
Bill D. Herman

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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 the playing field is still quite slanted toward stronger copyright, the politics around the issue are much messier and less predictable. This study, a detailed political and legislative history of the major proposals regarding copyright and digital rights management from 1987 to 2006, illustrates how this policy dynamic has changed so drastically. In 1987, there was no organized opposition to copyright’s expansion. By 2006, however, there was a substantial coalition of opposition, anchored by nonprofits that were founded in the relatively recent past to stand up for the rights of computer users and technological innovators. By the mid-2000’s, this group 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, this “strong fair use” coalition had fought the “strong copyright” coalition to a draw in two key debates in the mid-2000’s. By looking at the political histories of all of these proposals in one place, this article shows an unmistakable trajectory in the politics of copyright toward an era in which copyright industries face a permanent voice of opposition.

* Assistant Professor of American Media Law, Policy, and Regulation, Dept. Film & Media, Hunter College CUNY. B.A., M.A. Colorado State University; Ph.D. Annenberg School for Communication, University of Pennsylvania.
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I. Introduction

Since the last wholesale rewrite of copyright law in 1976,\(^1\) Congress has enacted several significant copyright reforms. While these have been varied, perhaps the most important change is the shift from a copyright system that regulated only copying behavior into a system that regulates copying technology. These reforms have come at the behest of the content industries,\(^2\) which have sought such regulations out of fear that new technologies—especially the internet—will erode their ability to exclude nonpaying consumers.\(^3\)

Like the legislative process generally, the evolution of copyright has hardly been straightforward. Victorious policy outcomes always require the overcoming of nontrivial obstacles; political actors need to recruit allies, build advocacy infrastructures, persuade policymakers, combat the US system’s strong tendency toward inertia, and fight the resistance of any organized opposition. From 1976 through the end of the 20\(^{th}\) Century, those advocating stronger copyright law, whom I call the “strong copyright” (or SC) coalition,\(^4\) generally succeeded in overcoming these obstacles and turning their policy wishes into legal reality.\(^5\)

While the SC coalition had faced little organized resistance before, the dawn of the 21\(^{st}\) 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

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\(^4\) Bill D. Herman, *Taking the Copyfight Online: Comparing the copyright debate in congressional hearings, in newspapers, and on the web*, 17 J. COMPUTER-MEDIATED COMM. (forthcoming April 2012).
broadening of exceptions, limitations, and affirmative defenses, especially fair use; thus, I call this coalition the strong fair use (or SFU) coalition. The birth and growth of the SFU coalition—rising from virtual nonexistence to serious political impact in under a decade—is an important inflection point in the political history of copyright law.

While working on a study of the representations of the DRM policy debate across congressional hearings, newspapers, 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) and the Digital Millennium Copyright Act (DMCA), 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 key debates have also been shaped by and 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 bringing each

7 Herman, supra note 4.
of these stories together in one place, this study tells an as-yet untold story about the trajectory of copyright advocacy in general.

II. Audio Home Recording Act (AHRA): 1987 to 1992

In the early 1980’s, electronics manufacturers began developing devices to record and play Digital Audio Tape (DAT). 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,”11 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 in a telephone interview. “Imagine what it will be like if the tape copy is equal to the original.”12

DAT decks were expected to arrive on US store shelves by 1987, but the recording industry used lobbying, threatened and actual litigation against Sony, and market pressure to stop the manufacturer from importing DAT machines. The recording industry had several advantages. They had much greater clout in Congress, especially since most manufacturers were based in Japan. Also, record labels could and did refuse to release music in DAT format, greatly diminishing the potential demand for the machines.

Starting in 1987, the recording industry supported legislation to require that DAT recorders sold or imported into the US include copy-control technologies. 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. Congressional hearings considering early legislation met substantial electronics industry resistance, 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. Still, the legal threats kept DAT decks out of US stores.

13 Id.
15 Litman, supra note 5.
18 Andrew Pollack, Move to End Digital Tape Dispute, N.Y. TIMES, Jan. 16, 1988, at A35.
20 Peter J. Boyer, Sony and CBS Records: What a Romance!, N.Y. TIMES MAG., Sep. 18, 1988, at 34.
In 1989, the industries came to terms, apparently clearing the legal cloud around DAT.\textsuperscript{21} 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.\textsuperscript{22}

Both industries sought legislation codifying this deal.\textsuperscript{23} 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.\textsuperscript{24}

The NMPA funded a lawsuit\textsuperscript{25} accusing Sony of contributory infringement,\textsuperscript{26} even though their case faced long odds. In \textit{Sony v. Universal},\textsuperscript{27} the Supreme Court had already ruled that “copyright law did not impose such secondary liability where the device in question was capable

\textsuperscript{22} \textit{Id}.
\textsuperscript{25} \textit{Cahn v. Sony Corp.}, No. 90 Civ. 4537 (S.D.N.Y. filed July 9, 1990).
\textsuperscript{26} Menell & Nimmer, \textit{supra} note 14, at 19-20.
of substantial noninfringing uses.”

Despite the weakness of the *Cahn* suit, Sony decided against another extended legal fight and “settled about a year into the litigation” in June of 1991.

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. With all three industries on board, the bill sailed into law in 1992. 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.

