Subcomm. on Telecomm., Trade, & Consumer Prot., 105th Cong. 8 (1998)* (statement of Hon. Bart Gordon, Member, House Comm. on Commerce).

⁸⁸ 17 U.S.C. § 1201(a)(1)(A).

⁸⁹ *Id.* § 1201(a)(2).

unauthorized copying. The third ban (the “additional violations ban”) prohibits trafficking in tools to facilitate the circumvention of DRM if that DRM protects any copyright holder’s right.⁹⁰ For example, the music industry had briefly experimented with DRM-restricted CDs. These discs are not easily copied by computers, but the DRM systems do not prevent access; CD players require no access key or code to play them and thus generally play them without problems. This provision would ban a technology designed or marketed to circumvent this DRM system—for instance, a tool that would allow a consumer to convert the audio files from this CD into MP3 format on her hard drive. The proposed bills and final legislation all left untouched the right to circumvent use-controlling DRM such as this. Thus, a determined end user would be well within her rights to circumvent the DRM on a music CD, but it would be illegal for her to develop, sell, or market a service or software program that did so.

The 105th Congress added a number of amendments to the bill. In the House bill as introduced,⁹¹ a very brief section 1201 lays out the three bans with no explicit exceptions. It contains the following caveat, which is also included in the final legislation: “Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.”⁹² While this may seem like a large caveat, the DMCA does not change the definition of infringement; it simply adds an additional set of prohibitions. Thus, most of the limitations, exclusions, and affirmative defenses built into copyright law do not limit the DMCA’s reach. Most importantly, fair use is not a defense against charges of circumvention or trafficking in circumvention devices. The language in the 1997 bill also applies criminal penalties of up to a million dollars in fines and up to ten years in prison for violating section 1201 or 1202 “willfully and for purposes of commercial advantage or private financial gain.”⁹³ These penalties remained in the final legislation as enacted.⁹⁴

Facing mobilized opposition—including librarians, privacy advocates, encryption researchers, and computer industry representatives—the bill’s supporters made several narrow concessions, each creating a limited reprieve from one or more of the three bans. These caveats are clear attempts to address the concerns of a specific sector without much reduction in the bill’s reach. Librarians opposed the bill and got a very limited exception; they may circumvent DRM “to make a good faith determination of

⁹⁰ *Id.* § 1201(b).

⁹¹ Digital Millennium Copyright Act, H.R. 2281, 105th Cong. (1997).

⁹² *Id.* § 1201(d), encoded at 17 U.S.C. § 1201(c).

⁹³ Digital Millennium Copyright Act, H.R. 2281, 105th Cong. § 1204(a) (1997).

⁹⁴ 17 U.S.C. § 1204.

whether to acquire a copy of that work,⁹⁵ but not to preserve works they have already purchased.⁹⁶ Software designers and information technology researchers spoke in opposition and got some more substantial breathing room to do their jobs,⁹⁷ though not enough to prevent some major professional headaches for some bona fide researchers doing legitimate work, as discussed below. The Electronic Privacy Information Center testified in opposition, so they won the right to circumvent DRM in order to protect their personal information.⁹⁸ Each opposition group got a concession in rough proportion to its political capital. For the bill's backers, this was vastly preferable to permitting a general-purpose exemption for otherwise noninfringing uses—let alone an exception for technologies that are capable of substantial noninfringing uses.

The basic ban is also subject to additional, temporary exemptions. Every three years, under the supervision of the Librarian of Congress, the U.S. Copyright Office holds hearings to consider proposed exemptions from the ban on circumventing access-controlling DRM systems.⁹⁹ The procedure moves questions of fair use away from relatively fair use-friendly federal courts and into the hands of the Register of Copyrights, a clear member of the SC coalition—a shift of venue that substantially favors the SC coalition.¹⁰⁰ Though several exemptions have been granted in each rulemaking, the statute and the Register of Copyright's interpretation of the rules for determining exemptions

⁹⁵ 17 U.S.C. § 1201(d)(1).

⁹⁶ This exemption is not very useful in practice, to say the least. Librarians who want to make informed decisions about DRM-encrypted media such as DVDs can borrow them from other libraries, and they will only buy them if they have the appropriate technology to view them without circumvention. This exemption could apply to a librarian who wants to decide whether or not to purchase a networked resource such as a specialized database, but for it to be necessary, a librarian would need to approach a database vendor, ask for a trial subscription to a database to which the library is considering subscribing, and be rebuffed. It is highly unlikely that any company that sells their products to libraries would act so directly against their own best interests. Even in such an outlandishly unlikely scenario, a determined librarian would still likely be very uncomfortable with her legal footing for accessing such a resource, not only in light of § 1201, but also due to other federal and state laws against the unauthorized access of computing resources. For instance, in the estimation of this non-lawyer, 18 U.S.C. §§ 1029-1030 would seem not to apply, but the lack of such clear applicability would be small comfort. While the DMCA is poorly thought out on many counts—including, importantly, in its assumption of a neat cleavage between access-controlling and use-controlling DRM—this exemption borders on the silly. I doubt it has ever been used.

⁹⁷ 17 U.S.C. §§ 1201(f), 1201(g)(2).

⁹⁸ *Id.* §1201(g).

⁹⁹ *Id.* § 1201(a)(1).

¹⁰⁰ Herman & Gandy, *supra* note 60, at 143-44.

are heavily stacked against proposed exemptions.¹⁰¹ Changes introduced in the 2006 rulemaking make it somewhat less objectionable in terms of both procedure and outcome, though the whole procedure remains deeply flawed.¹⁰²

Ironically, the bill's opponents might have been better off had they allowed the original bill to pass without the explicit exemptions that were later added. As Jessica Litman explains:

The original Lehman bill granted copyright owners sweeping new rights, but its silence on available exceptions invited the courts to apply copyright's traditional limitations [such as fair use]. The DMCA also grants copyright owners sweeping new rights. Its laundry list of narrow exceptions, however, discourages the inference that the classic general exceptions and privileges apply.¹⁰³

This inapplicability of general exceptions became the cause for much political wrangling later, as discussed below.

C. DMCA: Impact and Political Significance

Compared with the AHRA, the passage of the DMCA represented a much more significant shift in copyright law as a vehicle for the regulation of technology. The AHRA regulates only one small class of technologies—stand-alone digital audio recording devices. In contrast, the DMCA regulates a potentially infinite number of devices, including computers. Every copyrighted work that can be digitized can be wrapped in encryption and flagged by copyright management information. Those who design and manipulate technologies to handle such copyrighted works are on thin legal ice. This discourages even legitimate academic encryption research, despite the exception for encryption research.¹⁰⁴ Unauthorized but legal uses of DRM-protected works are also discouraged, both by the ban on circumvention and the ban on tools of circumvention.¹⁰⁵ This is a

¹⁰¹ *Id.* at 187-90.

¹⁰² Bill D. Herman, *Copyright Office Grants 6 Exemptions for Circumventing TPMs*, SHOUTING LOUDLY, Nov. 22, 2006, <http://www.shoutingloudly.com/2006/11/22/copyright-office-grants-6-exemptions-for-circumventing-tpms>.

¹⁰³ LITMAN, *supra* note 58, at 145.

¹⁰⁴ KEMBLEW MCLEOD, *OWNING CULTURE: AUTHORSHIP, OWNERSHIP, AND INTELLECTUAL PROPERTY LAW* 261-62 (2001).

¹⁰⁵ Herman & Gandy, *supra* note 60, at 132.

substantial departure from prior copyright law, sharing “neither the logic nor the strategy of copyright.”¹⁰⁶

Like the debate around the AHRA, the process leading up to the DMCA also says a great deal about the politics of copyright—though while the AHRA debate was more of an extension of the previous politics of copyright, the run-up to the DMCA sowed the seeds of a major change. Before Lehman began advancing his ideas, there was still no cohort of policy actors that advanced an agenda directly opposed to that of the SC coalition. Lehman’s proposal, however, scared opponents into coordinated action. Starting with Peter Jaszi and other like-minded law professors, opponents began recruiting others to the cause in the hopes of stopping or amending the proposal before it could become law. Importantly, they successfully recruited new coalition members that policymakers could not ignore—that is, not just law professors and librarians—including especially industry groups. Weighing in to express concerns about the bill were computer and electronics industry trade groups such as the Home Recording Rights Coalition, Consumer Electronics Manufacturers Association, and the Computer & Communications Industry Association. Another notable opponent was the Institute of Electrical and Electronics Engineers, which functions like an academic body and has many academic members but is also substantially populated by and representative of industry professionals. With the AHRA debate being just the most recent example, Congress was not used to legislating copyright law in the face of opposing industries. The addition of genuinely opposed industries slowed down what Lehman expected would be easy passage for the bill.

Another important development was when Representative Rick Boucher joined the opposition. Over nearly three decades in service, Boucher earned a reputation as one of the most technologically literate member of Congress and an informed, thoughtful voice in technology policy discussions.¹⁰⁷ In expressing his own views in congressional hearings, he eloquently advanced the arguments of the bill’s opponents. For instance, he argued that the bill would erode the *Sony* decision and that this would prevent legitimate technologies from coming to market.¹⁰⁸ He also

¹⁰⁶ GILLESPIE, *supra* note 62, at 177.

¹⁰⁷ Tony Romm, *Tech Community Laments Rick Boucher Loss*, POLITICO, Nov. 2, 2010, <http://www.politico.com/news/stories/1110/44589.html>.

¹⁰⁸ *NII Copyright Protection Act of 1995 (Part 2): Hearing Before the Subcomm. on Courts & Intellectual Prop. of the H. Comm. on the Judiciary*, 104th Cong. 16 (1996) (statement of Hon. Rep. Rick Boucher).

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

proposed legislation with an alternate version of § 1201.¹⁰⁹ It read, in part:

No person, for the purpose of facilitating or engaging in an act of infringement, shall engage in conduct so as knowingly to remove, deactivate or otherwise circumvent the application or operation of any effective technological measure used by a copyright owner to preclude or limit reproduction of a work or a portion thereof. As used in this subsection, the term ‘conduct’ does not include manufacturing, importing or distributing a device or a computer program.¹¹⁰

If passed in this form, the DMCA would have tethered violations to the question of infringement; if a user’s purpose was not infringing, circumvention would have been entirely legal. Thus, exemptions and affirmative defenses such as fair use would have limited the reach of the DMCA. In this bill, the basic ban is the only ban—there are no bans on developing or selling products or services that circumvent DRM, whether access controlling or use-controlling. Instead, the language specifically exempts manufacturers and vendors of such devices and services. Unlike the DMCA that passed, the Boucher proposal would not have limited the reach of the *Sony* defense.

Obviously, members of Congress make for powerful political allies, and this represents Boucher’s full-throated entrée into the coalition opposed to copyright as a tool for regulating technology. Combined with the academic, librarian, and many technology industry actors¹¹¹ organized under the aegis of the Digital Future Coalition, this group now had a collective voice that represented substantial opposition that needed to be taken seriously. Because this coalition sprung into existence in response to Lehman’s proposals, the bill’s proponents were caught off-guard and needed to regroup. Fortunately for them, the WIPO treaties gave additional momentum to the proposal, and it passed anyway.

The SC coalition won passage of one part of the DMCA with remarkable ease. The DMCA contains a little-noticed, AHRA-like affirmative requirement that all VCRs sold in the U.S. implement a specific DRM technology.¹¹² The technology, developed by DRM vendor Macrovision, looks for a “do not copy”

¹⁰⁹ Digital Era Copyright Enhancement Act, H.R. 3048, 105th Cong. § 8 (1997).

¹¹⁰ *Id.* §1201(a).

¹¹¹ The various divisions of the technology sector are not unified on these issues. See *infra* Part IV.B.

¹¹² 17 U.S.C. § 1201(k).

signal that movie studios can build into pre-recorded videos; if the signal is present, the VCR will not make a useful copy of the original. This provision was subject to no public scrutiny. Nothing like this section appeared in the versions that passed the House and the Senate; rather, it was “added during conference committee markup.”¹¹³ Thus, this AHRA-like mandate, of obvious benefit to Macrovision and also desired by the movie industry, was passed using a strategy designed to evade public input.

The most significant part of the anti-circumvention provisions, however, was and remains the three bans on circumvention and trafficking in circumvention devices. The law’s passage was a wake-up call to those in the formerly cozy confines of the copyright debate. It saw the birth of the SFU coalition and its capacity to slow and even modify copyright industry-backed legislation. The SFU coalition was not yet powerful enough to stop the DMCA from passage, but catching Lehman off-guard and changing the bill was a promising beginning. In the years after, opposition to the DMCA became one of the main issues driving the growth of the SFU coalition. Before considering the efforts to reform the DMCA, however, the intervening years are worth brief consideration.

III. INTERLUDE: 1999 TO 2002

In the four years between the passage of the DMCA and the next major legislative fights over credibly advanced DRM proposals, several notable events happened that reshaped the playing field. The most visible events happened in technology and the courts, but some less widely discussed developments from that period have had comparable or even greater long-term political significance.

A. *The Peer-to-Peer Explosion*

Most visibly, 1999 was the year in which Napster first gave millions of users the ability to acquire nearly all of the world’s recorded music for free. This represented a tectonic shift in the media industry; suddenly, the music industry wished that its biggest threat were from illicit cassette recordings (digital or otherwise) rather than the Internet. Most readers will likely know at least the basics of the story, though of course there are more thorough examinations of the birth and early growth of Napster,¹¹⁴

¹¹³ Herman & Gandy, *supra* note 60, n.146.

