2005

P2P and the Future of Private Copying

Peter K. Yu
peter_yu@msn.com

P2P AND THE FUTURE OF PRIVATE COPYING

PETER K. YU*

TABLE OF CONTENTS

 Associate Professor of Law & Director, Intellectual Property & Communications Law Program, Michigan State University College of Law; Adjunct Professor of Telecommunication, Information Studies and Media & Faculty Associate, James H. and Mary B. Quello Center for Telecommunication Management & Law, College of Communication Arts & Sciences, Michigan State University. Earlier versions of this Article were presented in the Sixth FuturTech Conference at the University of Michigan Business School, the ITU Telecom Asia 2004 Forum organized by the International Telecommunication Union in Busan, Korea, the Fifth Annual Quello Communications Policy & Law Symposium in Washington, D.C., the LawTechTalk Series at the University of Hong Kong Faculty of Law, and the First Annual Intellectual Property and Communications Law and Policy Scholars Roundtable at Michigan State University College of Law. The article was also delivered as a public lecture for the Intellectual Property Department of the Government of Hong Kong Special Administrative Region. The Author thanks the participants of these events, in particular Adam Candeub, Cindy Cohn, Shubha Ghosh, Debora Halbert, Robert Heverly, Matt Jackson, Jay Kesan, Michael Landau, Lyrissa Lidsky, Michael Madison, Adam Mossoff, Susan Scafidi, Mitch Singer, and Katherine Strandburg, for their valuable comments and suggestions. He also expresses his appreciation and gratitude to Alexander Kanous and Jade Zuege for excellent research and editorial assistance and Richard Miller and the staff of the UNIVERSITY OF COLORADO LAW REVIEW for their thoughtful and thorough editing.

INTRODUCTION

Two thousand and three was the year of recording industry litigation. For the first time, the industry filed lawsuits against individual end-users whom it suspected of illegally trading music. In April, the major record labels filed high-profile lawsuits against four college students who ran file-sharing engines that allowed fellow students to download copyrighted songs.[1] Five months later, the Recording Industry Association of America ("RIAA"), the trade group that represents the five major labels and other smaller member companies, launched full-fledged battles against individuals suspected of swapping music without authorization via peer-to-peer ("P2P") networks,[2] such as Grokster, iMesh, KaZaA, and Morpheus. Hundreds of lawsuits were filed,[3] thousands of subpoenas were issued,[4] and countless people—innocent or otherwise—received the trade group's notorious cease-and-desist letters.[5] These

1. Frank Ahrens, *4 Students Sued over Music Sites*, WASH. POST, Apr. 4, 2003, at E1; Jon Healey, *Students Hit with Song Piracy Lawsuits*, L.A. TIMES, Apr. 4, 2003, at C1.

2. P2P networks are computer networks that allow individual end-users to communicate with each other without using a centralized server. For a brief discussion of the operation of P2P networks, see *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 380 F.3d 1154, 1158–60 (9th Cir.), *cert. granted*, 125 S. Ct. 686 (2004). *See generally* PEER-TO-PEER: HARNESSING THE BENEFITS OF A DISRUPTIVE TECHNOLOGY (Andy Oram ed., 2001) [hereinafter PEER-TO-PEER].

3. Amy Harmon, *261 Lawsuits Filed on Music Sharing*, N.Y. TIMES, Sept. 9, 2003, at A1 [hereinafter Harmon, *261 Lawsuits Filed*].

4. *SBC Online Music Case Moved to Washington*, L.A. TIMES, Dec. 2, 2003, at C3 (reporting that the RIAA has issued thousands of subpoenas since spring 2003).

5. Declan McCullagh, *RIAA Apologizes for Erroneous Letters*, CNET NEWS.COM (May 13, 2003), *at* http://news.com.com/2100-1025-1001319.html; *see also* Declan McCullagh, *RIAA Apologizes for Threatening Letter*, CNET NEWS.COM (May 12, 2003), *at* http://news.

strong-arm tactics have alienated many of the industry's customers and political supporters[6] and, to some extent, have backfired by driving unauthorized copying underground.[7] Digital piracy remains rampant today, and billions of music files are traded every month.[8]

Since the beginning of the P2P file-sharing controversy, commentators have discussed the radical expansion of copyright law,[9] the recording industry's controversial enforcement tactics,[10] the need for new legislative and business models,[11] the changing social

---

com.com/2100-1025-1001095.html. For a discussion of take-down notices, see *infra* text accompanying notes 35–46.