**B. The AHRA’s Effects and Political Significance**

The AHRA was outdated quickly after it became law. In order to avoid the imposition of royalties on their products—which, in 1992, were rarely used to produce or copy audio recordings—computer companies had helped to make sure that the act did not regulate general-purpose computers, computer software, or blank computer media such as floppy disks or hard disk drives. As today’s consumer well knows, this demarcation between personal media equipment and computing equipment did not hold for long. By the mid 1990s, computer CD

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30 Lee, *supra* note 17, at 452.
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.\textsuperscript{35} The courts also found that the act does not regulate MP3 players,\textsuperscript{36} 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.\textsuperscript{37} By persuading the record labels to sign on to the iTunes music store in 2002,\textsuperscript{38} 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.\textsuperscript{39}

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

\footnotesize{\textsuperscript{35} Dan Stets, \textit{Pump up the PC}, PHILA. INQ., April 11, 1996, at F1. 
\textsuperscript{36} \textit{Recording Industry Association of America V. Diamond Multimedia Systems Inc.}, 180 F.3d 1072 (9th Cir. 1999).
\textsuperscript{37} \textsc{John Alderman}, \textsc{Sonic Boom: Napster, MP3, and the New Pioneers of Music} (2001).
\textsuperscript{38} \textsc{Jack Goldsmith & Tim Wu}, \textsc{Who Controls the Internet?: Illusions of a Borderless World}, 117-9 (2006).
\textsuperscript{39} In our large-lecture Introduction to Media Studies, I often have occasion to ask my undergraduate students how many of them even still use CD players at home. In a class of 150, perhaps 5 will raise their hands.}
technologies, such as the Sony MiniDisc, never caught on with consumers; consumers greatly preferred unregulated computer-based CD burners. 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.

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. 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.

The passage of the AHRA also shows how DRM policy debates through the end of the 20th Century continued to follow the industry-led legislation process that Jessica Litman identifies in copyright generally. As in other instances, Congress urged the affected industries

41 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, 106, n51 (2005). See also Lee, supra note 17, at 411, n197. 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.
42 Shaffer Van Houweling, supra note 41, at 4.
44 Litman, supra note 5, at 23. (“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.”)
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 1990’s, 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.45

There were voices of resistance during the legislative process. Several opponents voiced their opposition, and some of their reasons for opposing the bill were insightful or even prescient.46 Well-reasoned though they were, however, these voices of opposition were not part of any substantially mobilized resistance and thus went unheeded. For instance, consumer groups expressed their doubts but participated lightly—and 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.47

Consumers Union representatives appeared in two Washington Post articles, describing the

\[\text{\textsuperscript{45}}\text{ Pollack, supra note 21. (Observing that, as of July, 1989, DAT decks had “been available in Japan, and to a limited extent in Europe, for about two years.”).}\]

\[\text{\textsuperscript{46}}\text{ See, e.g., Digital Audio Tape Recorder Act of 1990: Hearing on S. 2358 Before the Subcommittee on Communications, 101st Cong. 169-80 (1990) (statement of Philip Greenspun, President, Isosonics Corp.) (arguing, inter alia, that neither DAT nor the AHRA would substantially change the amount of infringement and that consumers would generally not adopt DAT).}\]

\[\text{\textsuperscript{47}}\text{ Audio Home Recording Act, Hearing on S. 1623 Before the Subcommittee on Patents, Copyrights, and Trademarks, C.I.S. 92-S521-55, 74 (1991) (statement of Linda F. Golodner, Executive Director, National Consumers League).}\]
royalty as unfair but assessing the bill as the only means to get DAT into the market.48 Scholarly opposition was more genuinely against the bill as drafted, but their participation was also light; law professor Jessica Litman voiced her opposition to the bill,49 as did Philip Greenspun, then a research assistant at MIT—though he was also serving as president of a small technology company.50 With all the major affected industries signing on and little systemic resistance, the bill passed with relative ease. Copyright holders would not enjoy such easy passage in future DRM policy debates.

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 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.

III. Digital Millennium Copyright Act (DMCA): 1995 to 1998

The Digital Millennium Copyright Act, or DMCA, is the most sweeping revision to copyright law of the last 30 years “and arguably represents the most dramatic change in the history of US copyright law.” The act was an effort “to bring US copyright law ‘squarely into the digital age,’ … [and] the primary battleground in which the [Act] achieved this goal is its first title.” This title was billed as an implementation of two World Intellectual Property Organization treaties, which the US signed in 1996.

A. Addressing the Looming Internet Threat.

The story of this law begins with what James Boyle describes as the “Internet Threat.” Copyright holders view the internet as a substantial technological challenge that cannot be addressed through AHRA-style legislation. Beginning in 1994, the World Wide Web exploded in popularity, drawing tens of millions online. In light of this growth, copyright holders came to

51 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).
57 BOYLE, supra note 3, at 54-82.
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.59

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 Paper60 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 Working Group report caused “dismay among libraries, composers, writers, online service providers, … and the makers of consumer electronic devices and computer hardware.”61 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

59 Litman, supra note 5, at 93-94.
61 Litman, supra note 5, at 93.
possibility of mounting an effective opposition to the White Paper’s proposals.”62 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.”63 This group of interests agreed to work together, calling themselves the Digital Future Coalition, or DFC.64 The DFC succeeded in mobilizing substantial—and, from the standpoint of Lehman and the content industries, unexpected—opposition to Lehman’s suggested changes.

The proposed legislation contained a categorical ban on the importation, development, and distribution of any tool to circumvent DRM.65 The bill also banned the removal or alteration of copyright management information—data that identifies the copyright holder and related information.66 The legislation also contained provisions stipulating civil penalties, giving a victorious plaintiff the choice of actual damages or statutory damages of up to $2,500 per violation of the ban on trafficking in tools that circumvent DRM (the ban contained in section 1201) or up to $25,000 per violation of the section 1202 ban on removal or alteration of copyright management information.67 Finally, the bill stipulated criminal penalties of up to $500,000 or 5 years in prison for anybody convicted of violating “section 1202 with intent to defraud.”68

62 Id. at 123.
63 Id.
66 Id., § 1202.
67 Id., § 1203.
68 Id., § 1204.
All DFC members saw this bill as a bad policy idea that would have a net negative effect on society, and many also feared it as a looming legal liability that could threaten them directly, so they mobilized and prevented 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.\(^{69}\) Supporters were able to secure the passage of two related treaties through WIPO\(^{70}\) even as the domestic legislation stalled. US delegates advanced a proposed treaty that looked much like the proposed domestic legislation: ban circumvention, and ban the tools that make circumvention possible. Much of the international community balked—like Jaszi and the DFC, they saw a lot to oppose—so proponents compromised with skeptics, weakening the treaty language. 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 Treaty is much closer to the traditional contours of copyright, which had regulated copying behavior but not copying technologies.\(^ {71}\)

In a second important compromise with critics, the Treaty imposes 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.\(^{72}\) US law arguably met the Treaty’s standard before the DMCA’s passage. It was already illegal to circumvent DRM to conduct copyright infringement, and manufacturers of

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\(^{69}\) Litman, supra note 5, at 129.