¹¹⁴ ALDERMAN, *supra* note 52.

the record industry's reaction,¹¹⁵ and the current state of the music industry in light of peer-to-peer (P2P) trading.¹¹⁶

Even during hearings leading up to the DMCA, the media industries were already expressing fears about the Internet.¹¹⁷ If the untamed web of 1998 was scary, however, the explosive adoption of peer-to-peer software was mortifying. The record industry responded with a multi-pronged legal strategy. First, along with the motion picture industry, they sued the companies behind P2P technologies. They started by suing Napster, winning a finding that the company was liable for its users' widespread infringement.¹¹⁸ After the 2001 *Napster* decision led to the service's shuttering, several newer companies sprung up to fill Napster's shoes; the recording and movie industries responded by suing these companies as well, resulting in the 2005 *Grokster* decision by the Supreme Court.¹¹⁹ This decision substantially reduced the value of the *Sony* safe harbor, placing technology innovators in a much more precarious legal position.¹²⁰ Yet this strategy did not prevent the further development and adoption of still further P2P programs.¹²¹ "In short, suing the technology hasn't worked,"¹²² as P2P software is still readily available and widely used for infringement.

The other part of the RIAA's legal strategy was suing thousands of users—approximately 35,000 from 2003 to 2008.¹²³ It

¹¹⁵ STEVE KNOPPER, *APPETITE FOR SELF-DESTRUCTION: THE SPECTACULAR CRASH OF THE RECORD INDUSTRY IN THE DIGITAL AGE* (2009).

¹¹⁶ See, e.g., MARY MADDEN, *THE STATE OF MUSIC ONLINE: TEN YEARS AFTER NAPSTER* (2009), available at http://pewinternet.org/~media/Files/Reports/2009/The-State-of-Music-Online_-Ten-Years-After-Napster.pdf.

¹¹⁷ See, e.g., *Intellectual Property Rights: The Music and Film Industry: Hearing Before the Subcomm. on Int'l Econ. Policy & Trade of the H. Comm. on Int'l Relations*, 105th Cong. 26 (1998) (statement of Steven Metalitz, Vice President and General Counsel, International Intellectual Property Association) ("One thing that we're very concerned about is that technology is driving this problem to get worse. The . . . internet and other networks give the copyright industries new ways of reaching new customers and new markets. But these very same technologies magnify the threat of piracy.").

¹¹⁸ *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004 (9th Cir. 2001).

¹¹⁹ *MGM v. Grokster*, 545 U.S. 913 (2005).

¹²⁰ Menell & Nimmer, *supra* note 14.

¹²¹ The most significant contemporary P2P application is BitTorrent, which is used for widespread infringement but also has been adopted for legitimate purposes such as distributing open source software. See, e.g., ELEC. FRONTIER FOUND., *RIAA v. THE PEOPLE: FIVE YEARS LATER 1* (2008), available at <https://www.eff.org/files/eff-riaa-whitepaper.pdf>.

¹²² *Id.* at 2.

¹²³ Sarah McBride & Ethan Smith, *Music Industry to Abandon Mass Suits*, WALL ST. J., Dec. 19, 2008, <http://online.wsj.com/article/SB122966038836021137.html>.

was a public relations debacle, highlighted by lawsuits against “several single mothers, a dead person and a 13-year-old girl.”¹²⁴ While the RIAA certainly embarked on this campaign with some reluctance and with a readiness to be subjected to some degree of public scorn, the suits did not even have the intended effect of discouraging P2P use.¹²⁵ The message that illicit P2P trading is illegal did get through to users, but peer pressure provided a far more powerful force in favor of continued use.¹²⁶ Beginning in 2008, the RIAA thus stopped pursuing new cases, though it continued with cases that had already begun.¹²⁷

Even though the RIAA has stopped suing users and even scaled back its scorched-earth litigation against technological innovators, the group may never recover from the public relations damage. After its response to Napster, the trade group that had formerly had relatively little public visibility was suddenly the object of hatred by young people and technology enthusiasts across the country. While few of these people were being tapped for direct political action, their opposition to the RIAA’s political agenda was suddenly boundless and effusive.¹²⁸ Even among the very substantial subset that do not trade illicit files, there has been little public support for the industry in its war against downloaders. This ethos of visceral resentment toward the RIAA and MPAA has also been reflected on and fueled by virtually every major technology website—from *Wired* to technology-themed blogs and user-generated content sites. On the rare occasions when high-profile sites do host a guest commentary from an SC ally, the stream of outraged user comments let the editors know that this

¹²⁴ *Id.*

¹²⁵ ELEC. FRONTIER FOUND., *supra* note 121, at 9. (“Is it working? . . . After five years of threats and litigation, the answer is a resounding no.”)

¹²⁶ Ville Oksanen & Mikko Välimäki, *Theory of Deterrence and Individual Behavior: Can Lawsuits Control File Sharing on the Internet?*, 3 REV. OF LAW & ECON. 693, 693 (2007), available at <http://www.degruyter.com/view/j/rle.2007.3.3/rle.2007.3.3.1156/rle.2007.3.3.1156.xml?format=INT>.

¹²⁷ McBride & Smith, *supra* note 123.

¹²⁸ On literally every major site that I can name that draws the young or technology savvy, open contempt for content industry lobbyists has been the norm since these lawsuits began. The drumbeat is the loudest on technology sites, such as Slashdot.org, Wired.com, TechDirt.com, and Gizmodo.com, where the legal environment for technology is discussed with the highest relative frequency. On other sites are popular with young audiences—such as YouTube and social networking sites such as MySpace (dominant during the heart of the RIAA’s legal campaign) and Facebook—the subject comes up with much less proportional frequency, but when it does, users are more openly hostile to the RIAA than sympathetic to their goals.

viewpoint is not appreciated.¹²⁹ While the DMCA had passed in relative obscurity, the RIAA's actions quickly pushed copyright to the front page—while drawing millions to view the content industry as the enemy in a war between new technologies and copyright holders.

B. Senator Hollings's Proposal

Not content with the DMCA, the content industries and their allies in Congress soon advanced additional legislative proposals intended to limit Internet users' ability to continue engaging in infringement. The most significant of these legislative proposals, if enacted, would have represented a change in copyright exceeding the significance even of the DMCA. That proposal, S. 2048, the Consumer Broadband and Digital Television Promotion Act,¹³⁰ “would have prohibited the manufacture, sale, import, or provision of any ‘interactive digital media device’ that didn't incorporate certain security technologies.”¹³¹ From computers to iPods to a good portion of today's advanced home audio/video equipment, the bill would have required government-specified copy protection to be built into each device.

Sponsored by Senator Fritz Hollings, S. 2048 created a firestorm. “Several consumer groups and electronics companies aligned themselves against” the bill.¹³² A *Salon* headline warned, “U.S. Prepares to Invade Your Hard Drive,” and noted that Hollings' sponsorship of the bill had moved him into the “axis of evil for technology.”¹³³ Faced with this coordinated—and now predictable—resistance, the bill was unlikely ever to become law. As if this were not enough of an obstacle, the Hollings bill also ran into a problem of committee jurisdiction; by introducing this bill from the Senate Commerce Committee, Hollings stepped squarely on the Judiciary Committee's traditional domain of copyright legislation. This breach of jurisdiction upset Judiciary member

¹²⁹ For instance, in 2005, CNET published an anti-DMCA-reform piece by Patrick Ross, then-VP of the now-defunct SC-aligned Progress and Freedom Foundation. Patrick Ross, *Perspective: Here's a Surefire Way to Stifle Innovation*, CNET NEWS (Oct. 6, 2005), http://news.cnet.com/2010-1025_3-5889596.html. The article drew 124 comments, virtually all of them scathing critiques—including one by this author.

¹³⁰ Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (2002).

¹³¹ GILLESPIE, *supra* note 62, at 196.

¹³² Brad King, *Howling Mad Over Hollings' Bill*, WIRED, Mar. 3, 2002, <http://www.wired.com/gadgets/portablemusic/news/2002/03/51337?currentPage=all>.

¹³³ Paul Boutin, *U.S. Prepares to Invade Your Hard Drive*, SALON, Mar. 29, 2002, http://www.salon.com/2002/03/29/hollings_bill/.

Patrick Leahy, who is normally a reliable supporter of copyright industry requests but in this case actually threatened a filibuster.¹³⁴

If the music and movie industries had wanted to give something like the Hollings bill a real shot at passage, they would have engaged the electronics and computer industries in the kind of negotiations that led to the passage of the AHRA. They also would have chosen the “right” committee to introduce the bill. Instead, Disney’s then-CEO Michael Eisner, reportedly the industry voice who led to Hollings’ sponsorship of the bill,¹³⁵ jumped several steps ahead in the process and moved forward with a sponsor that further reduced the odds of passage. There are a range of theories about why Eisner and Hollings teamed up on this effort, all the more so because the Hollings bill would have gone further than even other media companies and allied congresspersons supported,¹³⁶ meaning that the strategies they did choose sealed the bill’s fate.

Rather than a sincere effort to change the law, the Hollings bill was far more likely intended as a rhetorical move—an addition to the conversation or an implicit threat to the technology sector, depending on one’s perspective. It was reported as an effort to spur “Hollywood and Silicon Valley to redouble their efforts to find a technological fix to the problem of digital duplication. . . . In other words, think of Washington as a legislative cattle prod.”¹³⁷ One could debate whether this prod was effective or counterproductive, though there is no clear link to any industry outcomes. The next April, Apple finally offered consumers a legitimate way to purchase most big-label music—contained within Apple’s proprietary DRM scheme, FairPlay—with the iTunes Music Store. Many other stores soon cropped up selling their own packages of DRM-wrapped media. Yet it is not at all clear that the Hollings bill helped foster any of these outcomes. Instead, it took Apple—and even, to a large degree, Steve Jobs personally—to persuade a reluctant recording industry to embrace Internet distribution.¹³⁸ Once the money started rolling in from that agreement, deals with other companies became far more conceivable.

¹³⁴ Jeffrey H. Birnbaum, *The Hollings Bill: Doomed But Effective*, CNN, May 27, 2002, http://money.cnn.com/magazines/fortune/fortune_archive/2002/05/27/323686/index.htm.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ Ben Sisario, *He Pushed a Reluctant Industry Toward Digital Music*, N.Y. TIMES MEDIA DECODER (Oct. 5, 2011, 11:44 PM), <http://mediadecoder.blogs.nytimes.com/2011/10/05/he-pushed-a-reluctant-industry-toward-digital-music/>.

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

The Hollings bill did at least serve as a loud and clear threat to the technology industry: Make DRM systems that satisfy the content companies, or Congress might design and mandate one for you. It also made it quite clear to technology companies that they needed to pay more attention to the debate over copyright in DC.¹³⁹ This is especially significant because the technology sector is not united on copyright issues. Some are principled, permanent members of the SFU coalition; the clearest examples are nonprofits that support free (as in freedom) software and other copyrightable content, such as the Free Software Foundation (founded in 1985), the Mozilla project (created in 1998), and the Wikimedia Foundation (founded in 2003). In contrast, the commercial software industry (in particular, Microsoft and Adobe) and vendors of DRM technologies (e.g., Macrovision) are generally members of the SC coalition. The rest of the technology sector generally leans toward the SFU position but are better described as the “persuadable technology” (or PT) division or group. This division—which I do not label as a coalition since they do not necessarily act in coordination—is filled with very important potential allies for either the SC or the SFU coalition. Those in the PT group include the consumer electronics industry, makers of computer hardware, Internet service providers, web content companies, and online retailers. Collectively, these represent a significantly larger share of the economy than the SC-affiliated industries,¹⁴⁰ allowing them a real chance to swing the debate in either direction.

¹³⁹ See Birnbaum, *supra* note 134.

¹⁴⁰ In 2009, the latest year available, the entire publishing industry (including software) accounted for 1% of GDP, and the movie and record industries made up just 0.4%. The SC coalition could also claim a portion of the “Arts, entertainment, and recreation” sector—particularly that portion, such as sports leagues, that also sell their rights to media companies—that totals 0.9%. In contrast, the computer and electronics industry alone made up 1.5%, and the sales of these items are a substantial and lucrative portion of the retail (5.8%) and wholesale (5.5%) trade sectors. (For instance, the items that draw the largest crowds for Black Friday sales are almost always technology products, including televisions, computers, and video game systems.) The IT services sector (“Computer systems design and related services”) accounted for 1.2%, information processing came in at 0.5%, and telecommunications and broadcasting (unfortunately lumped together) accounted for 2.5%. Depending on estimates for the telecommunications industry (vs. broadcasting) and impact on wholesale and retail trade, the PT division in the copyright debate could claim credit for 5% to 10% of the U.S. economy. In contrast, the SC sectors might weigh in at 3% to 5%. In other words, the PT division is roughly twice as large as all SC-affiliated industries, and as much as ten times as large as the industries at the very core of the SC coalition—the record and movie industries. See Teresa L. Gilmore, Edward T. Morgan, & Sarah B. Osborne, *Annual Industry Accounts: Advance Statistics on GDP by Industry for 2010*, SURV. OF CURRENT

The bulk of the technology industry is persuadable on issues of digital copyright regulation. If proposed copyright legislation would drastically reduce consumer rights in a way that would sharply reduce the value of their wares, they will weigh in alongside the SFU coalition. Yet, as discussed herein in relation to the AHRA (§ II), DMCA (§ III), and broadcast flag (§ VI), they are also willing to go along with increases in copyright as long as they can shape the legislation such that it reduces their liability or does not substantially reduce their profitability. Because of their substantial economic clout, the SFU and SC coalitions each spend a great deal of effort trying to draw this PT division to support their respective sides. To the extent the Hollings bill—as well as the suits against P2P companies—pushed the PT division closer to the SFU coalition, it probably had the ironic effect of harming the SC coalition’s interests. Regardless of whether its impact led to any actual business decisions, then, the bill’s political significance is hard to ignore.