6. *See* Peter K. Yu, *The Copyright Divide*, 25 CARDOZO L. REV. 331, 442–43 (2003).

7. *See id.* at 443.

8. *See generally* Peter K. Yu, *The Escalating Copyright Wars*, 32 HOFSTRA L. REV. 907 (2004) [hereinafter Yu, *Escalating Copyright Wars*].

9. *See, e.g.*, LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD (2001) (lamenting how the recent expansion of intellectual property laws have stifled creativity and innovation); JESSICA LITMAN, DIGITAL COPYRIGHT (2001) (detailing the expansion of copyright laws in the past two centuries); SIVA VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS: THE RISE OF INTELLECTUAL PROPERTY AND HOW IT THREATENS CREATIVITY (2001) [hereinafter VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS] (describing how the increasing corporate control over the use of software, digital music, images, films, books and academic materials has steered copyright law away from its original design to promote creativity and cultural vibrancy); James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 33 [hereinafter Boyle, *The Second Enclosure Movement*] (describing the recent expansion of intellectual property laws as "the second enclosure movement").

10. *See, e.g.*, Sonia K. Katyal, *The New Surveillance*, 54 CASE W. RES. L. REV. 297 (2003).

11. *See, e.g.*, COMM. ON INTELLECTUAL PROP. RIGHTS AND THE EMERGING INFO. INFRASTRUCTURE, NAT'L RESEARCH COUNCIL, THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE 79–83 (2000) [hereinafter DIGITAL DILEMMA] (discussing the business models and technological protection mechanisms that can be used to address the digital piracy problem); WILLIAM W. FISHER III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT 199–258 (2004) (proposing to set up a governmentally administered system that rewards copyright holders for commercial and noncommercial uses); Peter Eckersley, *Virtual Markets for Virtual Goods: The Mirror Image of Digital Copyright?*, 18 HARV. J.L. & TECH. 85 (2004) (proposing to establish a system that distributes rewards based on a virtual market); Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263 (2002) (proposing to impose statutory levies on Internet service subscriptions and the sales of computer, audio, and video equipment); Diane Leenheer Zimmerman, *Authorship Without Ownership: Reconsidering Incentives in a Digital Age*, 52 DEPAUL L. REV. 1121 (2003) [hereinafter Zimmerman, *Authorship Without Ownership*] (discussing the Street Performer Protocol); Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1 (2004) [hereinafter Litman, *Sharing and Stealing*] (offering a proposal that combines blanket fees or levies, digital rights management, and an opt-out mechanism that allows copyright holders to withhold music from the system); Lydia Pallas Loren, *Untangling the Web of Music Copyrights*, 53 CASE W. RES. L. REV. 673 (2003) (proposing to revamp the copyright system by embracing the doctrine of derivative work independence and by consolidating all exclusive rights under existing copyright law into a single "right to commercially exploit" copyrighted expressions); Glynn S. Lunney, Jr., *The Death of Copyright: Digital Technology, Private Copying, and the Digital*

norms,[12] and the evolving interplay of politics and market conditions.[13] Although these discussions have delved into the many aspects of the controversy, none of them presents a big picture of the issues or explains how they fit within the larger file-sharing debate. That is the task of this Article, which takes a holistic approach to bring together existing scholarship while offering some thoughts on the future of private copying. The Article does not seek to advance a new theory or model, which could quickly become obsolete, given the rapid advance of digital and P2P technologies. Rather, it provides guidelines to help policymakers to craft an effective solution to the unauthorized copying problem.