\(^{70}\) WCT, supra note 56, Arts. 11-12; WPPT, supra note 56, Arts. 18-19.

\(^{71}\) Menell & Nimmer, supra note 14.

\(^{72}\) WCT, supra note 56, Arts. 11-12; WPPT, supra note 56, Arts. 18-19.
“black box” devices that only served to circumvent DRM had already been subjected to legal liability for facilitating infringement. The “Clinton Administration initially considered whether the WIPO Copyright Treaty might even be sent to the Senate for ratification ‘clean’ of implementing legislation.”

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

Congress used the 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.

Despite the SC coalition’s disappointment with the relative weakness of the final treaty, they took advantage of the treaty’s 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 made this argument. 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

73 Litman, supra note 5, at 131.
76 Herman & Gandy, supra note 51, at 131.
77 Id. at 133.
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.” 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.” 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. A technology is covered by this ban if it is developed, marketed, or primarily used for such circumvention. This ban (the “access trafficking

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Some DRM systems do not prevent unauthorized access but instead prevent certain uses of copyrighted works, especially 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. 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, 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.” While this may seem like a large caveat, the DMCA does not change

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83 Id. at § 1201(d), encoded at 17 U.S.C. § 1201(c).
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.” These penalties remained in the final legislation as enacted.

Facing mobilized opposition, 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 whether to acquire a copy of that work,” but not to preserve works they have already purchased. Software designers and information technology researchers spoke in

84 H.R. 2281, supra note 82, § 1204.
87 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 their 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. §§ 1029-30 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
opposition and got some more substantial breathing room to do their jobs,\(^{88}\) 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.\(^{89}\) Each opposition group got a concession in rough proportion to their 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 US Copyright Office holds hearings to consider proposed exemptions from the ban on circumventing access-controlling DRM systems.\(^{90}\) 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.\(^{91}\) Though several exemptions have been granted in each rulemaking, the statute and the Register of Copyright’s interpretation of the rules for determining exemptions are heavily stacked against proposed

\(^{88}\) 17 U.S.C. §§ 1201(f), 1201(g)(2).
\(^{89}\) 17 U.S.C. §1201(g).
\(^{91}\) Herman & Gandy, supra note 51, at 143-4.
exemptions. 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.

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. 

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

\[92 \text{Id. at } 187-90.\]
\[93 \text{Bill D. Herman, Copyright Office grants 6 exemptions for circumventing TPMs, SHOUTING LOUDLY, Nov. 22, 2006, at http://www.shoutingloudly.com/2006/11/22/copyright-office-grants-6-exemptions-for-circumventing-tpms}\]
\[94 \text{LITMAN, supra note 5, at 145.}\]
encryption research, despite the exception for encryption research.\textsuperscript{95} Unauthorized but legal uses of DRM-protected works are also discouraged, both by the ban on circumvention and the ban on tools of circumvention.\textsuperscript{96} This is a substantial departure from prior copyright law, sharing “neither the logic nor the strategy of copyright.”\textsuperscript{97}

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 voices. Weighing in to voice 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 voice of opposition 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

\textsuperscript{96} Herman & Gandy, \textit{supra} note 51, at 132.
\textsuperscript{97} Gillespie, \textit{supra} note 53, at 177.
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 the addition of Representative Rick Boucher to the
voices of 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.98 In expressing his own views in congressional hearings, he
eloquenty 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.99 He also proposed legislation with an alternate version of §1201.100 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.101

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

98 Tony Romm, Tech Community Laments Rick Boucher Loss, POLITICO, Nov. 2, 2010, at
99 NII Copyright Protection Act of 1995 (Pt. 2), Hearings Before the Subcommittee on Courts
100 H.R. 3048, Digital Era Copyright Enhancement Act, §8 (1997). Available at:
http://thomas.loc.gov/cgi-bin/query/z?c105:H.R.3048:
101 Id. §1201(a).
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 voices\(^\text{102}\) 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 Treaty gave additional momentum to the proposal, and it passed anyway.

On at least one count, though, the passage of one part of the DMCA sought by the copyright industries happened with even less resistance than came during the process leading up to the AHRA. The DMCA contains a little-noticed, AHRA-like affirmative requirement that all VCRs marketed and sold in the U.S. implement a specific type of DRM technology.\(^\text{103}\) The technology, developed by DRM vendor Macrovision, looks for a “do not copy” signal that movie studies can build into pre-recorded videos; if the signal is present, the VCR will not make a useful copy of the original. This DRM system is more stringent than the SCMS system required by the AHRA; the SCMS allows copies of originals, just not copies of copies, while the Macrovision system does not even allow copies of originals. Yet while the AHRA requirement

\(^{102}\) The various divisions of the technology sector are not unified on these issues. *See infra*, § IV(B).

\(^{103}\) 17 U.S.C. § 1201(k).
was subject to hearings and a public debate, the DMCA’s VCR requirement was subject to little
if any public scrutiny. Nothing like the relevant section appeared in either of the versions that
passed the House and the Senate; rather, it was “added during conference committee
markup.”

Thus, this AHRA-like mandate, of obvious benefit to Macrovision and also desired
by the movie industry, was passed in a manner that suggests an evasion of public input—hardly
an example of good, transparent government.

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.