C. NGOs Take a Central Role

In addition to rousing the slumbering giant of the technology sector, aggressive copyright industry litigation and lobbying helped spark the permanent involvement of nonprofit groups. Leading up to the passage of the DMCA, the Internet and media policy NGOs had little to say by way of opposition. The Electronic Frontier Foundation (EFF), which was founded in 1990 as roughly the online equivalent of the ACLU, could have joined as an opponent of the DMCA’s anti-circumvention provisions. Instead, in 1995, the *Washington Post* quoted then-chair Esther Dyson as supporting Lehman’s proposal.¹⁴¹ The Digital Future Coalition was really just an umbrella group for other actors, and it was conceived, founded, and run by people who had day jobs other than as full-time policy advocates. While this was an important start, there were no NGOs dedicated to the public’s side in the copyright debate.

In the early 2000s, however—especially in 2001—NGOs got heavily involved, and computer science researchers became the cause célèbre that helped spur such heavy involvement. First, in 2001, a team of computer scientists at Princeton faced legal threats for their study of a DRM system then in development. The Secure

BUSINESS 8, 17 (May 2011), available at http://www.bea.gov/scb/pdf/2011/05%20May/0511_indy_accts.pdf.

¹⁴¹ Elizabeth Corcoran, *A Digital Duel: Whose Property Is This? Business and the ‘Net Cruisers Debate How—and Whether—Copyright Applies in Cyberspace*, WASH. POST, Sept. 3, 1995, at H1.

Digital Music Initiative (SDMI), a coalition of recording industry and technology firms, was developing the DRM system, and the RIAA caught the researchers utterly off-guard with surprisingly stark legal threats. Lawrence Lessig tells the story:

Using encryption, SDMI hoped to develop a standard that would allow the content owner to say “this music cannot be copied,” and have a computer respect that command. The technology was to be part of a “trusted system” of control that would get content owners to trust the system of the Internet much more.

When SDMI thought it was close to a standard, it set up a competition. In exchange for providing contestants with the code to an SDMI-encrypted bit of content, contestants were to try to crack it and, if they did, report the problems to the consortium.

[Princeton Professor Ed] Felten and his team figured out the encryption system quickly. He and the team saw the weakness of this system as a type: Many encryption systems would suffer the same weakness, and Felten and his team thought it worthwhile to point this out to those who study encryption.

...

And though an academic paper describing the weakness in a system of encryption should . . . be perfectly legal, Felten received a letter from an RIAA lawyer that [threatened legal action].¹⁴²

The RIAA invoked the DMCA in its threats to Felten’s team. Of course, it is a rare event when scholars are threatened with legal action for attempting to share their research results at an academic conference. This drew substantial publicity—and much of it negative—for the DMCA. The researchers were able to attract substantial donations of money, pro bono legal work, and favorable publicity to support their case, all of which led the SDMI attorneys to drop the suit—though not before the ordeal wreaked professional havoc for the researchers.¹⁴³ The Electronic Frontier

¹⁴² LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 155-57 (2004). Even though the researchers won in the end, they endured tremendous professional difficulties.

¹⁴³ See, e.g., Ed Felten, *Happy Endings*, *FREEDOM TO TINKER* (Apr. 28, 2006), <https://freedom-to-tinker.com/blog/felten/happy-endings>. Felten writes:

Foundation, which had not previously been a major player in copyright politics, went to work *pro bono* on Felten's behalf. The EFF gave Felten's team the kind of legal and public relations resources that led the RIAA to drop its suit.¹⁴⁴ Even after the immediate legal threat was withdrawn, Felten and the EFF still wanted a court precedent to create a legal umbrella over his research and work like it, so they filed a suit seeking such a ruling. Since the recording industry had backed down, however, the New Jersey Federal District Court dismissed the case, and Felten's side declined to pursue an appeal.¹⁴⁵

Also in 2001, Russian programmer Dmitry Sklyarov faced his own, even more serious legal problems. During a visit to the United States, he was arrested and jailed for nearly a month, charged with criminal violations of the DMCA. Sklyarov was a PhD student researching cryptography and an employee of Russian software firm Elcomsoft. He had helped create a program called the Advanced eBook Processor, which removed the restrictions in Adobe Systems' eBook software. After he gave a presentation about the software at the 2001 DEF CON hacker¹⁴⁶ convention in Las Vegas, FBI agents arrested him and charged him with trafficking in a circumvention device for profit, a criminal offense under § 1204. After several weeks in jail, Sklyarov was released on

Let's catalog the happy consequences of our case. One person lost his job, and another nearly did. Countless hours of pro bono lawyer time were consumed. Anonymous donors gave up large amounts of money to support our defense. I lost at least months of my professional life, and other colleagues did too. And after all this, the ending was that we were able to publish our work – something which, before the DMCA, we would have been able to do with no trouble at all.

In the end, yes, we were happy – in the same way one is happy to recover from food poisoning. Which is not really an argument in favor of food poisoning.

Id.

¹⁴⁴ Jennifer B. Lee, *Delayed Report on Encryption Flaws to Be Presented*, N.Y. TIMES, Aug. 15, 2001, at C3 (“Dr. Felten says the association changed its stance only after the researchers filed the lawsuit in June with the support of the Electronic Frontier Foundation . . .”).

¹⁴⁵ Press Release, Electronic Frontier Foundation, Security Researchers Drop Scientific Censorship Case: Government, Industry Claim DMCA Not a Threat to Science (Feb. 6, 2002), *available at* http://w2.eff.org/IP/DMCA/Felten_v_RIAA/20020206_eff_felten_pr.html.

¹⁴⁶ News media often portray hackers as people who use their technological skills to commit crimes. As used here and as represented at DEF CON, a “hacker” is better thought of as a tinkerer. As the DEF CON web page notes, there are indeed criminals at the convention. Of course, criminals “also go to high school, college, work in your workplace, and the government. There are also lawyers, law enforcement agents, civil libertarians, cryptographers, and hackers in attendance [at DEF CON]. Ssshhh. Don't tell anyone.” *Official DEF CON FAQ v0.95*, DEFCON.ORG, <https://www.defcon.org/html/links/dc-faq/dc-faq.html> (last visited Apr. 4, 2012).

the condition that he testify against his employer Elcomsoft. In 2002, the jury found the company not guilty; they believed the company's defense of not knowingly violating the law.¹⁴⁷ Again, the EFF worked on behalf of the defendant, and again they were able to leverage the case into substantial negative publicity against the DMCA. While the EFF had not previously been involved in copyright litigation or advocacy to any substantial degree, the Felten and Sklyarov cases drew them immediately into the very center of the fray. As I discuss elsewhere, this entry was not temporary, but is still reflected by their central place in the copyright debate.¹⁴⁸

Likewise, in 2001, the D.C.-based NGO Public Knowledge was born.¹⁴⁹ The group was founded largely to serve as a permanent D.C. presence to counterbalance the content industry's lobbying efforts—or, as they put it more positively on their site, the group “preserves the openness of the Internet and the public's access to knowledge, promotes creativity through balanced copyright, and upholds and protects the rights of consumers to use innovative technology lawfully.”¹⁵⁰ As discussed elsewhere,¹⁵¹ Public Knowledge plays an absolutely central role in the SFU coalition's DC presence. During congressional hearings on copyright, they are often the only NGO present. By 2002, Public Knowledge President Gigi Sohn was already appearing in the national media as a voice for moderation in copyright law.¹⁵²

D. Scholars Step into the Spotlight

Finally, the period from 1999 to 2002 was the beginning of a period of major public outreach by scholars. Peter Jaszi might have put the Digital Future Coalition in motion, but most outside the world of copyright are (unfortunately for them) not familiar

¹⁴⁷ Matt Richtel, *Russian Company Cleared of Illegal Software Sales*, N.Y. TIMES, Dec. 17, 2002, <http://www.nytimes.com/2002/12/18/business/technology-russian-company-cleared-of-illegal-software-sales.html>.

¹⁴⁸ Herman, *supra* note 16.

¹⁴⁹ *Public Knowledge*, RAZOO, <http://www.razoo.com/story/Publicknowledge> (last visited Apr. 4, 2012).

¹⁵⁰ *Our Work*, PUBLIC KNOWLEDGE, <http://publicknowledge.org> (last visited Oct. 28, 2011).

¹⁵¹ See HERMAN, *supra* note 19, at 87, 175, 213.

¹⁵² E.g., David Lieberman, *Reshaping Industries, Lifestyles*, USA TODAY, June 25, 2002, <http://www.usatoday.com/life/cyber/tech/2002/06/25/bonus-panel.htm>; Amy Harmon, *Movie Studios Press Congress in Digital Copyright Dispute*, N.Y. TIMES, July 29, 2002, <http://www.nytimes.com/2002/07/29/business/movie-studios-press-congress-in-digital-copyright-dispute.html?pagewanted=all&src=pm>.

with Jaszi or with the other key scholars who were the heart of the DFC.¹⁵³ In sharp contrast, by the early 2000s, law professor Lawrence Lessig had appeared in public so often that he became known to millions as the face of a growing movement to reform copyright. He published several books aimed at non-lawyers,¹⁵⁴ helping to raise a high degree of public consciousness around questions of Internet design and regulation. Lessig also served as the attorney for Eric Eldred in Eldred's eponymous case, argued in 2002 and decided in 2003.¹⁵⁵ They asked the Supreme Court to overturn the 1998 Copyright Term Extension Act,¹⁵⁶ which extended copyright terms by 20 years—even retroactively. They failed to get their desired ruling, but the case helped bring additional attention to the fair use coalition's message on copyright law.¹⁵⁷ While Lessig's role has been singular, many other scholars have also taken the SFU coalition's message to the public—not only legal scholars,¹⁵⁸ but also scholars in fields such as communication¹⁵⁹ and computer science.¹⁶⁰ Once copyright

¹⁵³ This is not to say that these scholars were not public intellectuals. For instance, in congressional hearings leading up to the DMCA, law professors James Boyle, Robert L. Oakley, and Keith Aoki testified against the bill—as did Douglas Bennett, a political scientist who was then the president of Earlham College. Further, over 60 law faculty signed letters urging Congress to strip the portions of the bill that ban circumvention devices, instead calling for a conduct-based approach much more like Boucher's proposal. (Titles, dates, page numbers, and full PDFs of the hearings on file with author.) To my knowledge, however, none engaged in the kind of full-frontal publicity campaign that would come a few years later.

¹⁵⁴ Lessig's early triumvirate of bestsellers is: *CODE AND OTHER LAWS OF CYBERSPACE* (1999); *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* (2002); and *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* (2004).

¹⁵⁵ *Eldred v. Ashcroft*, 537 U.S. 186 (2003).

¹⁵⁶ Sonny Bono Copyright Term Extension Act, Pub. L. No. 105–298, 112 Stat. 2827 (1998).

¹⁵⁷ See, e.g., Dan Ackman, *0.2% for the Mouse!*, WALL ST. J., Jan. 17, 2003, at A10; *Copyrights and Wrongs*, WASH. POST, Oct. 16, 2002, at A24; Amy Harmon, *The Supreme Court: The Context; A Corporate Victory, but One That Raises Public Consciousness*, N.Y. TIMES, Jan. 16, 2003, <http://www.nytimes.com/2003/01/16/us/supreme-court-context-corporate-victory-but-one-that-raises-public-consciousness.html?pagewanted=all&src=pm>.

¹⁵⁸ There are so many public intellectuals at law schools whose work includes this issue that I dare not name a selection of them. For a starting point—but not anywhere near a definitive list—one could look at the list of faculty affiliated with Harvard's Berkman Center on Internet and Society.

¹⁵⁹ Two early examples are Siva Vaidhyanathan (then at N.Y.U., now at Virginia) and Kembrew McLeod (Iowa), though more have joined them in the years since.

¹⁶⁰ Without setting out to do so, Ed Felten became one of the most visible political actors in his discipline after the RIAA's legal threats. In the last decade, Felten founded the technology policy blog *Freedom-to-Tinker.com* as well as

became a hot issue—especially, as in Ed Felten’s case, once it became a hot issue in some researchers’ laps—these scholars were happy to help spread the agenda of copyright moderation, not only writing volumes online, but also appearing in newspapers and on radio and TV news.

The combination of all these events turned the period from 1999 to 2002 into an inflection point in the history of copyright. Before that point, copyright was perceived as a topic of little interest to the general public, but the subject suddenly captured the public’s attention.¹⁶¹ For a brief window, it seemed like the Internet might destroy the media industry’s business model of large, centralized distribution systems; the future of music, movies, publishing, and news media seemed to hang in the balance. Digital utopians like John Perry Barlow promised that the Internet would remove the need for centralized media industries and for copyright protection in general.¹⁶² Meanwhile, some agreed with Barlow’s contention in fact, but took up a wholly different estimation of that outcome’s desirability—promising doom and gloom for the future of cultural creativity.¹⁶³ In hindsight, the debate of ten years ago seems radically overstated, but at the time, many believed we had to choose between continued Internet freedom and the continued existence of the entertainment industries. While the same tension remains today, and though Manichean rhetoric is still not hard to find, everyone knows the policy trade-off between digital freedom and industry profits are a matter of degree rather than an either-or

Princeton’s Center for Information Technology Policy. On January 1, 2011, Felten became the Chief Technologist of the Federal Trade Commission. The irony here is that recording industry threats against Felten turned him into a powerful opponent.

¹⁶¹ Siva Vaidhyanathan, *The State of Copyright Activism*, FIRST MONDAY, Apr. 5, 2004, http://www.firstmonday.org/issues/issue9_4/siva/index.html.

¹⁶² John Perry Barlow, *The Next Economy of Ideas: Will Copyright Survive the Napster Bomb? Nope, But Creativity Will*, WIRED, http://www.wired.com/wired/archive/8.10/download_pr.html (last visited Apr. 4, 2012).