Part I of this Article traces the major developments in copyright law in 2003. Since the emergence of the Internet, the recording industry has employed five different strategies to alleviate the threat created by digital technology: lobbying, litigation, self-help, education, and licensing. Although the industry has used a combination of these strategies over the years, it focused primarily on litigation and licensing in 2003. Part I details the industry's enforcement tactics and the various legal setbacks the industry suffered at the end of that year. It also discusses the ninety-nine-cent-song business model pioneered by the iTunes Music Store, launched by Apple Computer in April 2003.

Part II focuses on the aftermath of the 2003 P2P file-sharing wars and outlines challenges the entertainment industry will face in the next

---

Millennium Copyright Act, 87 VA. L. REV. 813 (2001) (discussing the benefit of private file sharing and contending that a levy-based approach would be preferable to a strong encryption-based approach if the harm of private copying were to be addressed); Neil W. Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1 (2003) [hereinafter Netanel, *Noncommercial Use Levy*] (offering a blueprint for the establishment of a "noncommercial use levy"); John Perry Barlow, *The Economy of Ideas*, WIRED, Mar. 1994, at 84 (discussing the obsolescence of intellectual property law in the digital world), *available at* http://www.wired.com/wired/archive/2.03/economy.ideas.html; Esther Dyson, *Intellectual Value*, WIRED, July 1995, at 136 (contending that it will be more efficient to distribute content free-of-charge and charge for follow-up services instead), *available at* http://www.wired.com/wired/archive/3.07/dyson.html; ELEC. FRONTIER FOUND., A BETTER WAY FORWARD: VOLUNTARY COLLECTIVE LICENSING OF MUSIC FILE SHARING (2004) [hereinafter EFF WHITE PAPER] (recommending that the recording industry adopt a voluntary collective licensing model similar to the one used by radio stations today), *available at* http://www.eff.org/share/collective_lic_wp.pdf.

12. *See, e.g.*, Lior Jacob Strahilevitz, *Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks*, 89 VA. L. REV. 505 (2003) (discussing the change of social norms in light of the proliferation of file-sharing technologies).

13. *See, e.g.*, DEBORA J. HALBERT, INTELLECTUAL PROPERTY IN THE INFORMATION AGE: THE POLITICS OF EXPANDING OWNERSHIP RIGHTS 78–81 (1999); G. Prem Premkumar, *Alternative Distribution Strategies for Digital Music*, COMM. ACM, Sept. 2003, at 89 (discussing possible distribution strategies for digital music and their implications for the political interplay of consumers, artists and songwriters, record companies, and retailers).

few years. Section A discusses challenges within the United States—the proliferation of new P2P technologies, the increasingly transnational nature of the copyright wars, the decreasing support the industry receives from its customers and political allies, and the counterattacks and setbacks the industry is likely to suffer as a result of its aggressive tactics. Section B highlights international challenges, including the heightened tension between the United States and less developed countries, the severe criticisms of U.S. copyright policy in foreign countries, and the diversion of public attention from domestic copyright issues. Section C explores the spread of the P2P file-sharing wars from record companies to other media industries. It suggests that the publishing, television, and motion picture industries may adopt less confrontational strategies because of their differing structures and the lessons they may have learned from the recording industry.

Part III brings together the many proposals that commentators have put forward to solve the unauthorized copying problem. It categorizes them according to their underlying models and enforcement techniques and highlights their advantages and limitations. In particular, Part III critically evaluates eight categories of proposals: (1) mass licensing, (2) compulsory licensing, (3) voluntary collective licensing, (4) voluntary contribution, (5) technological protection, (6) copyright law revision, (7) administrative dispute resolution proceeding, and (8) alternative compensation. Acknowledging the provisional nature of these proposals, this Part contends that policymakers need to adopt a range of solutions—both short- and long-term—if they are to address the unauthorized copying problem.

Part IV challenges policymakers and commentators to step outside their mental boundaries to rethink the P2P file-sharing debate. By presenting thought experiments that compare the ongoing P2P file-sharing wars to (1) a battle for self-preservation between humans and machines, (2) an imaginary World War III, and (3) the conquest of Generation Y, this Part demonstrates that policymakers should not focus on legal solutions alone. Instead, they should pay more attention to market forces, technological architectures, and social norms, which also play very important roles in crafting an effective solution to the unauthorized copying problem. The Article concludes by offering some guidelines that may point the way to this solution.