IV. 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.

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104 Herman & Gandy, supra note 51, at 148, n. 146.
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,105 the record industry’s reaction,106 and the current state of the music industry in light of peer-to-peer (P2P) trading.107

Even during hearings leading up to the DMCA, the media industries were already expressing fears about the internet.108 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 their users’ widespread infringement.109 After the 2001 Napster decision led to the service’s shuttering, several newer companies sprung up to fill Napster’s shoes; the

108 See, e.g., Intellectual Property Rights: The Music and Film Industry, Hearing Before the House Subcommittee on International Economic Policy and Trade, C.I.S. 99-H461-2, 25 (1998) (Statement of Steven Metalitz, Vice President and General Counsel, Int’l Intellectual Prop’y Ass’n). (“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.” Id. at 26.)
recording and movie industries responded by suing these companies as well, resulting in the 2005 *Grokster* decision by the Supreme Court.\(^\text{110}\) This decision substantially reduced the value of the *Sony* safe harbor, placing technology innovators in a much more precarious legal position.\(^\text{111}\) Yet this strategy did not prevent the further development and adoption of still further P2P programs.\(^\text{112}\) “In short, suing the technology hasn’t worked,”\(^\text{113}\) 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.\(^\text{114}\) It was a public relations debacle, highlighted by lawsuits against “several single mothers, a dead person and a 13-year-old girl.”\(^\text{115}\) 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.\(^\text{116}\) 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.\(^\text{117}\) Beginning in 2008, the RIAA thus stopped pursuing new cases, though it continued with cases that had already begun.\(^\text{118}\)

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\(^{112}\) 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.*, Electronic Frontier Foundation, *RIAA v. The People: Five Years Later* 1 (2008), at: https://www.eff.org/files/eff-riaa-whitepaper.pdf

\(^{113}\) *Id.* at 2.


\(^{115}\) *Id.* at ¶ 2.

\(^{116}\) Electronic Frontier Foundation, *supra* note 112, at 9. (“Is it working? … After five years of threats and litigation, the answer is a resounding no.”)


\(^{118}\) McBride & Smith, *supra* note 114.
B. Senator Hollings’ Proposal

Additionally, the content industries and their allies in Congress 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,119 “would have prohibited the manufacture, sale, import, or provision of any ‘interactive digital media device’ that didn’t incorporate certain security technologies.”120 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. The consumer electronics, computer industries, and public interest groups quickly mobilized to oppose the bill.121 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.”122 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

120 GILLESPIE, supra note 53, at 196.
breach of jurisdiction upset Judiciary member Patrick Leahy, who is normally a reliable supporter of copyright industry requests but in this case actually threatened a filibuster.\textsuperscript{123}

If the music and movie industries had thought something like the Hollings bill had a real shot at passage, they likely 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,\textsuperscript{124} 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, but the key point is that the Hollings bill would have gone further than even other media companies and allied congresspersons supported.\textsuperscript{125}

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.”\textsuperscript{126} 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 with the iTunes Music Store, and many other stores soon cropped up selling their own packages of DRM-wrapped media. Yet it is not at all

\textsuperscript{124} \textit{Id.} at ¶ 3.
\textsuperscript{125} \textit{Id.} at ¶ 5-6.
\textsuperscript{126} \textit{Id.} at ¶ 6.
clear that the Hollings bill helped foster any of these outcomes. Instead, it took Apple—and, to a large degree, Steve Jobs personally—to persuade a reluctant record industry to embrace internet distribution.\textsuperscript{127} Once the money started rolling in from that agreement, deals with other companies became far more conceivable.

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.\textsuperscript{128} 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. The PT 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. The PT division includes the consumer electronics industry, makers of computer hardware, internet service providers, web content companies, and online

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\textsuperscript{128} See Birnbaum, \textit{supra} note 123.
retailers. Collectively, these represent a significantly larger share of the economy than the SC-affiliated industries, allowing them a real chance to swing the debate in either direction.

The bulk of the technology industry is persuadible 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), this sector is 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

129 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 US 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. Osborn, Annual IndustryAccounts: Advance Statistics on GDP by Industry for 2010, Survey of Current Business 8, 17 (May, 2011), available at http://www.bea.gov/scb/pdf/2011/05%20May/0511_indy_accts.pdf
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, as described above. The Electronic Frontier Foundation (EFF), which was founded in 1990 as more of an online equivalent of the ACLU—that is, with little dedication to copyright law in its early years—might have been a voice against the DMCA’s anti-circumvention provisions. Instead, in 1995, the Washington Post quoted then-chair Esther Dyson as supporting Lehman’s proposal.\(^{130}\) 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 full-time policy advocates. While this was an important start, there were at the time no NGOs dedicated to the public’s side in the copyright debate.

In the early 2000’s, however—especially in 2001—NGOs got heavily involved, and computer science researchers became the cause celebre 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 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].

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—

131 L A W R E N C E L E S S I G, F R E E C U L T U R E: H O W B I G M E D I A U S E S T E C H N O L O G Y A N D T H E L A W T O L O C K D O W N C U L T U R E A N D C O N T R O L C R E A T I V I T Y 1 5 5 - 7 ( 2 0 0 4 ). E v e n t h o u g h t h e r e s e a r c h e r s w o n i n t h e e n d , t h e y e n d u r e d t e n d e n o u s p r o f e s s i o n a l d i f f i c u l t i e s .

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though not before the ordeal wreaked professional havoc for the researchers. The Electronic Frontier 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. 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.

Also in 2001, Russian programmer Dmitry Sklyarov faced his own, even more serious legal problems. During a visit to the US, 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.

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Felten writes:

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. at ¶ 6-7.

133 Jennifer B. Lee, Delayed Report on Encryption Flaws to Be Presented, NY 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…”)

After he gave a presentation about the software at the 2001 DEF CON hacker\textsuperscript{135} 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 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.\textsuperscript{136} 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.\textsuperscript{137}

Likewise in 2001, the DC-based NGO Public Knowledge was born.\textsuperscript{138} The group was founded largely to serve as a permanent DC 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

\textsuperscript{135} 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, https://www.defcon.org/html/links/dc-faq/dc-faq.html


\textsuperscript{137} Herman, \textit{supra} note 4.

\textsuperscript{138} 10th Anniversary Roast & 8th Annual IP3 Awards, \textsc{Public Knowledge}, http://publicknowledge.org/event/10th-anniversary-roast-8th-annual-ip3-awards (last visited October 28, 2011).
technology lawfully.”