¹⁶³ See, e.g., David Higgins, *Download and Be Damned*, SYDNEY MORNING HERALD, May 19, 2000, http://newsstore.smh.com.au/apps/viewDocument.ac?page=1&sy=smh&kw=download+and+be+damned&pb=smh&dt=selectRange&dr=entire&so=relevance&sf=headline&rc=10&rm=200&sp=nrm&clsPage=1&docID=news000519_0609_8726. (“THE Internet generation is holding the rock industry to ransom with computer programs which let it steal whole CDs at the click of a mouse.”). But see Sathnam Sanghera, *Battles of the Copyright Crusader: Interview Hilary Rosen*, FIN. TIMES, Aug. 14, 2002, at 10 (quoting then-RIAA chair Hilary Rosen, “I don’t think it’s the end of the business—every survey that we’ve ever done says that music is an incredibly important part of people’s lives, consumption of music is still extremely high—we just have to monetise that more effectively and find better ways of getting piracy under control. We will return to growth.”).

choice. One good example of this later debate was the proposal to reform the DMCA.

IV. DMCA REFORM

Especially in light of the Felten and Sklyarov cases, the budding SFU coalition quickly came to see the DMCA as an extremely objectionable law in need of reform. The stories of programmers who had been harassed and even jailed quickly galvanized academics, programmers, and inventors, adding thousands to the ranks of the newly or potentially mobilized. While the Felten and Sklyarov cases are just part of the DMCA reform movement's story—and efforts to reform the DMCA are just part of the intellectual property reform movement—these two stories served as a mobilizing wake-up call for untold thousands of new entrants into the copyright debate.

A. Reform Proposals

DMCA reform became a serious possibility once it attracted congressional allies. Most significant of these was Representative Rick Boucher, Democrat of Virginia. In the 108th and 109th Congresses, he introduced bills to curtail the reach of the DMCA.¹⁶⁴ Also in the 108th Congress, Representative Zoe Lofgren, Democrat of California, introduced a similar DMCA reform bill, cosponsored by Boucher.¹⁶⁵ These bills would have modified the basic ban on circumventing copy controls, allowing circumvention to aid otherwise legal activities such as fair use. They also would have scaled back the anti-trafficking provisions, allowing companies to develop and sell tools with substantial noninfringing uses. In short, the bills would have tethered charges of illegal circumvention to charges of infringement, and they would have applied the *Sony* standard¹⁶⁶ to the development and distribution of tools capable of circumvention. Like Sony's Betamax video recorder, companies would be able to develop

¹⁶⁴ See Digital Media Consumers' Rights Act of 2003, H.R. 107, 108th Cong. (2003); see also Digital Media Consumers' Rights Act of 2005, H.R. 1201, 109th Cong. (2005).

¹⁶⁵ See Benefit Authors without Limiting Advancement or Net Consumer Expectations (BALANCE) Act of 2003, H.R. 1066, 108th Cong. (2003).

¹⁶⁶ See *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984) (finding "the sale of copying equipment . . . does not constitute contributory infringement if the product is . . . capable of substantial noninfringing uses.").

circumvention devices that are capable of substantial noninfringing uses.

The DMCA would be quite different if such a reform passed. For instance, the law would still forbid hacking DVDs en route to selling bootlegged copies; in addition to the civil and criminal penalties for infringement, a would-be bootlegger could also face the DMCA's civil and criminal penalties. If reformed as Boucher envisioned, however, the DMCA would not prevent a consumer from hacking the DRM on a legally purchased DVD to transfer the film to her laptop—an activity that is illegal if common today.

Technology firms could also develop and sell circumvention devices under such a reform, as long as these tools were capable of substantial noninfringing uses. Since DRM systems generally prevent some noninfringing uses,¹⁶⁷ most circumvention tools are likely capable of substantial noninfringing uses. This would have been quite a legal shield for would-be makers of circumvention devices, spreading the tools to circumvent DRM from the dark corners of the Internet into the open—and even on to the shelves of big box retailers.

If these reforms had passed, the DMCA would be less frightening for the likes of Ed Felten and Dmitry Sklyarov. Legal threats against encryption researchers would be less frequent and less likely to succeed. This might not be enough to comfort researchers, however. Indeed, given the current law's exemption for encryption research,¹⁶⁸ Felten likely would have prevailed had the RIAA actually sued—rather than merely threatening a suit. Yet that is little comfort for an individual in the face of a legal threat from a major industry trade group. Since the court's dismissal of Felten's suit, no researcher has faced similar legal threats for academic encryption research. If passed, the reform would further increase any such researcher's odds of success in court, but even the threat of a suit is often enough to chill certain activities. As Felten explains, "For me and my colleagues, *probably* wasn't enough. Even a 99% chance of getting to keep our houses and savings wasn't enough. Nor should it be."¹⁶⁹

If the potential difference for academic researchers is important but small, the impact of such a reform on for-profit activities would be enormous. The difference would be night and day for somebody in Sklyarov's situation—researching encryption for academic purposes and turning this knowledge into a marketable product. A firm like Elcomsoft would be much better

¹⁶⁷ NEIL WEINSTOCK NETANEL, COPYRIGHT'S PARADOX 74-75 (2008).

¹⁶⁸ 17 U.S.C. § 1201(g).

¹⁶⁹ Ed Felten, *Revisionism*, FREEDOM TO TINKER (Aug. 5, 2003), <https://freedom-to-tinker.com/blog/felten/revisionism>.

positioned to take calculated risks in this circumstance, and while the law might still prevent some technologies from coming to market, the odds would be much more favorable to technology firms and thus to their employees.

From the perspective of the SC coalition, the proposed reforms would substantially reduce their ability to use the DMCA to keep circumvention devices on the margins. Hundreds of thousands if not millions of people download and use software that circumvents DRM; as of this writing, the most common goal is to defeat the encryption on DVDs (and, increasingly, Blu-Ray discs), but many other DRM systems are routinely targeted. Many other consumers, however, do not even know that such options exist. For many, circumvention devices such as DVD rippers are effectively unavailable until they appear in mainstream retail stores—if Best Buy does not sell it, it does not exist. Keeping circumvention tools out of these less technology-savvy consumers' hands may indeed preserve some revenue for the content industries.¹⁷⁰

B. Outcome and Significance

DMCA reform garnered serious attention and support from virtually every significant member of the SFU coalition, and it drew substantial opposition from the SC coalition. The House Committee on Commerce and Energy held several hearings to discuss the bills in detail.¹⁷¹ Further, in the 109th Congress (2005-2006), the bill's 13 bipartisan cosponsors included House Committee on Energy and Commerce Chair Joe Barton, giving it instant credibility.¹⁷²

While the kerfuffle over the Hollings bill revealed the judiciary committees' belief that they should get first crack at copyright issues, the commerce committees—who have jurisdiction over the regulation of consumer goods such as electronics—also have a legitimate role to play once copyright becomes a tool for regulating technology. This opens the door to venue shopping for both sides. In general, the judiciary committees have been quite hospitable to the SC coalition, while the commerce committees have proven friendlier to the technology industries and

¹⁷⁰ In particular, children's movies undoubtedly sell many extra copies because many parents don't know how to make backup copies—leaving them to pay full price to replace copies that got lost, damaged, or smeared with jam. See CORY DOCTOROW, *CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE* 8-9 (2008), available at <http://craphound.com/content/download/>.

¹⁷¹ HERMAN, *supra* note 19, at 200.

¹⁷² *Id.* at 170.

thus more skeptical of DRM regulation. Barton's chairmanship sharpened this divide.

Despite the substantial push, reform proposals all died in committee. The motion picture, recording, and software industries provided stiff opposition, as did their many allies in Congress.¹⁷³ Congressional members of the SC coalition helped limit Barton's influence by isolating discussion of the bills to his committee. Each of the other three proposals discussed in detail in this study were subject to hearings in both the commerce and judiciary committees in either the House or Senate (or in both); in contrast, neither judiciary committee held a hearing on any of the DMCA reform bills. Even in Barton's committee, the proposal never came to a vote. Despite the low ceiling set for the DMCA reform proposals, however, these efforts represent a watershed moment in the DRM policy debate. For the first time, the SFU coalition was on the offensive and gaining some traction. The effort may have stalled, but it shows how seriously the coalition had grown by the mid-2000s.

V. BROADCAST FLAG

The 2000s saw a number of proposals for further expansion of copyright's reach in regulating technology. As discussed above, the Hollings bill was among them. Another proposal of note was the 2005 Digital Transition Content Security Act,¹⁷⁴ which would have prevented the re-digitization of analog content.¹⁷⁵ While these and other proposals drew some attention, the proposal that came closest to passage sought to impose a DRM system called the "broadcast flag" on digital television (DTV) receivers.¹⁷⁶ This proposal was the result of sophisticated negotiations between multiple industries and other stakeholders. After a rulemaking, the FCC passed a broadcast flag mandate,¹⁷⁷ but the courts struck it down as exceeding the FCC's regulatory reach.¹⁷⁸ The decision noted that Congress might give the FCC the jurisdiction, and

¹⁷³ *Id.*

¹⁷⁴ Digital Transition Content Security Act of 2005, H.R. 4569, 109th Cong. (2005). This proposal to close the so-called "analog hole" was not strictly a DRM proposal, but because analog outputs represent a potential weakness in DRM schemes, it is a closely related subject.

¹⁷⁵ GILLESPIE, *supra* note 62, at 197.

¹⁷⁶ *See id.* at 193-222. Gillespie briefly discusses the other contemporary proposals before embarking on a detailed examination of the technology and politics of the broadcast flag generally.

¹⁷⁷ *In re* Digital Broadcast Content Protection, 18 F.C.C.R. 23,550 (2003) (codified at 47 C.F.R. pts. 73, 76).

¹⁷⁸ *American Library Ass'n v. FCC*, 406 F.3d 689 (D.C. Cir. 2005).

legislation to do so made some headway in Congress. The DTV flag even had enough momentum that the proponents of a far less developed proposal—for a similar flag mandate on HD radio receivers—tried to piggyback on the DTV proposal. The failure of these efforts was also a clear sign of the SFU coalition’s growing political impact.

A. Bottling Digital Broadcasts

Consumers have long been able to record broadcast radio and television, first with analog tape and now with digital recording devices. This ability has long caused anxiety for the content industries. Even though copyright holders have tried to sue manufacturers of home recording technology, *Sony* recognized home taping as at least potentially noninfringing; in that case, the court recognized as fair use when consumers record television programs and watch them later.¹⁷⁹ Because the FCC sets the technology standards for broadcasting, content owners are unable to impose DRM unilaterally on over-the-air broadcasts. To impose a DRM scheme on broadcast, they would need the government to include at least the potential for DRM into the broadcasting standards.

The transition to digital broadcasting increased copyright holders’ anxiety over home recording; digital recordings of digital broadcasts are better than digital or analog recordings of analog broadcasts. Yet this transition also offered a unique opportunity to limit home recording even beyond the technical limits imposed by analog technology. Motion picture studios¹⁸⁰ seized this opportunity, hoping to recreate the success of the relatively sealed environment offered by DVD distribution. Their best political weapon was the threat to withhold content; without tight DRM, they argued, they would withhold their high-value content from broadcasting, sabotaging the transition to digital television broadcasting.¹⁸¹

¹⁷⁹ *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 442-56 (1984).

¹⁸⁰ As movie studios are also core sources of TV shows, their concern is the protection of made-for-TV programming as well as that of feature films. Also, the dichotomy between studios and broadcasters is for the most part between divisions within the same companies rather than between separate companies. Each of the major national broadcasters and most of the most successful TV programming studios exist as divisions of still-larger media conglomerates. *See, e.g.*, Allen J. Scott, *The Other Hollywood: The Organizational and Geographic Bases of Television-Program Production*, 26 MEDIA CULT. & SOC’Y 183 (2004).

¹⁸¹ GILLESPIE, *supra* note 62, at 200. The studios threatened that they would withhold desirable, recent films from broadcast, and broadcasters threatened not

Studios' best shot at imposing a flag mandate was adding DRM capabilities into the standards for DTV. They reached out to the PT division—in particular, the consumer electronics industry—and built an inter-industry coalition to develop a mutually acceptable technical solution. This DRM system could then serve as the basis for a government mandate. There was no political will for encrypting content at the source, so the next best choice was to force a mandate that all tuners encrypt content before passing it along to other media devices. Tarleton Gillespie explains the system:

Digital broadcasts would be accompanied by a mark that indicated whether the owner of that content would permit it to be redistributed or not. Any digital tuner that transformed this signal into a displayable form would be required to check for and honor this flag. If the content was flagged, the tuner would allow it to be recorded only in specified formats—formats that would preserve the broadcast flag if that copy were passed to another device ... after encrypting it using one of a limited set of authorized encryption technologies.¹⁸²

In this way, only authorized forms of reuse would be allowed. This would have curtailed consumers' ability to record and reuse broadcast media.

In 2001, Fox Broadcasting Company first proposed the DTV broadcast flag technical standard and began building an inter-industry coalition. This effort was organized as the Broadcast Protection Discussion Group (BPDG), including representatives from the major motion picture companies, as well as “consumer electronics corporations, . . . information technology and software companies, . . . companies specializing in existing forms of copy protection, . . . and consumer and public advocate groups.”¹⁸³ Despite initial, vocal objections by some participants—in particular, NGOs—the process was reasonably smooth. “The premise of the flag and how it would work was already agreed

to transmit HD versions of their content. Only the threat to withhold feature films had even a patina of credibility. Movie studios have other substantial revenue streams that could be threatened—DVD sales, pay and basic cable licensing, and so on—while broadcasters rely almost exclusively on advertising revenue. Thus, a decision by broadcasters to withhold high-quality versions of TV programs would have almost no identifiable benefit other than the cost savings of not upgrading production facilities and broadcast towers.