I. THE 2003 COPYRIGHT WARS

In 1999, the recording industry was growing at an annual rate of over six percent, totaling $14.6 billion in business.[14] After the emergence of Napster and P2P file sharing, however, CD sales plunged by more than six percent in 2001, nearly nine percent in 2002, and slightly more than seven percent in 2003.[15] To stem its losses, the industry has employed five different strategies: lobbying, litigation, self-help, education, and licensing.[16] In 2003, however, the industry focused its efforts primarily on litigation and licensing.[17]

The year started off with a ruling favoring the recording industry. In January 2003, the United States District Court for the Central District of California ruled that KaZaA's parent company, Sharman Networks, could be sued for copyright infringement in the United States.[18] Headquartered in Australia and incorporated in the South Pacific tax haven of Vanuatu, Sharman Networks claimed that it did not have substantial contacts with California and thus should not be subject to the court's juris-

---

14. Jefferson Graham et al., *Hammering Away at Piracy*, USA TODAY, Sept. 11, 2003, at 1D.

15. RIAA, *The Recording Industry Association of America's 2003 Yearend Statistics*, *available at* http://www.riaa.com/news/newsletter/pdf/2003yearEnd.pdf (last visited Jan. 30, 2005). *But see* SIVA VAIDHYANATHAN, THE ANARCHIST IN THE LIBRARY: HOW THE CLASH BETWEEN FREEDOM AND CONTROL IS HACKING THE REAL WORLD AND CRASHING THE SYSTEM 44 (2004) [hereinafter VAIDHYANATHAN, THE ANARCHIST IN THE LIBRARY] (noting that "[record] sales and revenues in 2003 were comparable to 1997, suggesting that the massive sales increase in 1998, 1999, and 2000 may be the anomaly"); FELIX OBERHOLZER & KOLEMAN STRUMPF, THE EFFECT OF FILE SHARING ON RECORD SALES: AN EMPIRICAL ANALYSIS (2004) (showing that file sharing has only had a limited effect on record sales), *available at* http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf. As Professor Vaidhyanathan questioned:

> Does each downloaded song equal a lost sale? I am not convinced. I would not consider buying ninety-nine out of one hundred songs I download. Many of them are garbled, low-quality recordings. Some are partial files. Some turn out to be lame songs. Mostly, I download songs to see if I want to buy them. I also get songs I can't buy, for example, out-of-print stuff from cult bands like Too Much Joy or rare live cuts of "Jersey Girl" sung by Bruce Springsteen and Tom Waits.

Id. at 41–42.

16. *See generally* Yu, *Escalating Copyright Wars*, *supra* note 8.

17. One might include education if one agrees with RIAA President Cary Sherman that "lawsuits are a very potent form of education." Benny Evangelista, *Online Music Finally Starts to Rock 'n' Roll*, S.F. CHRON., Dec. 29, 2003, at E1 (quoting RIAA President Cary Sherman).

18. *See* Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 243 F. Supp. 2d 1073 (C.D. Cal. 2003), *aff'd*, 380 F.3d 1154 (9th Cir. 2004), *cert. granted*, 125 S. Ct. 686 (2004); *see also* Declan McCullagh, *Judge: Kazaa Can Be Sued in U.S.*, CNET NEWS.COM (Jan. 10, 2003), *at* http://news.com.com/2100-1023-980274.html.

diction.[19] The court emphatically rejected this argument, observing that it could hardly be doubted that a company whose software had been downloaded more than 143 million times by California residents had "knowingly and purposefully availed itself of the privilege of doing business in California" and had established the required minimum contacts with California residents.[20] The court also found that Sharman Networks was "at least constructively aware" of the many agreements it had entered into with users authorizing and limiting the use of the KaZaA software.[21] Noting that "many, if not most, music and video copyrights are owned by California-based companies,"[22] the court allowed the plaintiff copyright holders to proceed with the lawsuit.