As discussed elsewhere, 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.

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 with Jaszi or with the other key scholars who were the heart of the DFC. In sharp contrast, by the early 2000’s, 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, 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

140 See Herman, supra note 8, at 87, 175, 213.
142 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.
case, argued in 2002 and decided in 2003. They asked the Supreme Court to overturn the 1998 Copyright Term Extension Act, 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. 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, but also scholars in fields such as communication and computer science. Once copyright became a hot issue—especially, as in Ed Felten’s case, 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.

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147 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.
148 Two early examples are Siva Vaidhyanathan (then at NYU, now at Virginia) and Kembrew McLeod (Iowa), though more have joined them in the years since.
149 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 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 it was the recording industry’s legal threats against Felten that turned him into a powerful voice against their policy agenda.
For a brief window, it seemed like an unrestrained 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.\(^{151}\) 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.\(^{152}\) 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 choice. One good example of this later debate was the proposal to reform the DMCA.

V. 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.


\(^{152}\) See, e.g., David Higgins, *Download and Be Damned*, SYDNEY MORNING HERALD, May 19, 2000, at 15. (“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.”)
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.\(^{153}\) Also in the 108th Congress, Representative Zoe Lofgren, Democrat of California, introduced a similar DMCA reform bill, cosponsored by Boucher.\(^{154}\) 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* standard\(^{155}\) to the development and distribution of tools capable of circumvention. Like Sony’s Betamax video recorder, companies would be able to develop 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, 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. Thanks to even the current law’s exemption for encryption research, Felten likely would have prevailed had the RIAA actually sued rather than merely threatening a suit, but 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,

\[157\] 17 U.S.C. § 1201(g).
“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.”

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 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.

159 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/
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.\textsuperscript{160} Further, in the 109\textsuperscript{th} Congress (2005-2006), the bill’s 13 bipartisan cosponsors included House Committee on Energy and Commerce Chair Joe Barton, giving it instant credibility.\textsuperscript{161}

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 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.\textsuperscript{162} 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.

\textsuperscript{160} Herman, supra note 8, at 200.
\textsuperscript{161} Id. at 170.
\textsuperscript{162} Id.
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-2000’s.

VI. Broadcast Flag

The 2000’s 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,163 which would have prevented the re-digitization of analog content.164 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.165 This proposal was the result of sophisticated negotiations between multiple industries and other stakeholders. After a rulemaking, the FCC passed a broadcast flag mandate,166 but the courts struck it down as exceeding the FCC’s regulatory reach.167 The decision noted that Congress might give the FCC the jurisdiction, and 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.

163 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.  
164 GILLESPIE, supra note 53, at 197.  
165 Id. at  
167 Am. Library Ass’n v. FCC, 406 F.3d 689 (D.C. Cir. 2005).
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.\textsuperscript{168} 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 and than 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 studios\textsuperscript{169} 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,

\begin{flushright}
\textsuperscript{169} 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, \textit{The Other Hollywood: The Organizational and Geographic Bases of Television-Program Production}, 26 MEDIA CULT. & SOC’Y 183 (2004).
\end{flushright}
they argued, they would withhold their high-value content from broadcasting, sabotaging the
transition to digital television broadcasting.\footnote{\textit{Gillespie}, \textit{supra} note 53, at 200. The studios threatened that they would withhold desirable, recent films from broadcast, and broadcasters threatened not 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.}

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

CBS was airing much of its prime time broadcasts in HD by 2000—despite just 50,000 HDTV sets in use at the time—and the threat of illicit copying was not a substantive obstacle to faster adoption, while the cost to upgrade cameras and other equipment was such an obstacle. See Christopher Stern, \textit{Mixed Signals: Broadcasters' Promise of a Digital TV Age Has Not Been Met, And Now Congress Is Having Second Thoughts About Its Role}, WASH. POST, Dec. 17, 2000, at H1. By late 2002, the HD broadcast lineup included large portions of the prime time lineups from NBC, ABC, and even the WB—even including \textit{ABC Saturday Night at the Movies}. See Anon., \textit{High Definition, High Profile}, USA TODAY, Oct. 2, 2002, at D3. (That week’s movie was the 1997 action movie \textit{Air Force One}, starring Harrison Ford, though since the film was certainly not edited with Blu-ray distribution in mind, one must wonder whether the film was aired in 720p resolution—then the norm for broadcast HD—or was merely a digital broadcast of the 480p version sold on DVD. Regardless, that the studio would allow it to be broadcast in digital at all helped undermine their argument that desirable, recent films would not be carried on unprotected digital broadcasts.) FOX committed to move to HDTV broadcasts by 2004, though it did so only while complaining of the need for a broadcast flag. Ken Kerschbaumer, \textit{Fox Says Yes to High-Def; Slates 50\% of 2004 Prime Time for HD, Though Not Sports}, BROADCASTING \& CABLE, June 30, 2003, at 14. CBS also stated that they were considering not broadcasting in HDTV if the flag mandate fell through, but they withdrew the threat. \textit{Id.} In short, the threats to withhold content without broadcast flag protection were unconvincing if not downright ridiculous; broadcasters adopted HDTV so readily as to undermine the argument even as their policy people made it.
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.\textsuperscript{171}

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.”\textsuperscript{172} 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 upon at the start, or agreed upon by enough

\textsuperscript{171} GILLESPIE, \textit{supra} note 53, at 202.
\textsuperscript{172} \textit{Id.} at 203.
of the major players that critics could be pushed aside.”\textsuperscript{173} Even groups that actually opposed the flag mandate continued to participate, seeking a role in steering the process.

While important differences remained,\textsuperscript{174} 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.\textsuperscript{175} 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.\textsuperscript{176} The FCC may regulate receivers, but the 3-judge panel unanimously held the current statute does not grant the FCC the “authority to regulate receiver apparatuses after the completion of

\begin{itemize}
\item \textsuperscript{173} \textit{Id.} at 204.
\item \textsuperscript{174} 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. \textit{See} GILLESPIE, \textit{supra} note 53, at 206-210.
\item \textsuperscript{175} \textit{Digital Broadcast Content Protection}, 18 F.C.C.R. 23,550 (2003) (codified at 47 C.F.R. pts. 73, 76).
\item \textsuperscript{176} \textit{Am. Library Ass’n v. FCC}, 406 F.3d 689 (D.C. Cir. 2005).
\end{itemize}
broadcast transmissions.”