¹⁸² GILLESPIE, *supra* note 62, at 202.

¹⁸³ *Id.* at 203.

upon at the start, or agreed upon by enough of the major players that critics could be pushed aside.”¹⁸⁴ Even groups that actually opposed the flag mandate continued to participate, seeking a role in steering the process.

While important differences remained,¹⁸⁵ the BPDG presented the DTV flag proposal to the FCC as reflecting unanimous inter-industry agreement. In November 2003, with all the industries on board and the only real opposition coming from the NGOs, the FCC passed a rule implementing the broadcast flag as a required standard for DTV receivers.¹⁸⁶ The rule was to take effect July 1, 2005.

B. Lowering the Broadcast Flag

In 2004, a coalition of four NGOs and five library groups filed suit to stop the broadcast flag rule from taking effect. Among NGOs, Public Knowledge led the charge, joined by the EFF, Consumers Union, and Consumers Federation of America. Library groups included the American Library Association (ALA), Association of Research Libraries, American Association of Law Libraries, Medical Library Association, and Special Libraries Association. In May 2005, the DC Circuit Court sided with the petitioners, holding the FCC had exceeded its jurisdiction.¹⁸⁷ The FCC may regulate receivers, but the 3-judge panel unanimously held that the current statute does not grant the FCC the “authority to regulate receiver apparatuses after the completion of broadcast transmissions.”¹⁸⁸ This decision prevented the flag requirement from ever taking effect—just two months before the regulation would have gone into effect.

The court ruling left open the possibility for congressional intervention; if the FCC needed congressional authorization, a new law could provide it. In May 2006, then-Senator Ted Stevens introduced an omnibus telecommunications reform bill.¹⁸⁹ One section would have authorized the FCC to adopt a broadcast flag mandate, permitting the Commission to re-enact its 2003 ruling.¹⁹⁰ This was part of the subtitle known as the Digital Content

¹⁸⁴ *Id.* at 204.

¹⁸⁵ The most divisive issue was on the question of how new encryption schemes would be approved—the process for certifying devices to handle content after it had been encrypted. *See* GILLESPIE, *supra* note 62, at 206-10.

¹⁸⁶ *See supra* note 177.

¹⁸⁷ *American Library Ass’n v. FCC*, 406 F.3d 689 (D.C. Cir. 2005).

¹⁸⁸ Lee, *supra* note 28, at 411.

¹⁸⁹ Communications, Consumer's Choice, and Broadband Deployment Act of 2006, S. 2686, 109th Cong. (2006).

¹⁹⁰ *Id.* § 452.

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

Protection Act of 2006.¹⁹¹ The bill was the subject of congressional hearings and a relatively high volume of attention, but the broadcast flag was only part of the cacophony of debate over the bill, which passed committee but never came up for a final vote in the Senate.¹⁹²

Stevens' efforts stalled in part due to the remarkable groundswell of public demands that network neutrality be part of any comprehensive telecommunications reform act,¹⁹³ though other forces of opposition also slowed the bill. Among those forces were members of the SFU coalition, who opposed the flag mandate. In particular, NGOs such as Public Knowledge and the EFF came out in full force against broadcast flag proposals in both the House and Senate.¹⁹⁴ With the FCC's decision having been overturned, industry voices such as the Consumer Electronics Association—who had participated in the BPDG discussions, though in part seeking a more permissive system—expressed opposition to the bill to overturn *ALA v. FCC*.¹⁹⁵

It is unclear whether these forces alone could have stopped either the whole bill or a standalone broadcast flag bill, but the

¹⁹¹ *Id.* §§ 451-454.

¹⁹² The Stevens bill passed the Senate Committee on Commerce, Science, and Transportation as H.R. 5252, which was the number assigned to the telecommunications bill authored by Joe Barton (R-TX) that had already passed the House on a vote of 321 to 101. Communications Opportunity, Promotion, and Enhancement Act of 2006, H.R. 5252, 109th Cong. (2006). Had the Stevens bill passed the Senate, this change would have enabled a conference committee to work out the substantial difference between the two proposals.

¹⁹³ Jeffrey A. Hart, *The Net Neutrality Debate in the United States*, 8 J. INFO. TECH. & POLITICS 418, 418 (2011); Lisa Caruso, *Outmanned, Outfoxed, Outspent*, 38 (32-34) NAT. J. 44 (2006), available at http://www.nationaljournal.com/member/magazine/lobbying-law-outmanned-outfoxed-outspent-20060812?mrefid=site_search; Daniel W. Reilly, *The Telecom Slayers*, SALON (Oct. 2, 2006), <http://www.salon.com/2006/10/02/slayers/>.

In the interest of full disclosure, I have long been a public advocate for network neutrality.

As member of the network neutrality movement, it is modestly self-serving to credit that movement—rather than the many other political forces that came to bear—for stopping the Stevens bill. That caveat in mind, support for net neutrality was a roadblock of at least some importance, though it might not have been sufficient to stop the bill's passage.

¹⁹⁴ E.g., *Content Protection in the Digital Age: The Broadcast Flag, High-Definition Radio, and the Analog Hole: Hearing Before the Subcomm. On Telecomms. & the Internet of the H. Comm. on Energy & Commerce*, 109th Cong. 21-32 (2005) (statement of Gigi B. Sohn, President, Public Knowledge); *id.* at 77 (letter from Fred von Lohmann, Senior Staff Attorney for Intellectual Property, Electronic Frontier Foundation). Both groups also posted copious amounts of oppositional materials on their websites.

¹⁹⁵ *Id.* at 33 (statement of Michael Petricone, Vice President of Government Affairs, Consumer Electronics Association).

SFU coalition was emboldened by the court's ruling, and opposition to a flag mandate was sustained and powerful. The nonprofit and library groups were pivotal in slowing the proposal's momentum; had they not participated heavily, the flag mandate would have become law. Their role in the successful suit is the most obvious impact, but consider also their seeming success in turning the electronics industry against the mandate. During the BPDG process, the electronics industry's concerns were primarily about preserving marketable functions (e.g., the capacity to shift recorded programs to a user's computer), and they expressed little public objection to the idea of a flag mandate. The outcome of the *ALA* ruling, as well as what was undoubtedly a strong push from NGOs,¹⁹⁶ emboldened the consumer electronics industry—a key portion of the persuadable technology division—to become full-fledged opponents of a flag mandate. By drawing the electronics industry into the opposition, the SFU coalition added more political pressure than they could have mustered on their own.

C. *Few Salute the Audio Flag*

While the DTV broadcast flag nearly became law, proposals for a digital radio flag gained much of their viability from piggybacking on the DTV flag effort—and even then, proponents abandoned them in their infancy. No similar inter-industry coalition developed a radio flag, and even members of Congress who supported the DTV flag were often opposed to the audio flag.¹⁹⁷ Despite this, it was contained in two bills, and the similarities between the proposals—strategically employed by audio flag proponents—gave it at least a patina of credibility.

In addition to permitting the FCC to mandate the DTV flag, the Stevens bill also includes an audio flag provision, albeit a much more prospective one than the DTV flag authorization. If the Stevens bill had passed, the DTV authorization would have

¹⁹⁶ This study did not find public evidence of such coalition building, but it would have been irrational of the NGOs not to attempt to persuade the electronics industry to weigh in against the flag mandate. Additionally, it would be consistent with the literature. Persuading would-be allies to one's way of thinking is a vital inside-the-Beltway policy tactic, and it is often the case—and certainly so here—that NGOs are more strident in their positions than their potential allies in industry or government. See Paul A. Sabatier & Hank C. Jenkins-Smith, *The Advocacy Coalition Framework: An Assessment*, in THEORIES OF THE POLICY PROCESS 117, 130 (Paul A. Sabatier ed., 2d ed. 2007); Hank C. Jenkins-Smith, Gilbert K. St. Clair, & Brian Woods, *Explaining Change in Policy Subsystems: Analysis of Coalition Stability and Defection over Time*, 35 AM. J. POL. SCI. 851 (1991).

¹⁹⁷ HERMAN, *supra* note 19, at 198.

directed the FCC to begin a rulemaking process specifically to implement its original 2003 mandate, albeit with minor modifications.¹⁹⁸ The audio flag authorization would have given the FCC the power to implement a similar rule, but only if a similar inter-industry process had led to substantial agreement within 18 months; otherwise, the Commission was to report back to Congress.¹⁹⁹

Also in 2006, Representative Mike Ferguson introduced legislation granting the FCC the authority to require audio flag compliance for digital radio tuners.²⁰⁰ Whereas the audio flag provisions of the Stevens bill would have required a substantial inter-industry consensus, the Ferguson bill made no such stipulation; it simply granted the Commission the authority to impose an audio flag mandate. While the omnibus Stevens bill had a great deal of political muscle behind it and was close to passage, the much more targeted Ferguson bill never gained much traction. For instance, many members of Congress who supported the DTV mandate stated explicitly that they did not think the audio flag mandate was a good idea.²⁰¹ The lack of a preexisting inter-industry agreement weighed heavily against its passage.

Another factor also weighed against the audio flag proposal: the recording industry has a substantially diminished capacity to withhold content from broadcasters. Broadcasters seeking to use movies and TV shows must negotiate with copyright holders on a work-by-work basis, giving both industries a reason to work together to avoid a negotiation showdown.²⁰² In contrast, terrestrial radio stations are in a much less precarious position when it comes to getting licenses to broadcast content. The statutory list of the exclusive rights of copyright holders²⁰³ grants no general right of public performance right for sound recordings; there is an exclusive right of performance for sound recordings that applies to digital audio transmissions,²⁰⁴ but a separate exemption makes clear that this does not apply to digital broadcasts by FM stations.²⁰⁵ In short, sound recording copyright holders get no royalties from and have no leverage over terrestrial

¹⁹⁸ Communications, Consumer's Choice, and Broadband Deployment Act of 2006, S. 2686, 109th Cong. § 452 (2006).

¹⁹⁹ *Id.* §§ 453-454.

²⁰⁰ Audio Broadcast Flag Licensing Act of 2006, H.R. 4861, 109th Cong. (2006).

²⁰¹ HERMAN, *supra* note 19, at 198-99.

²⁰² Broadcasting content is a public performance, and the copyright holders for "motion pictures and other audiovisual works" enjoy an exclusive right to control their public performance. 17 U.S.C. § 106(4) (2006).

²⁰³ *Id.* § 106.

²⁰⁴ *Id.* § 106(6).

²⁰⁵ 17 U.S.C. § 114(d) (2006).

broadcasters.²⁰⁶ Not only do record companies not try to stop radio airplay, they strongly encourage it—so much so that it has led to the practice of record companies paying large sums to get their songs on the radio.²⁰⁷

There is an exclusive right of public performances of musical compositions,²⁰⁸ so all broadcasters must negotiate royalty terms with these copyright holders—generally songwriters or their heirs. Yet such licensing agreements via royalty collecting societies (ASCAP, BMI, and SESAC) are a long-established mechanism for collecting reasonable royalties for songwriters.²⁰⁹ As the AHRA debate illustrated, music publishers' digital copyright strategy is based on royalty collection rather than DRM mandates.²¹⁰ As such, publishers did not make even an idle threat to withhold licenses from broadcasters. With no music industry threat to withhold content, the audio flag proposal was treated with little urgency.

Like the DMCA reform bills, the audio and DTV broadcast flag bills provide excellent opportunities to see the SC and SFU coalitions in action. Both efforts warranted substantial attention from all interested parties, but each coalition was strong enough to stop the other's proposals from becoming law. In particular, the failure of the broadcast flag proposals further highlights the growth of the SFU coalition. Without their focused resistance in the courts and in Congress, the broadcast flag mandate would have become law. That the broadcast flag has already been swept into the dustbin of history is a remarkable victory for a coalition that was, by all rights, just getting started.

VI. AFTER DRM: FROM THE DISC TO THE WHOLE WIDE WEB

From the SFU coalition's perspective, the gains of the 2000s have been encouraging but far from enough to be satisfied with the current policy dynamics around copyright. In the years since 2006, the SC coalition has also remained the more powerful side in the debate. While there have been a number of other

²⁰⁶ Cassondra C. Anderson, Recent Development, *"We Can Work It Out:" A Chance to Level the Playing Field for Radio Broadcasters*, 11 N.C. J.L. & TECH. 72, 73-74 (2011).

²⁰⁷ Eric Boehlert, *Pay for Play*, SALON.COM (Mar. 14, 2001), http://www.salon.com/2001/03/14/payola_2/.

²⁰⁸ 17 U.S.C. § 106(4).

²⁰⁹ See Anderson, *supra* note 206, at 93 (Anderson writing approvingly of "the rate of 3% to 5% of revenue that all radio broadcasters pay to music publishers and songwriters through their licenses with ASCAP, BMI, and SESAC.)."

²¹⁰ See *supra* notes 22-48 and accompanying text.

notable events, two developments in particular help illustrate the trajectory of the politics of copyright to date. Both show the SFU coalition's continued and even growing relevance despite the SC coalition's continued dominance. They also demonstrate that, while DRM restrictions will likely remain in place for the foreseeable future, the combination of DRM technologies and the laws that back them clearly have not produced the reductions in infringement predicted by the content industries.