Within two weeks, the RIAA obtained another favorable ruling, this time from the United States District Court for the District of Columbia.[23] In *In re Verizon Internet Services, Inc.* ("*Verizon I*") the RIAA sought to enforce a subpoena it had served on Verizon, an Internet service provider ("ISP"), in July 2002. That subpoena sought to obtain the identity of a subscriber who allegedly had used the KaZaA software to make more than six hundred copyrighted songs available for downloading over the Internet.[24] Verizon fought enforcement on the grounds that the subpoena was related to materials transmitted over, rather than stored on, its network, and that the Digital Millennium Copyright Act of 1998 ("DMCA") does not authorize the issuance of a subpoena to an ISP acting solely as a conduit for communicating content determined by others.[25] The district court ordered that the subpoena be enforced, and Verizon appealed the ruling.[26]

While *In re Verizon* was on appeal, the major record labels, in April 2003, filed high-profile lawsuits against four college students—two at Princeton University, one at Michigan Technological University, and one at Rensselaer Polytechnic Institute.[27] The labels alleged that the students

---

19. *Metro-Goldwyn-Mayer Studios*, 243 F. Supp. 2d at 1079.

20. *Id.* at 1087 (footnote omitted).

21. *Id.*

22. *Id.* at 1089.

23. *In re* Verizon Internet Servs., Inc., 240 F. Supp. 2d 24 (D.D.C.) [hereinafter *Verizon I*], *rev'd*, Recording Indus. Ass'n of Am., Inc. v. Verizon Internet Servs., Inc., 351 F.3d 1229 (D.C. Cir. 2003).

24. *Id.* at 28.

25. *Id.* at 29.

26. *See* discussion *infra* notes 114–17 and accompanying text.

27. Ahrens, *4 Students Sued over Music Sites*, *supra* note 1; Healey, *Students Hit with Song Piracy Lawsuits*, *supra* note 1. Although *Verizon* allowed the recording industry to serve subpoenas on Internet service providers, the record companies did not use the subpoena process to obtain identities of these four students. As the *Washington Post* reported, "the networks named in the lawsuits are internal college networks, known as local area networks, or LANs,

had infringed upon the companies' copyrights by running file-sharing engines that helped others on campus to share copyrighted songs. The record companies not only asked the courts for permanent injunctions to shut down the networks but also sought the maximum statutory damages afforded by the 1976 Copyright Act—$150,000 for each illegal download.[28] Such awards could run to billions of dollars, even though the students did not reap any financial gain from their actions.[29]

Although the lawsuits raised public awareness of the illegality of online file trading, the recording industry soon found itself confronted with bad publicity and harsh criticism. In less than a month, the labels settled with the students, each of whom agreed to pay damages that ranged from $12,000 to $17,500.[30] The students did not admit any wrongdoing but agreed not to infringe or support infringement of copyrights owned by the record companies.[31] These settlements were a milestone for the major labels; never before had they recovered money from individuals they had accused of online piracy.[32] Some commentators applauded the settlement, noting that the damage amounts were "high enough to catch the attention of file swappers" and intimidate them from continuing their illegal practices.[33] Others, however, predicted that the

---

and are not seen by the RIAA software. Instead, the RIAA discovered them by reading college newspapers, in which the LANs are discussed." Ahrens, *4 Students Sued over Music Sites*, *supra* note 1. As the RIAA noted in its complaints, "[t]he four defendants were chosen because the RIAA found their sites to be among the most active, enabling thousands of songs to be freely shared." *Id.*

28. *See* 17 U.S.C. § 504(c)(2) (2002) (stipulating that "the court in its discretion may increase the award of statutory damages to a sum of not more than $150,000" in willful infringement cases).

29. Ken Hamner, *Entertainment Industry Goes After Little Guy*, HARV. CRIMSON, Apr. 9, 2003, at 4 (reporting that the Michigan Technological University student "stored 650,000 songs on his server" and would have been liable for a maximum of $97.5 billion in damages at $150,000 per song).

30. Jon Healey & P.J. Huffstutter, *4 Pay Steep Price for Free Music*, L.A. TIMES, May 2, 2003, at A1.

31. *Id.*

32. *See id.* (noting that "[t]he settlements mark[ed] the first time the record companies have recovered money from individuals in the United States accused of piracy on file-sharing networks").