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 a omnibus telecommunications reform bill. One section would have authorized the FCC to adopt a broadcast flag mandate, permitting the Commission to re-enact its 2003 ruling. This was part of the subtitle known as the Digital Content Protection Act of 2006. 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.

Stevens’ efforts stalled in part due to the remarkable groundswell of public demands that network neutrality be part of any comprehensive telecommunications reform act, though other

177 Lee, supra note 17, at 411.
180 Id. §§ 451-454.
181 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.

In the interest of full disclosure, I have long been a public advocate for network neutrality. See Bill D. Herman, Opening Bottlenecks: On Behalf of Mandated Network Neutrality, 59 FED. COMM. L.J. 103 (2006). I fought for network neutrality as an intern for Public Knowledge in 2006, and I even recorded Senator Stevens’ infamous “Series of Tubes” speech that helped bring a great deal of additional attention to the issue. Tim Schneider, Mr. Stevens’ Wild Ride through a
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.\textsuperscript{183}

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 \textit{ALA v. FCC}.\textsuperscript{184}

It is unclear whether these forces alone could have stopped either the whole bill or a standalone broadcast flag bill, but the 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 \textit{ALA Series of Tubes}, \textbf{PUBLIC KNOWLEDGE POLICY BLOG}, July 11, 2006, at http://www.publicknowledge.org/node/521

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.\textsuperscript{183} \textit{E.g.}, \textit{Content Protection in the Digital Age: The Broadcast Flag, High-Definition Radio, and the Analog Hole}, 109th Cong. 21 (2004) (statement of Gigi B. Sohn, President, Public Knowledge); \textit{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.\textsuperscript{184} \textit{Id.} at 33 (statement of Michael Petricone, Vice President of Government Affairs, Consumer Electronics Association).
ruling, as well as what was undoubtedly a strong push from NGOs,185 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.186 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 directed the FCC to begin a rulemaking process specifically to implement its original 2003 mandate, albeit with minor

185 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 PAUL A. SABATIER (Ed.), THEORIES OF THE POLICY PROCESS 117, 130 (2nd 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. POLI. SCI. 851 (1991).
186 Herman, supra note 8, at 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.\textsuperscript{188}

Also in 2006, Representative Mike Ferguson introduced legislation granting the FCC the authority to require audio flag compliance for digital radio tuners.\textsuperscript{189} 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.\textsuperscript{190} 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.\textsuperscript{191} In contrast, terrestrial radio stations are in a much less precarious position when it comes to getting licenses

\textsuperscript{188} Id. §§ 453-4.
\textsuperscript{190} Herman, \textit{supra} note 8, at 198-9.
\textsuperscript{191} 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).
to broadcast content. The statutory list of the exclusive rights of copyright holders\(^\text{192}\) 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,\(^\text{193}\) but a separate exemption makes clear that this does not apply to digital broadcasts by FM stations.\(^\text{194}\) In short, sound recording copyright holders get no royalties from and have no leverage over terrestrial broadcasters.\(^\text{195}\) 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.\(^\text{196}\)

There is an exclusive right of public performances of musical compositions,\(^\text{197}\) 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.\(^\text{198}\) As the AHRA debate illustrated, music publishers’ digital copyright strategy is based on royalty collection rather than DRM mandates.\(^\text{199}\) As such, publishers did not make even an idle threat to withhold licenses to broadcasters. With no music industry threat to withhold content, the audio flag proposal was treated with little urgency.

\(^{194}\) 17 U.S.C. § 114(d).
\(^{198}\) Anderson, supra note 195, at 93. (Anderson writes 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.”)
\(^{199}\) See infra, notes 24-44, and accompanying text.
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.

VII. Aftersong: From the Disc to the Whole Wide Web

From the SFU coalition’s perspective, the gains of the 2000’s 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 notable events, two developments in particular help illustrate the trajectory of the politics of copyright to date. Both illustrate the SFU coalition’s continued relevance despite the SC coalition’s continued dominance. They also illustrate 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 kind of sharp limitations on infringement sought 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. 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. 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. 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 phones to specific networks. 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

\[\text{\footnotesize{\textsuperscript{200}}}\] 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.” \textit{Id.} § 2(a). That section also would have encoded the \textit{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.” \textit{Id.} at § 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.


\[\text{\footnotesize{\textsuperscript{202}}}\] 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.

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 experienced a major hit to its roll of congressional allies when, after running unopposed in 2008, Boucher lost his 2010 re-election bid.\(^{204}\) Boucher’s loss was undoubtedly due 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.\(^{205}\) Despite these larger political forces, it is significant that Boucher lost despite his having been among the SFU coalition’s most-beloved congresspersons;\(^{206}\) 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,\(^{207}\) 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.


\(^{206}\) *Id.*

\(^{207}\) Among other examples of such support for the SFU coalition, each has publicly expressed their opposition to the 2011 Stop Online Piracy Act (SOPA), H.R. 3261, discussed herein, §VII(B). See Alexander Howard, *Internet Companies And Lawmakers Speak Out Against The Stop Online Piracy Act*, HUFFPOST TECH, ¶ 10-11, Nov. 15, 2011, at http://www.huffingtonpost.com/mobileweb/2011/11/15/internet-companies-and-la_n_1095477.html
B. Domain Seizures

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. Further, 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, making it so that a user who types AllYourVideosHere.com into their web browser would not find the site with the infringing videos. Even better for copyright holders, that domain name could even be redirected to a different server with a site that could encourage 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 Combatting Online Infringement and Counterfeits Act (COICA).\(^{208}\) It would have authorized the US 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.\(^ {209}\) The measure also would have given courts the power to force internet domain registrars to “suspend operation of, and lock, the domain name.”\(^ {210}\) 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