A. Boucher's Efforts End

First, Rick Boucher's proposed DMCA reforms—and then, Boucher's time in Congress—went out with a whimper. In 2007, Boucher introduced a bill with a watered-down version of his DMCA reform proposals.²¹¹ In his 2003 and 2005 bills, Boucher's proposals would have tied DMCA violations to infringement, meaning that circumvention for noninfringing purposes and technologies capable of substantial noninfringing uses would have been protected as legal.²¹² In an effort to find something more politically palatable, Boucher wrote his 2007 bill such that it merely would have created a narrow list of exemptions to the basic ban on circumvention.²¹³ These exemptions made a small dent in the DMCA, providing the right to do things like circumvent the DRM on DVDs to show embedded high-quality clips as part of in-class lectures, or to circumvent the technology that locks cell

²¹¹ Freedom and Innovation Revitalizing U.S. Entrepreneurship Act of 2007, H.R. 1201, 110th Cong. § 3 (2007). Section 2, the other substantive section of the bill, would have instructed the court to remit damages for secondary infringement, “except in a case in which the copyright owner sustains the burden of proving, and the court finds, that the act or acts constituting such secondary infringement were done under circumstances in which no reasonable person could have believed such conduct to be lawful.” *Id.* § 2(a). That section also would have encoded the *Sony* standard as follows: “No person shall be liable for copyright infringement based on the design, manufacture, or distribution of a hardware device that is capable of substantial, commercially significant noninfringing use.” *Id.* § 2(b). Based on this section of the bill alone, this author was surprised that the proposal was allowed to die on the vine without a meaningful push from the persuadable technology division.

²¹² Digital Media Consumers' Rights Act of 2003, H.R. 107, 108th Cong. (2003); Digital Media Consumers' Rights Act of 2005, H.R. 1201, 109th Cong. (2005).

²¹³ Freedom and Innovation Revitalizing U.S. Entrepreneurship Act of 2007, H.R. 1201, 110th Cong. § 3 (2007). The other substantive section, § 2, sought to reduce the scope of secondary liability for technology companies and, in findings where reasonable people might disagree about whether there was secondary liability, to reduce damages.

phones to specific networks.²¹⁴ This proposal would have had no impact on the vast majority of would-be noninfringing users. Even more significantly, the bill did not touch the bans on the development and marketing of circumvention devices. Despite this very limited reach, the bill died in committee with little fanfare. Boucher introduced no similar bill in the next Congress.

The SFU coalition also took a hit to its roll of congressional allies when, after running unopposed in 2008, Boucher lost his 2010 re-election bid.²¹⁵ There is no reason to believe Boucher's loss was due to his SFU allegiance. Rather, it was more to his being a Democrat in a conservative Virginia district during an election that was ripe for Republicans across the country—and in particular, due to his support for cap-and-trade carbon regulations.²¹⁶ Despite these larger political forces, it is significant that Boucher lost despite his having been among the SFU coalition's most-beloved congresspersons;²¹⁷ if even Rick Boucher couldn't leverage such an allegiance into electoral safety, the message to other congressional allies and would-be supporters is clear. The SFU coalition does retain several vocal congressional allies, like Senator Ron Wyden and Representatives Zoe Lofgren and Anna Eshoo,²¹⁸ though these are all members with relatively safe seats in regions with fairly high technology-sector presence. They are up against a much deeper roster of SC allies, including many from states such as Vermont (Senator Patrick Leahy), Texas (Rep. Lamar Smith), and Michigan (Rep. John Conyers) that are not exactly well-known hotbeds of media production and distribution.

²¹⁴ More specifically, it proposed making permanent the six temporary exemptions to the basic ban on circumvention granted by the Register of Copyrights and the Librarian of Congress from 2006 to 2009. *Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works*, U.S. COPYRIGHT OFFICE, <http://www.copyright.gov/1201/2006/index.html> (last visited Apr. 4, 2012).

²¹⁵ Jim Nolan, *After 14 Terms, Boucher Is Out; Griffith, Majority Leader in Va. House, Stuns 9th District Democrat*, RICHMOND TIMES-DISPATCH, Nov. 3, 2010, at A9.

²¹⁶ Tony Romm, *Tech Community Lament Rick Boucher Loss*, POLITICO (Nov. 2, 2010), <http://www.politico.com/news/stories/1110/44589.html>.

²¹⁷ *Id.*

²¹⁸ Among other examples of support for the SFU coalition, each has publicly expressed opposition to the 2011 Stop Online Piracy Act (SOPA), H.R. 3261, discussed in Part VII.B. See Alexander Howard, *Internet Companies And Lawmakers Speak Out Against The Stop Online Piracy Act*, HUFFPOST TECH (Nov. 15, 2011), http://www.huffingtonpost.com/mobileweb/2011/11/15/internet-companies-and-la_n_1095477.html.

B. Domain Seizures: COICA, ICE, and SOPA/PIPA

Another major development in copyright politics since 2006 has been the advancement of various strategies for seizing the domain names of sites that are found to be hosting infringing materials. Imagine a website that hosts videos at the website AllYourVideosHere.com. Imagine that enough of the content on the site is infringing—or even arguably infringing—that it draws the ire of copyright holders. Those copyright holders would be happy if they could seize that domain name away from the site’s hosts, so that a user who types AllYourVideosHere.com into his or her web browser would not find the site with the infringing videos. Even better for copyright holders, that domain name could be redirected to a different server with a site that encouraged users not to visit sites with infringing content. This is the ideal outcome for those who advocate domain seizures.

In late 2010, Senator Patrick Leahy advanced a domain seizures bill, the Combating Online Infringement and Counterfeits Act (COICA).²¹⁹ It would have authorized the U.S. Attorney General to seek court action against a domain if it is “primarily designed, has no demonstrable, commercially significant purpose or use other than, or is marketed by its operator, or by a person acting in concert with the operator, to offer” content that infringes copyrights or trademarks.²²⁰ The measure also would have given courts the power to force Internet domain registrars to “suspend operation of, and lock, the domain name.”²²¹ For those websites registered abroad, a court order could be used to compel Internet service providers to block users from reaching those domains, to prevent financial services providers from processing their transactions, and to prevent Internet advertisers from serving ads to these sites.²²² This all would have happened without an adversarial hearing during which a site’s operator could defend its right to continue about its business without being shuttered. In most cases, the operators of an affected site would lose their domains and face other negative effects before they even knew what had happened.²²³ COICA drew immediate opposition from NGOs,²²⁴

²¹⁹ Combating Online Infringement and Counterfeits Act, S. 3804, 111th Cong. (2010).

²²⁰ *Id.* § 2324(a)(2)(A).

²²¹ *Id.* § 2324(e)(1).

²²² *Id.* § 2324(e)(2).

²²³ An operator of such a site could later petition the court to undo its orders “based on evidence that (i) the Internet site associated with the domain name subject to the order is no longer dedicated to infringing activities; or (ii) the interests of justice require that the order be modified, suspended, or vacated.” *Id.* § 2324(h)(1)(B). That such a court appearance would come only after a website

scholars,²²⁵ the technology press,²²⁶ and Internet engineers.²²⁷ The bill passed the Senate Judiciary Committee in November—leaving its supporters too little time to pass it through the full Senate and House, but setting up a replay of the debate in the 112th Congress.

Also in 2010, the Department of Immigrations and Customs Enforcement (ICE), a division of Homeland Security, started seizing domains of websites accused of copyright and trademark infringement in an operation dubbed “Operation In Our Sites.”²²⁸ These efforts are still active at the time of this writing.²²⁹ While a fuller analysis of the costs and benefits of such an operation are well beyond the scope of this Article, the operation has drawn much criticism. One critique is that many of the sites have been taken down even though they are not clearly dedicated to infringing content. Several have been shuttered merely for linking to sites with allegedly infringing content.²³⁰ Several of the music sites that have been taken down were apparently targeted because they posted files that were given to them by record label or

operator had lost the domain name, advertisers, links from ISPs, and/or ability to process transactions is, in this author’s estimation, a profound affront to both due process and the First Amendment.

²²⁴ E.g., Peter Eckersley, *UPDATE: The Case Against COICA*, ELEC. FRONTIER FOUND. (Nov. 18, 2010), <https://www.eff.org/deeplinks/2010/11/case-against-coica>; *Concerns Regarding S. 3804, Combating Online Infringement and Counterfeits Act*, PUB. KNOWLEDGE (Nov. 18, 2010), <http://www.publicknowledge.org/concerns-regarding-coica-pk-2-pager>.

²²⁵ E.g., Zoe Argento, et al., *Law Professors’ Letter in Opposition to S. 3804 (Combating Online Infringements and Counterfeits Act)*, PUB. KNOWLEDGE (Nov. 16, 2010), <http://www.publicknowledge.org/files/docs/LawProfCOICA.pdf>.

²²⁶ E.g., Mike Masnick, *Why Voting for COICA Is a Vote for Censorship*, TECHDIRT (Nov. 22, 2010), <http://www.techdirt.com/articles/20101121/23584311958/why-voting-coica-is-vote-censorship.shtml>.

²²⁷ E.g., David P. Reed, et al., *Letter from Internet Engineers Opposing COICA*, PUBLIC KNOWLEDGE (Nov. 5, 2010), <http://www.publicknowledge.org/letter-internet-engineers-opposing-coica>.

²²⁸ See Press Release, U.S. Immigration and Customs Enforcement, Operation In Our Sites Targets Internet Movie Pirates: ICE, Manhattan U.S. Attorney Seize Multiple Web Sites for Criminal Copyright Violations, (June 30, 2010), <http://www.ice.gov/news/releases/1006/100630losangeles.htm>.

²²⁹ See Press Release, U.S. Immigration and Customs Enforcement, ICE Announces Results of “Operation Strike Out”: Protects Consumers from Counterfeit Sports Paraphernalia on the Internet and on the Streets (Oct. 31, 2011), <http://www.ice.gov/news/releases/1110/111031washingtondc.htm>.

²³⁰ Abigail Phillips, *What Congress Can Learn from the Recent ICE Seizures*, ELEC. FRONTIER FOUND. (Feb. 15, 2011), <https://www.eff.org/deeplinks/2011/02/what-congress-can-learn-recent-ice-seizures>.

artist representatives.²³¹ The wave of lawsuits against YouTube highlights the possibility that, had domain seizure procedures been in place five years ago, the world's number-one video sharing site may well have been seized.²³² Critics have also charged ICE with administrative overreach,²³³ and several of those affected by domain seizures have claimed that the Administration has been shockingly non-responsive to their requests for more information or reconsideration.²³⁴

Despite all these critiques of ICE domain seizures, many members of the current Congress sought to pass a COICA-like bill. Senator Patrick Leahy introduced the Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act (PROTECT-IP Act, or PIPA) of 2011,²³⁵ and Representative Lamar Smith introduced the Stop Online Piracy Act (SOPA).²³⁶ Both bills are variants on the domain seizure idea first introduced in COICA. On November 16, 2011, the House Committee on the Judiciary held a hearing²³⁷ that was heavily stacked in favor of the bill's passage,²³⁸ and the committee's website describing the hearing expresses clear enthusiasm about the bill.²³⁹ At the very

²³¹ Sherwin Siy, *More Domain Seizures from DOJ/ICE: Spanish Website Seized Despite Legal Status in Spain*, PUB. KNOWLEDGE (Feb. 1, 2011), <http://www.publicknowledge.org/blog/more-domain-seizures-dojice-spanish-website-s>; Mike Masnick, *Senator Wyden Asks WTF Is Up With Homeland Security Domain Seizures*, TECHDIRT (Feb. 3, 2011), <http://www.techdirt.com/articles/20110202/23363812934/senator-wyden-asks-wtf-is-up-with-homeland-security-domain-seizures.shtml>.

²³² See Siy, *supra* note 231.

²³³ Masnick, *supra* note 226.

²³⁴ Mike Masnick, *Why We Haven't Seen Any Lawsuits Filed Against The Government Over Domain Seizures: Justice Department Stalling*, TECHDIRT (May 24, 2011), <http://www.techdirt.com/articles/20110521/15125114374/why-we-havent-seen-any-lawsuits-filed-against-government-over-domain-seizures-justice-department-stalling.shtml>.

²³⁵ Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act of 2011, S. 968, 112th Cong. (2011) (also abbreviated as the PROTECT-IP Act).

²³⁶ Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011).

²³⁷ *Hearing on: H.R. 3261, the "Stop Online Piracy Act"*, U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON THE JUDICIARY, http://judiciary.house.gov/hearings/hear_11162011.html (last visited Apr. 4, 2012).

²³⁸ Nate Anderson, *At Web Censorship Hearing, Congress Guns for "Pro-Pirate" Google*, ARS TECHNICA (Nov. 16, 2011), <http://arstechnica.com/tech-policy/news/2011/11/at-web-censorship-hearing-congress-guns-for-pro-pirate-google.ars>.

²³⁹ *SOPA Hearing*, *supra* note 237 (stating, *inter alia*, "The bill modernizes our criminal and civil statutes to meet new IP enforcement challenges and protect American jobs. The proposal reflects a bipartisan and bicameral commitment toward ensuring that law enforcement and job creators have the necessary tools to protect American intellectual property from counterfeiting and piracy").

start of the hearing, Judiciary Chair Lamar Smith accused Google—the only substantive opponents at the hearing table—of obstructionism; he also accused the company of supporting “rogue” websites.²⁴⁰ This is consistent with both judiciary committees’ longstanding support for the SC coalition.²⁴¹

The same groups that spoke out against COICA quickly rose up to oppose PIPA and SOPA in 2011, though this time, much of the persuadable technology division has also put their weight into opposing the bills.²⁴² In advance of the House Committee on the Judiciary hearing held on November 16, 2011, a veritable who’s who of Internet companies signed on to a letter of opposition; signatories included Google, Facebook, Twitter, Yahoo!, Mozilla, and eBay.²⁴³ Collectively, these voices have also won sympathy from several members of Congress who themselves sent a letter to Smith opposing SOPA.²⁴⁴

At this point—specifically, through mid-November, 2011—the conventional political analysis would have cast the odds of something like SOPA passing as very strong. Even with the Internet industry ramping up its lobbying expenditures in recent years, SOPA’s opponents are still badly outspent on Capitol Hill; groups that support SOPA spent more than ten times as much as the bill’s opponents in 2010 and over six times as much through the third quarter of 2011—spending \$280 million in less than two years.²⁴⁵ As the persuadable technology division has more revenue and a bigger impact on the economy,²⁴⁶ this imbalance means that SC groups spend a far greater share of their revenue on lobbying. Additionally, the SC coalition’s much longer history of working with Congress—and their much better-connected roster of lobbyists, including most notably MPAA chief and former Connecticut Senator Chris Dodd—means they would have a substantial advantage even if the SFU coalition had matched their lobbying expenditures dollar-for-dollar in 2011. Further, as the rest

²⁴⁰ Anderson, *supra* note 238 (quoting Rep. Smith, “one of the companies represented here today has sought to obstruct the Committee’s consideration of bipartisan legislation. Perhaps this should come as no surprise given that Google just settled a federal criminal investigation into the company’s active promotion of rogue websites that pushed illegal prescription and counterfeit drugs on American consumers”).