33. *Id.* Matthew Oppenheim, the former senior vice president of business and legal affairs for the RIAA, said the settlements were "the right amount given the situation," although they were well below what the record companies had asked for. *Id.* Another copyright attorney added, "I'd personally think twice about doing something that would cost me $12,000 to $17,500 to avoid spending 12 to 15 bucks on the occasional CD." *Id.* Within six weeks of the settlement, however, one of the student defendants raised the entire amount of his $12,000 settlement by contributions from supporters over the Internet. Jefferson Graham, *Fined Student Gets Donations to Tune of $12K*, USA TODAY, June 25, 2003, at 4D. By the end of 2003, another student had similarly raised two-thirds of the $15,000 he owed the record companies.

settlements would backfire on the industry by alienating paying customers who were disgusted by the industry's strong-arm tactics.[34]

Following the settlements, the recording industry expanded its enforcement practice, sending out countless cease-and-desist letters and take-down notices. Under section 512 of the DMCA, a representative of a copyright holder may send a notice, the so-called "take-down notice," to an ISP requesting that infringing copyrighted material be removed.[35] Any ISP that "responds expeditiously to remove, or disable access to the material," will be eligible for the provision's safe harbor and thus will avoid legal liability.[36]

To seek out information about infringing material, the RIAA has used automated Web crawlers and other computer programs to scour the Internet for what it believed to be illegally traded songs.[37] Although these automated Web crawlers drastically reduced the costs of policing copyrights, they also yielded false positives that caused the industry public embarrassment. For example, during the second week of May 2003, the RIAA issued an erroneous take-down notice to Speakeasy, a national broadband provider, alleging that the FTP site of one of its subscribers illegally offered copyrighted sound files for download.[38] According to the form letter, many of the "approximately 0" files on the Web site "contain recordings owned by our member companies, including songs by such artists as Creed."[39] The subscriber's FTP site was not devoted to Creed or other musicians but focused on the Commodore Amiga computer, collecting "demo" files designed to show off the Amiga's superior graphic capabilities.[40] As the site administrator noted, "There are some files with the suffix mp3 but there is nothing I could find that I could associate with any artist that I know of."[41]

That same week, the RIAA's crawlers confused Peter Usher, a retired professor of astronomy and astrophysics at Pennsylvania State University, with Usher Raymond, the best-selling rhythm-and-blues per-

---

See Daniel Peng, *Legal Fees and $15,000 RIAA Settlement, at* http://arbornet.org/~danpeng (last updated July 12, 2004).

34. According to Howard Ende, attorney for defendant Daniel Peng, "This case had very little to do with [the defendant] and everything to do with the recording industry's attempt to intimidate Internet users around the country and college students in particular. . . . They looked to instill fear, but instead they got fear and loathing." Healey & Huffstutter, *supra* note 30.

35. *See* 17 U.S.C. § 512(c) (2000).

36. *Id.* § 512(c)(1)(C).

37. *See, e.g.*, McCullagh, *RIAA Apologizes for Erroneous Letters*, *supra* note 5.

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

former.[42] After the crawler located on the university's departmental server a directory named "usher" that contained a sound file in MP3 format, the RIAA sent Professor Usher a cease-and-desist letter. The suspect file, it turned out, was a recording by *The Chromatics*, an *a cappella* group of Penn State astronomers and astrophysicists, of a song about the Swift gamma ray satellite that Penn State had helped to design. The RIAA later withdrew the notice and apologized to Professor Usher, offering to send him a compact disc and T-shirt "in appreciation of his understanding."[43] According to the RIAA, the dozens of faulty copyright infringement notices that went out during that week were sent by a temporary worker who failed to follow regular protocol to confirm the content of the suspect files.[44]

While this type of problem is unavoidable considering the large number of unlicensed songs traded on the Internet every day, the current copyright regime does little to protect innocent individual end-users from bogus take-down notices. Under the DMCA, the copyright holder will be liable for damages and attorney's fees if he or she "knowingly materially misrepresents" information in the notice.[45] However, if the holder has a good-faith belief that material stored on the system infringes on its copyright, those injured by the faulty notices will have no legal recourse for compensation. Drafted before the emergence of P2P networks, this take-down provision was primarily designed to balance the interests of copyright holders and ISPs. Because the DMCA did not take into account extensive private copying by individual end-users, it failed to include any safeguard to protect these users against overreaching by copyright holders and their overzealous representatives.