\(^{208}\) Combating Online Infringement and Counterfeits Act, S. 3048, 111th Cong. (2010).
\(^{209}\) Id. § 2324(a)(2)(A).
\(^{210}\) Id. § 2324(e)(1).
transactions, and to prevent internet advertisers from serving ads to these sites. This all would have happened without an adversarial hearing during which a site’s operator could defend their right to continue about their business without being shuttered. In most cases, the operators of an affected site would lose their domain and face other negative effects before they even knew what had happened. COICA drew immediate opposition from NGOs, scholars, the technology press, and internet engineers. 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

211 Id. § 2324(e)(2).
212 An operator of such a site could later petition the court to undo its orders “based on evidence that the Internet site associated with the domain name subject to the order is no longer dedicated to infringing activities; or 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 operator had lost their 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.
trademark infringement in an operation dubbed “Operation In Our Sites.” These efforts are still active at the time of this writing. 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. 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 artist representatives. The wave of lawsuits against YouTube highlights the possibility that, had domain seizure procedures been in place five years ago, the site that was then and still remains the world’s number one video sharing site—and which now features authorized content from most of the world’s largest media conglomerates—may well have been seized. Critics have also charged ICE with administrative overreach, and several of those affected by domain


221 See Siy, supra note 220, at ¶ 6.

222 Masnick, supra note 220.
seizures have claimed that the Administration has been shockingly non-responsive to their requests for more information or reconsideration.\textsuperscript{223}

Despite all these critiques of ICE domain seizures, members of the current Congress have 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 (PIPA) of 2011,\textsuperscript{224} and Representative Lamar Smith introduced the Stop Online Piracy Act (SOPA).\textsuperscript{225} 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 hearing\textsuperscript{226} that was heavily stacked in favor of the bill’s passage,\textsuperscript{227} and the committee’s website describing the hearing expresses clear enthusiasm about the bill.\textsuperscript{228} At the very start of the hearing, Judiciary Chair Lamar Smith accused Google—the only substantive opponents at the hearing table—of obstructionism; he also accused them of supporting “rogue” websites.\textsuperscript{229} This is consistent with both judiciary committees’ longstanding support for the SC coalition.\textsuperscript{230}

\textsuperscript{224} Preventing Real Online Threats to Economic Creativity and Theft of Intellectual Property Act of 2011, S. 968, 112\textsuperscript{th} Cong. (2011). (This has also been abbreviated as the PROTECT-IP Act.)
\textsuperscript{225} Stop Online Piracy Act, H.R. 3261, 112\textsuperscript{th} Cong. (2011).
\textsuperscript{226} \textit{The Stop Online Piracy Act, Hearing on H.R. 3261 before the House Committee on the Judiciary, 112\textsuperscript{th} Cong. (2011)}.
\textsuperscript{229} Anderson, supra note , at ¶ 3. (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
The same groups that spoke out against COICA have risen 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.\textsuperscript{231} In advance of the Judiciary hearing in November 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.\textsuperscript{232} Collectively, these voices have also won sympathy from several members of Congress who themselves sent a letter to Smith opposing SOPA.\textsuperscript{233}

The conventional political analysis would still 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.\textsuperscript{234} As the persuadable technology division has more revenue and a bigger impact on the economy,\textsuperscript{235} this imbalance means that SC groups spend a far greater share of their revenue on lobbying. Yet internet mobilization may help the SFU coalition to derail the bills. November 16, 2011, was widely publicized as American Censorship Day, a day of efforts to create awareness about and

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  \item company’s active promotion of rogue websites that pushed illegal prescription and counterfeit drugs on American consumers.”)
  \item Herman, supra note 8, at 170.
  \item Id. at ¶ 1, 3.
  \item Id. at ¶ 13.
  \item Infra, note 129.
\end{itemize}
motivate constituent calls against SOPA and PROTECT-IP.\textsuperscript{236} The effort, which drove traffic to a single American Censorship Day website,\textsuperscript{237} was remarkably successful at generating publicity for the bill’s opponents. Links to the website and its calls to action were widely publicized on some of the web’s biggest nonprofit sites on which people rely every day, including Wikipedia, Creative Commons, and the Mozilla start page.\textsuperscript{238} For-profit websites such as Reddit, TechDirt, and BoingBoing also participated,\textsuperscript{239} bringing the message to millions more users. Thanks to this publicity, the site claims having generated over 1,000,000 emails and four calls \textit{per second} to Congress.\textsuperscript{240} This is a remarkably successful extension of the SFU coalition’s longstanding strategy of heavy internet advocacy.\textsuperscript{241}

For all except the most dedicated members of the SC coalition, this kind of public outcry is hard for policymakers to ignore. While SOPA or PIPA may still pass, the odds of passage have dropped dramatically thanks to the SFU coalition’s NGO members having succeeded at bringing much of the persuadable technology division to participate in vocal opposition,\textsuperscript{242} then

\textsuperscript{237} American Censorship Day November 16 - Join the fight to stop SOPA, AMERICAN CENSORSHIP DAY (as retrieved on November 17, 2011), at http://americancensorship.org
\textsuperscript{238} \textit{Id.}
\textsuperscript{239} \textit{Id.}
\textsuperscript{240} \textit{Id.}
\textsuperscript{241} Herman, \textit{supra} note 4.
\textsuperscript{242} Neither public reports nor off-the-record discussions with this author verify that NGOs pushed the persuadable technology division on this issue. However, for the reasons discussed above, note 185, such an order of events—NGOs were the first to take the strongest opposition view, then they pushed industry to join them in strong opposition, and finally industry did in fact join such strong opposition—was extremely likely. Here, as in the broadcast flag debate, the first and third steps are matters of public record and did occur in that order, with substantial time in between. Further, we can be certain that NGOs, with a record of reaching out to technology sector voices on important legislation on which these companies might voice an opinion, did so on this subject. Thus, the only matter here in question is the extent to which technology
spearheading\textsuperscript{243} an online effort that quickly drew in over a million citizens to email their members of Congress. While still in flux, the debate shows that the SC coalition’s ability to pass legislation is still substantially diminished compared to the previous century.