²⁴¹ HERMAN, *supra* note 19, at 170.

²⁴² Declan McCullagh, *Google, Facebook, Zynga Oppose New SOPA Copyright Bill*, CNET (Nov. 15, 2011), http://news.cnet.com/8301-31921_3-57325134-281/google-facebook-zynga-oppose-new-sopa-copyright-bill/.

²⁴³ *Id.*

²⁴⁴ *Id.*

²⁴⁵ Jennifer Martinez, *Shootout at the Digital Corral*, POLITICO (Nov. 16, 2011), <http://www.politico.com/news/stories/1111/68448.html>.

²⁴⁶ *See supra* note 140.

of this study shows, the technology industry has previously established a track record of going along with expansions of copyright, as long as those expansions are perceived as likely and are tempered so that the technology sector's financial interests are not substantially harmed. For all of these reasons, one of two outcomes for SOPA and PIPA looked very likely: either the technology sector would have been sufficiently mollified that the bill would have passed in somewhat modified form, or the core SFU advocates would have again produced just enough friction to keep the bill from passing.

What happened instead was nothing short of game-changing. The Internet—already the bogeyman of the SC coalition for its capacity to facilitate infringement—became the means for mobilizing millions of citizens who spoke out against SOPA and PIPA. The first action was on November 16, 2011, which was the date of the heavily stacked hearing in the House Committee on the Judiciary to consider SOPA.²⁴⁷ To mobilize opposition, hundreds of websites engaged in a coordinated information campaign, hosting banners urging users to learn more about the arguments against act and to contact Congress to express opposition.²⁴⁸ The site was hosted by a group, Fight for the Future, which was founded in late 2011 and is “aligned with groups like EFF and Public Knowledge but [is] campaign-focused and public-facing.”²⁴⁹ Other groups also played key roles in spreading awareness about this campaign. Other campaign sponsors included core SFU advocates—not only EFF and Public Knowledge, but also groups such as the Free Software Foundation, Creative Commons, and Mozilla.²⁵⁰ Other sponsors as of November 17 included Demand Progress and the Participatory Politics Foundation.²⁵¹ Links to the website and its calls to action were widely publicized on some of the web's most visible sites, including Tumblr, Reddit, and Mozilla.²⁵²

²⁴⁷ See *supra* note 237.

²⁴⁸ Fight for the Future, *American Censorship Day November 16—Join the Fight To Stop SOPA*, AMERICAN CENSORSHIP DAY, <http://americancensorship.org> (last visited Nov. 17, 2011).

²⁴⁹ Fight for the Future, *Campaign Coordinator*, <http://fightforthefuture.org/jobs/campaign-director> (last visited Feb. 23, 2012).

²⁵⁰ Fight for the Future, *American Censorship Day*, *supra* note 248.

²⁵¹ *Id.*

²⁵² Kirsten Salyer, “*American Censorship Day*” *Makes an Online Statement: The Ticker*, BLOOMBERG NEWS (Nov 16, 2011), <http://www.bloomberg.com/news/2011-11-16/-american-censorship-day-makes-an-online-statement-the-ticker.html>.

The effort did a great deal to create awareness about and motivate constituent calls against SOPA and PROTECT-IP.²⁵³ The American Censorship Day website claimed to have generated over a million emails and four calls *per second* to Congress that day.²⁵⁴ This was an extension of the SFU coalition's longstanding strategy of heavy Internet advocacy,²⁵⁵ and it was a remarkably successful mobilization for an issue that previously had little visibility in the eyes of the public. While the proposal's potential negative effects were a substantial force motivating so much online action, this explosion of constituent action is also probably due in part to the issue's clarity relative to the DRM debate. Despite having tried to explain this issue to perhaps thousands of previously uninitiated people, I still have difficulty explaining in a brief period what DRM is, how it is regulated, and why that is important. In contrast, a great number of Internet users were quickly able to understand—and fear—the proposal that infringing sites' domain names would be seized and then redirected to government-sponsored anti-piracy sites. The issue had the clarity that gave these technology enthusiasts the chance to take a specific political action in defense of the Internet—not to mention an expression of their visceral dislike for the content industry, harvested over the past decade of SC coalition missteps.

The congressional response to the November action was, unfortunately for SFU actors, muted. A few additional members joined the opposition, but the bills still seemed fairly likely to pass. PIPA was to be put to a vote in the full Senate on January 24, 2012, and passage in the House seemed not too far behind.²⁵⁶ Undeterred, SFU actors doubled down on the strategy of reaching out to sympathetic websites and engaging in a coordinated day of action; they scheduled a second day of Internet action for January 18, 2012. This action drew many thousands more sites to participate—over 115,000 in all—and more of the web's top sites participated.²⁵⁷ More dramatically, many sites in the January action chose to blackout their pages to varying degrees—an illustration of

²⁵³ Mike Masnick, *Why the Public Is Willing To Rally Against SOPA/PIPA, But Not for It*, TECHDIRT (Nov. 23, 2011), <http://www.techdirt.com/articles/20111123/00002616879/why-public-is-willing-to-rally-against-sopapipa-not-it.shtml>.

²⁵⁴ Fight for the Future, *American Censorship Day*, *supra* note 248.

²⁵⁵ Herman, *supra* note 16.

²⁵⁶ Senate Majority Leader Harry Reid had scheduled a cloture vote on the bill. Jennifer Martinez, *SOPA and PIPA Dead For Now*, POLITICO (Jan. 20, 2012), <http://www.politico.com/news/stories/0112/71720.html>. While technically a procedural vote, cloture requires 60 votes of support, making it the largest obstacle to final passage.

²⁵⁷ See Fight for the Future, *The January 18 Blackout/Strike in Numbers*, SOPA STRIKE, <http://sopastrike.com/numbers> (last visited Feb. 24, 2012).

the censorship that they accused the bill of threatening. The most noteworthy site to go dark was Wikipedia, the sixth most-visited website in the world,²⁵⁸ and many more sites with very high visibility went dark (e.g., Mozilla, Reddit), made prominent changes on their home pages (e.g., Google, Wired, Drudge Report), successfully encouraged thousands of users turn their personal pages dark (e.g., Tumblr, WordPress), or became vehicles by which millions spread anti-SOPA/PIPA messages (e.g., Twitter).²⁵⁹ This became the “largest online protest in history.”²⁶⁰

The coordinated action worked beyond anyone’s hopes. According to Fight for the Future, over ten million people signed their petition against SOPA and PIPA, and there were over eight million attempts to call Congress.²⁶¹ Four million people sent emails to Congress through EFF, Fight for the Future, and Demand Progress, and “Wikipedia wasn’t even counting.”²⁶² So many constituents tried to contact Congress that the phone lines were flooded and many members’ sites crashed.²⁶³ This made an immediate impact on the balance of congressional opinion on the bills. As of the morning of January 18, 2012, the bills had 80 supporters and 31 opponents in the House and Senate; by the next day, it had shifted radically to 63 supporters and 122 opponents.²⁶⁴ As of this writing, the balance is 55 supporters and 205 opponents,²⁶⁵ but the bills were effectively dead even before the additional opponents piled on. On January 20, Senate Majority Leader Harry Reid cancelled the scheduled cloture vote, and Representative Lamar Smith said that the Judiciary Committee he chairs would cancel consideration of the bill that had been scheduled for February.²⁶⁶

²⁵⁸ *Top Sites*, ALEXA (Feb. 20, 2012), at <http://www.alexa.com/topsites> (last visited Feb. 20, 2012).

²⁵⁹ Fight for the Future, *supra* note 257. I am certain that millions of Facebook users also posted in opposition, but I found no sources that could verify this.

²⁶⁰ Boonsri Dickinson, *The Largest Online Protest in History Started Here*, BUSINESS INSIDER (Jan. 19, 2012), <http://www.businessinsider.com/largest-protest-in-history-started-here-more-than-a-billion-people-will-see-anti-sopa-messages-2012-1>.

²⁶¹ Fight for the Future, *supra* note 257.

²⁶² *Id.*

²⁶³ The Daily Caller, *SOPA Protests Caused Panic, Crashed Government Websites*, YAHOO! NEWS (Jan. 19, 2012), <http://news.yahoo.com/sopa-protests-caused-panic-crashed-government-websites-214506713.html>.

²⁶⁴ Josh Constine, *SOPA Protests Sway Congress: 31 Opponents Yesterday, 122 Now*, TECHCRUNCH (Jan. 19, 2012), <http://techcrunch.com/2012/01/19/sopa-opponents-supporters/>.

²⁶⁵ Dan Nguyen, *SOPA Opera: Where Do Your Members of Congress Stand on SOPA and PIPA?*, PROPUBLICA (Feb. 23, 2012), <http://projects.propublica.org/sopa/>.

²⁶⁶ Martinez, *supra* note 256.

With a presidential and congressional election looming, nothing like SOPA and PIPA is likely to be considered until after the election, if ever. Something much more modest likely would have passed without the public even noticing. As a more modest goal, SC advocates could have seized on to the OPEN Act that was submitted in both the House²⁶⁷ and Senate²⁶⁸ as an alternative to SOPA and PIPA.²⁶⁹ The Act would set up a procedure for the U.S. International Trade Commission to investigate sites accused of systemic violations of copyright or trademark.²⁷⁰ If the Commission finds a site to be dedicated to infringement, the copyright holder could then take a legal order to that site's payment processors and advertisers to stop doing business with the site.²⁷¹ In this way, infringing sites could be starved of revenue—not a small penalty to be doled out to sites based outside the United States. Instead, SC lobbyists and their allies in Congress tried to ram SOPA and PIPA through as quickly as possible, with little input from other stakeholders, and despite vocal opposition. In short, they tried to act as if the policy dynamic of the copyright debate was still that which was in place in the 1990s.²⁷² Rather than getting what they wanted, they substantially strengthened the SFU coalition's hand—not just for this debate, but for the indefinite future. In the world of policy advocacy writ large, it would be hard to name a better contemporary example of comeuppance.

C. The Legacy of the SOPA Blackout

A full exploration of the run-up to the SOPA blackout, how it happened, and its aftermath is beyond the scope of this study.²⁷³ Still, it is already clear that the debate over copyright will never be the same again. Whether an SC ally, an SFU supporter, or one

²⁶⁷ Online Protection and Enforcement of Digital Trade Act, H.R. 3782, 112th Cong. (2012).

²⁶⁸ Online Protection and Enforcement of Digital Trade Act, S. 2029, 112th Cong. (2011).

²⁶⁹ *E.g.*, Julie Samuels, An Alternative to SOPA: An Open Process Befitting an Open Internet, EFF DEEPLINKS BLOG (Dec. 8, 2011), <https://www.eff.org/deeplinks/2011/12/alternative-sopa-open-process-befitting-open-internet>.

²⁷⁰ Online Protection and Enforcement of Digital Trade Act, S. 2029, 112th Cong. §2 (2011)(See the portion that would create 19 U.S.C. §337A(c).).

²⁷¹ *Id.* (See the portion that would create 19 U.S.C. §337A(g).).

²⁷² *See supra* Parts II-III.

²⁷³ The study was already accepted for publication before the blackout happened. The editorial board deserves extra thanks for the flexibility to give me the extra time to update the article in light of this obviously noteworthy development.

without any clear allegiances, any scholar who cares about copyright law—or the policy process in general—now cannot help but be intrigued to see how the copyright debate plays out going forward.

The SOPA blackout and its aftermath have left several key legacies in the politics of copyright in the future. First and most obviously, the Internet community and the general public have now mobilized around this issue to a previously unimaginable degree. This study's story of the building of the SFU coalition provides an important context for understanding the intellectual and logistical backing of the uprising. The efforts begun by Peter Jaszi and company helped create a network of dedicated activists—and, before long, many of them professional—who could represent the voices of ordinary citizens on copyright. Likewise, beginning with the anti-RIAA backlash in the Napster era and the wide dissemination of pro-SFU messages by public intellectuals and advocates, the broad Internet-using public had long since begun to distrust the content industry—to put it charitably. Yet these potent forces had not yet come together in a large-scale political action until SOPA seemed certain of passage. The proposal was so objectionable, and the process by which it had advanced so willfully designed to avoid the frantic critical input by the technology sector and the public, that millions of voters had a “Howard Beale moment—[Internet] users were mad as hell, and they weren't going to take it anymore.”²⁷⁴

Of course, millions of people only act in concert when there is substantial coordination. The SOPA protests “were a combination of independent decisions by websites including Wikipedia and Reddit to go black on Jan. 18, behind-the-scenes organization by a number of groups, and grassroots response to the blackout and other online efforts”²⁷⁵ Unfortunately, most of the reporting on the backlash has credited the technology industry, failing to understand the far more significant roles played by the collective decisions of thousands of power users—including those who pushed group-created sites Wikipedia and Reddit to action—as well as core SFU allies including NGOs, public intellectuals, and journalists.²⁷⁶ Of course the technology industry pushed back

²⁷⁴ Larry Downes, *Who Really Stopped SOPA, and Why?*, FORBES (Jan. 25, 2012), <http://www.forbes.com/sites/larrydownes/2012/01/25/who-really-stopped-sopa-and-why/>.