The push for domain seizures also shows that DRM and its regulation have utterly failed to prevent the widespread infringement of copyrighted works. The more one believes the rhetoric of the SC coalition in the current debate, the more clearly this is true. If the combination of DRM and the DMCA had actually stopped the widespread circulation of infringing copies of encrypted media, then the copyright industries would have little need for SOPA or PIPA. Instead, in their advocacy for these bills, they repeatedly insist that the internet is awash with illicit content such as movies.\textsuperscript{244} In the case of movies, the primary source for infringing copies is encrypted discs, whether DVD or Blu-Ray. These DRM schemes have thus failed to slow dedicated infringers—despite the anti-circumvention provisions of the DMCA.\textsuperscript{245}

\section*{VIII. Conclusion}

The political history of the DRM policy debate shows a substantial evolution in the copyright policy subsystem. In particular, as the SFU coalition has grown, it has become harder to pass strong-copyright DRM regulations, and it has become more conceivable that previous companies’ policy divisions and technology trade groups reached these conclusions based on the case made by NGOs—versus their own research.

\textsuperscript{243} The American Censorship Day organizers were: Electronic Frontier Foundation, Free Software Foundation, Public Knowledge, Demand Progress, Fight for the Future, Participatory Politics Foundation, Creative Commons, and Mozilla. \textit{Id.}

\textsuperscript{244} Larry Downes, \textit{Leahy's Protect IP bill even worse than COICA}, CNET NEWS, Nov. 17, 2011, at news.cnet.com/8301-13578_3-20062419-38.html (“According to rights holders, additional tools are necessary to curb wholesale copyright piracy, especially of movies…” \textit{Id.} ¶ 21.)

\textsuperscript{245} While I hope never to see this hypothesis tested, I am very confident that no domain seizures bill will stop online infringement to the satisfaction of the content industries. If that comes to pass, one wonders what they would propose next. Perhaps the only strategy left would be the kind of technological lockdown envisioned in Hollings’ bill.
DRM regulations would be moderated. This is a sharp change from the policy dynamics of copyright during the 20th Century. The Audio Home Recording Act became law with little substantial resistance, and while the anti-circumvention provisions of the Digital Millennium Copyright Act attracted more pushback, that opposition was not organized into 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 completely reshaped the playing field. By 2003, the SFU coalition had grown powerful enough that they had to be accounted for by the SC coalition. They played a central role in killing the broadcast flag proposals, and they made a credible push to reform the DMCA. While they still cannot match the copyright industries’ lobbying prowess, the SFU coalition has at least fought them to something of an uneasy stalemate. That stalemate may even be strong enough to stop efforts to legislate domain seizures.

While the DRM policy debate is just the most closely-fought embodiment of this change, this study is largely a story about the SFU coalition’s substantial successes at building and deploying organizational capacity to push for copyright moderation in general. As James Boyle explained in 2008:

Ten years ago, civil society had little to offer in terms of groups that represented anything other than an industry position on intellectual property. … This position has changed radically.

There are academic centers that concentrate on [intellectual property]—one of them at my university. Thanks in large part to the leadership of Pamela Samuelson, there
are law student clinics that do impact litigation on issues such as fair use and that represent underserved clients such as documentarians. But beyond academic work, there are organizations that have dedicated themselves to advocacy and to litigation… The Electronic Frontier Foundation did exist ten years ago, but its coverage of intellectual property issues was only episodic. Its portfolio of litigation and public education on the subject is now nothing short of remarkable. Public Knowledge’s valuable lobbying and education is another obvious example. International organizations with similar aims include the Open Rights Group in the United Kingdom.246

Other groups, particularly including the Center for Democracy and Technology (CDT) and Consumers Union, have also taken a more substantial interest. 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 speak for themselves.

None of the outcomes over the last ten years show the SFU coalition as having more political capital than the SC coalition; on the contrary, those calling for fair use are still outgunned, primarily because they are still being badly outspent. The end of Boucher’s DMCA reform efforts and his time in Congress, as well as the credibility of efforts to legislate domain seizures, show the continued imbalance between the coalitions. Yet the SFU coalition has been remarkably successful for a coalition with such a funding disadvantage. It is beyond the purpose of this study to explore all of the reasons for this gap, though in another study,247 I attempt a partial explanation, contending that the SFU coalition’s vociferous online and strategically

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\text{246 BOYLE, supra note 3, at 243.}
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\text{247 Herman, supra note 4.}
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successful offline communication have helped counterbalance their funding disadvantage. In particular, the SFU coalition has used the web to communicate their message with a richness that is hard to overstate. While policy outcomes are always hard to tether to a single specific cause, this deluge of online communication shows that the coalition thinks it is worthwhile—a belief reflected in off-the-record discussions with several of the members of that coalition. Combined with the remarkable policy trajectory identified in this study, the circumstantial evidence would certainly suggest that—at least in this case—internet mobilization has helped shape policy outcomes, to the benefit of the coalition with far less funding.

Whatever part has been played by the various people, organizations, and communication strategies, the story of the evolution of DRM policy is as much political as legal. The DRM debate was a key part of inspiring a new movement, the political reverberations of which will continue to shape the future of digital communication. Depending on one’s side in the copyright debate, this change in copyright politics is either inspiring or frustrating, but it is hard to deny.

The SFU coalition was among the first under-funded coalitions to have so much success leveraging the internet to identify sympathizers and spread their message. It is unsurprising, of course, that a coalition that is built almost exclusively of internet enthusiasts would go online in droves to spread their message—and that they would find a sympathetic audience among other internet enthusiasts. The very technologies that have revolutionized the media industries have also revolutionized 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. It may not always or even often lead to policy victories, but if the copyright debate is any example, a group can now move from virtual nonexistence to genuine competitiveness in less time—and with less money—than ever before.
As the strong fair use coalition shows, the internet is good for a lot more than committing copyright infringement.