²⁷⁵ Grant Gross, *Who Really Was Behind the SOPA Protests?*, PC WORLD (Feb. 3, 2012), http://www.pcworld.com/businesscenter/article/249270/who_really_was_behind_the_sopa_protests.html.

²⁷⁶ If there were an award for dogged anti-SOPA blogging, it would have to go to Mike Masnick at TechDirt.

against SOPA and PIPA, and their response worked synergistically with the public outcry—helping to fuel the understanding that something bad was in the works, then helping to draw constituents to contact Congress. Yet in the months before the public outcry, when the best hope for stopping Hollywood really was Silicon Valley, SOPA and PIPA were en route to easy passage.²⁷⁷ Even though its website was a key driver in the January action, the “response was not organized by Google or any tech money at all (except perhaps the meager salaries that tech-policy writers tend to receive).”²⁷⁸ Rather, the technology industry used mostly inside-the-Beltway politics up until the last minute, when it became clear that these strategies would not stop the bills—and that the technology community was going to try a far more public strategy. It was only then that technology industry heavyweights decided to join the online action, and they were nearly as surprised by their good fortune as the content industry was surprised by its own bad fortune.

Now that a major public uprising has happened, the odds of another action of at least substantial political importance are substantially higher. There are millions of citizens who have already been persuaded that the Internet is under political attack—but that the Internet can be defended by the kind of successful action in which they have already participated. SFU-allied NGOs have greatly expanded their visibility and legitimacy, making it easier for them to reach out to the public and potential organizational allies going forward. Similarly, general political advocacy websites and groups on both the left and right, from RedState to Demand Progress, now know that this issue matters to their audiences. Many millions of these citizens shared their contact information with one or more of these groups, greatly facilitating future outreach. On these and many other counts, future mass actions on copyright, though unlikely to be as visible or utterly effective, just became a great deal easier to execute.

As a second legacy, policymakers are now terrified of the political backlash that comes when they go against the wishes of the technology crowd. It will be difficult to muster a similar deluge of Congress over copyright again in the future, but the issue’s resonance with voters is now undeniable, and members have begun proceeding with caution when considering new legislation affecting digital media. Unfortunately, this fear is also wrapped in the popular misunderstanding that the major technology industry

²⁷⁷ Mike Godwin, *Guest Blogger: Sunlight Got It Wrong*, SUNLIGHT FOUNDATION (Feb. 7, 2012), <http://sunlightfoundation.com/blog/2012/02/07/guest-blogger-sunlight-got-it-wrong/>.

²⁷⁸ *Id.*

players are the ones who orchestrated the protests. For instance, writing for Politico, Kim Hart observes:

[A] new warning has entered the Hill vernacular: “Don’t get SOPA’d.” Lawmakers are tiptoeing around issues that could tick off tech heavyweights such as Google or Amazon Rep. Jared Polis (D-Colo.) said the anti-SOPA movement showed a certain “coming of political age” for the tech industry, and his colleagues in the House are treading carefully. “They’re involving the tech community more and are more interested in listening,” said Polis, who also opposed SOPA. “They’re paying closer attention now.”²⁷⁹

In linking to this story, technology publisher and free software evangelist Tim O’Reilly pushes back against the article’s mistaken assumptions. “Unfortunately, . . . the story devolves into the familiar narrative about the competition between ‘Hollywood’ and ‘Silicon Valley’ The SOPA protests weren’t the work of some Silicon Valley lobby[;] . . . they were the work of ‘the Internet public.’”²⁸⁰ Even if they are misguided as to who caused the largest online protest in history, however, a great many policymakers are now terrified of being seen as anti-technology, and this legacy will greatly strengthen the hands of the SFU coalition and technology industry voices in future copyright battles.

There is also a third important legacy of the SOPA action: the persuadable technology (PT) division has moved closer toward full membership in the SFU coalition. Unlike the content industries, technology companies have no hard-wired, extreme views on copyright, and they have a history of compromising on the issue. Yet they will also not soon forget the degree to which the SC coalition shut them out of the discussion leading up to SOPA and tried to push the bill through over their vocal opposition.²⁸¹

²⁷⁹ Kim Hart, *Pols Fear ‘SOPA Backlash’*, POLITICO (Mar. 8, 2012), <http://www.politico.com/news/stories/0312/73802.html>.

²⁸⁰ Tim O’Reilly, “Don’t Get SOPA’d”: Congress Learns to Fear the Internet Public, GOOGLE PLUS (Mar. 18, 2012), <https://plus.google.com/107033731246200681024/posts/Xkp5DhcyqmE>.

²⁸¹ E.g., Mike Masnick, *Disney Refused Invitation From Senator Feinstein To Meet With Tech Companies Over PIPA/SOPA*, TECHDIRT (Jan. 18, 2012), <http://www.techdirt.com/articles/20120118/01464317448/disney-refused-invitation-senator-feinstein-to-meet-with-tech-companies-over-pipasopa.shtml>.

When Public Knowledge Legal Director Harold Feld posted this on Facebook, the head of the Consumer Electronics Association, Gary Shapiro, bemoaned in a comment, “Valenti and Glickman would always pick up the phone. . . . I can’t

Going forward, the SC coalition will have a lot of trouble earning the trust of PT actors, even if SC actors adopt a more cooperative process going forward. Likewise, the SFU coalition will have much less difficulty getting PT backing for their agenda, including less difficulty keeping PT groups from making deals with the SC coalition on new bills. Technology companies also now have strong business reasons to be leery of reaching a political deal with SC interests. The object lesson here was GoDaddy, a web host and domain registrar that initially came out in support of SOPA. This led to a mass exodus of customers that, by late 2011, led to the company quickly shifting to opposing the bill.²⁸² In the future, even those technology companies that might otherwise be willing to reach a deal on new copyright legislation will be leery of suffering the fate that GoDaddy endured. Especially when combined with broader public mobilization on copyright and policymakers' newfound respect for the Internet public, the technology industry's steps toward the SFU coalition will further reduce the SC coalition's capacity to advance its agenda.

CONCLUSION

The last twenty-five years have brought a sea change in copyright law. This is commonly understood to be due to new digital technologies, but that is only half the story; the other half is the rise of a potent group of political actors who seek to defend those technologies against the encroachment by copyright law. Beginning with opposition to what would become the DMCA, and growing rapidly in the years since the DMCA's passage, SFU advocates have built a powerful multi-site organizational infrastructure. They have also spread the SFU message to millions of citizens. Especially as the downfall of SOPA/PIPA has shown, it is now much harder to pass strong-copyright legislations. The debate over DRM was a key part of the rallying cry of the SFU coalition, although related debates have also been quite significant. In particular, in the years since 2006, as the SC coalition's strategies have evolved from new DRM regulations to new Internet regulations, the SFU coalition has become even more relevant.

This is a sharp change from the policy dynamics of copyright during the twentieth century. The Audio Home

even get a hello lunch with Dodd." When I asked if I could quote him, he said, "Just factual!" (on file with the author).

²⁸² Alexia Tsotsis, *Burned By Fleeing Customers, GoDaddy No Longer Just 'Doesn't Support' But Actually "OPPOSES" SOPA*, TECHCRUNCH (Dec. 29, 2011), <http://techcrunch.com/2011/12/29/burned-by-fleeing-customers-godaddy-no-longer-just-doesnt-support-but-actually-opposes-sopa/>.

Recording Act became law with little substantial resistance. While the anti-circumvention provisions of the Digital Millennium Copyright Act attracted more pushback, opponents did not have time to organize a coherent coalition until after the passage of something like Lehman's White Paper proposal was nearly a foregone conclusion. Between 1999 and 2002, however, several events led to radical changes in the politics of copyright. The publicity around peer-to-peer trading, the threat of Hollings' bill, and the sharp rise in participation by NGOs and public intellectuals reshaped the playing field. By 2003, the SFU coalition had grown powerful enough that it had to be accounted for by the SC coalition. It played a central role in killing the broadcast flag proposals, and it made a credible push to reform the DMCA.

This study is largely a story about the SFU coalition's substantial successes at building and deploying organizations and ideas. In the decade after the DMCA's passage, countless SFU-allied groups were started, including advocacy- and litigation-focused NGOs, academic centers, and student law clinics.²⁸³ Along with library groups—perhaps the longest-standing voices for copyright moderation, though among the quieter voices today—these NGOs and scholars are at the core of a significant, permanent, organized coalition when there was none before, and the results have spoken for themselves—even before the SOPA blackout of January, 2012.

For those who knew little about the history of copyright advocacy, the SOPA strike seemed to come out of nowhere. For those who have watched these debates unfold over the years, however, it was clear that the birth and growth of the SFU coalition had already made a substantial change in the political dynamics around the issue. Further, as I document in quantitative detail elsewhere,²⁸⁴ the SFU coalition has long been engaged in vociferous online communications. This all-out effort to reach as many people online as possible has been a nice complement to their dedicated and consistent offline communication, and the combination has helped counterbalance their extreme funding disadvantage relative to the SC coalition's old-fashioned lobbying muscle. Even before the SOPA blackout, I had concluded that, based at least on the circumstantial evidence, Internet mobilization has helped shape policy outcomes in copyright. Now, with the SOPA blackout to account for, such qualifiers are no longer necessary. Online advocacy has profoundly changed the policy dynamics around copyright, including policy outcomes. Going forward, it is much less likely that copyright will be expanded. The

²⁸³ BOYLE, *supra* note 15, at 243.

²⁸⁴ Herman, *supra* note 16.

content industry still shows every willingness to use the existing statutory and case law to its strategic advantage, and the SC coalition is still almost certainly strong enough to block any rollback of copyright. Yet it must now rethink its understanding about what is possible in Congress.

The SOPA strike should also serve as a wake-up call to all those who were surprised to learn that there were so many Internet users who have such strong beliefs on the issue. For those who are not members of the online public that actively debates technology law, it may have been surprising that copyright matters to those who do engage in such debates, but that surprise is not because passionate debates about technology law are hard to locate. The heavy users of the sites where technology law is debated—like Reddit and Slashdot—are not hard to hear from; quite the contrary, they share so many opinions on technology regulation and business models that one cannot possibly read them all. Yet media industry executives in particular continue to make decisions that, from the Internet public's perspective, are beyond tone deaf.²⁸⁵ Even many in the technology sector and technology press were taken by surprise by the SOPA strike because this is not how they understand politics. They were surprised because, despite the Internet's ability to empower end users, they still think of technology law as a battle between Hollywood and Silicon Valley. Hopefully, the SOPA strike will lead those policy actors and reporters who are not plugged in to strive harder to get in touch with the broader Internet public. That really would be good for everybody, although it would be uncomfortable in the short term for senior media industry executives.

If the SFU coalition and persuadable technology actors play their newly strengthened hand correctly—including, importantly, if the technology industry works more closely with SFU coalition groups—they will be able to slow the SC coalition's political agenda to a substantial degree for the next several years. They have been playing defense for the entire digital era, but they would also be well served to advance their own agenda as well. One natural and somewhat likely path is pursuing impact litigation against ongoing government seizures of domain names. Especially since these are happening without an adversarial hearing in court, the

²⁸⁵ For instance, Warner Brothers just started a program for customers to upload their DVDs for Internet streaming. Customers would need to drive to a physical store, pay the store to copy the data from the DVD to a server, wait for that copying, return home, and then play the movies via a protected cloud service. Michael Weinberg, *Warner Bros. Embarrasses Self, Everyone, With New "Disco-to-Digital" Program*, PUB. KNOWLEDGE POLICY BLOG (Mar. 5, 2012), <http://www.publicknowledge.org/blog/warner-bros-embarrasses-self-everyone-new-%E2%80%99Cdi>.

A POLITICAL HISTORY OF DRM AND RELATED COPYRIGHT
DEBATES, 1987-2012

constitutional arguments against the current process (or lack thereof) behind domain seizures could be fairly persuasive. Another more aggressive strategy, however, would be to begin advancing legislative proposals to roll back the reach of copyright in the digital era. Remember that it was SFU-allied members of Congress who proposed the OPEN Act, but now, they should use even this proposal as a bargaining chip in seeking more SFU-oriented legislative reforms. They could push for a legislative end to the highly problematic ICE-administered domain seizures process, a law enacting the major DMCA reforms as proposed by Boucher through 2006, both, or yet other reforms. The SFU coalition is probably still not politically powerful enough to advance these proposals without giving up something in return, but as the OPEN Act demonstrates—even though it also has room for improvement—there are good ideas for how to improve enforcement without harming innocent bystanders or ignoring due process. If the SFU coalition can maintain this momentum, it will figure out how to stand as the gatekeeper withholding good ideas for improved enforcement, demanding the repeal of bad ideas of the past in return.

Copyright watchers are not the only ones who should be interested in the history of the copyright debate. The SFU coalition was among the first underfunded coalitions to have so much success leveraging the Internet to identify sympathizers and spread its message. It is unsurprising, of course, that a coalition that is built almost exclusively of Internet enthusiasts would go online in droves to spread its message—and that it would find a sympathetic audience among other Internet enthusiasts. These enthusiasts were right when they envisioned a future where the Internet would revolutionize not only the media industries but also the debate about their future. For those without substantial resources who would like to mobilize around other policy issues, the SFU coalition's story may even offer a good template for organizing in the Internet age. Though the model may not apply to every issue, the copyright debate shows that in at least some cases, a group can now move from virtual nonexistence to genuine competitiveness to transcendent victory in less time—and with less money—than ever before. As its biggest fans have been saying for years, the Internet is good for a lot more than committing copyright infringement.