The Penn State incident demonstrates the chilling effect of the take-down provision. When the university's central computing office received the RIAA's letter on May 8, it notified the Department of Astronomy and Astrophysics that it would shut down the department's Internet connection, right in the middle of spring-semester final examinations, unless the infringing material was removed within forty-eight hours.[46] Fortunately, the manager of the departmental server was able to locate Professor Usher's *a cappella* MP3 and convince the central computing office not to shut down the connection. Had he failed, some students in

---

42. *Complaint from Recording Industry Almost Closes Down a Penn State Astronomy Server*, CHRON. HIGHER EDUC., May 23, 2003, at A27 [hereinafter *Complaint from Recording Industry*]; *see also* Editorial, *Close Loophole in Copyright Law*, ATLANTA J.-CONST., June 6, 2003, at 18A.

43. McCullagh, *RIAA Apologizes for Threatening Letter*, *supra* note 5.

44. *Id.*

45. 17 U.S.C. § 512(f).

46. *Complaint from Recording Industry*, *supra* note 42.

the department would have been unable to take finals or complete other end-of-term assignments. Research would have come to a halt, and grant applications for some cutting-edge projects may have been fatally delayed. Unfortunately, the DMCA would not have provided any legal redress in any of these scenarios unless the victims could show that the RIAA had knowingly materially misrepresented information in the takedown notice.

In late April, the recording industry won a second lawsuit against Verizon.[47] While Verizon was fighting the first subpoena, the RIAA served a second subpoena on the ISP. This time, Verizon challenged the subpoena on constitutional grounds, contending that the district court lacked Article III jurisdiction to issue a subpoena without a pending federal case or controversy.[48] It also maintained that the subpoena provision violated the First Amendment rights of Internet users because it lacked sufficient safeguards to protect users' ability to speak and associate anonymously.[49] The district court again rejected Verizon's arguments. The court held that the DMCA's subpoena provision, which "assigns only a ministerial function" to judicial officers, "presents neither a danger of encroachment nor some other threat to the institutional integrity and independence of the judiciary."[50] Finding that the DMCA provides adequate First Amendment safeguards,[51] the court refused to quash the subpoena or stay its execution pending appeal.[52]

Taking advantage of the subpoena power granted under the DMCA and the precedent set by the *Verizon* cases, the RIAA launched a mass-litigation campaign against file-swappers who made large numbers of songs available in P2P networks.[53] By mid-July, the industry had sent out 871 federal subpoenas, and roughly seventy-five new subpoenas had been approved every day.[54]

In September, the RIAA filed 261 lawsuits against individuals who downloaded music illegally via P2P networks.[55] Unlike in April, this time the industry not only threatened with the stick of litigation but also dangled the carrot of amnesty. The RIAA offered to forgo suing any in-

47. *In re* Verizon Internet Servs., Inc., 257 F. Supp. 2d 244 (D.D.C.) [hereinafter *Verizon II*], *rev'd*, Recording Indus. Ass'n of Am. v. Verizon Internet Servs., Inc., 351 F.3d 1229 (D.C. Cir. 2003).

48. *Verizon II*, 257 F. Supp. 2d at 246–48.

49. *Id.* at 257.

50. *Id.* at 256 (footnote omitted).

51. *Id.* at 260–64.

52. *Id.* at 275.

53. *See* Jefferson Graham, *Swap Songs? You May Be on Record Industry's Hit List*, USA TODAY, July 22, 2003, at 1D.

54. *See Hundreds of Subpoenas in Net Piracy*, SEATTLE TIMES, July 19, 2003, at A8.

55. Harmon, *261 Lawsuits Filed*, *supra* note 3.

dividuals who removed all illegal music files from their computers and signed an affidavit promising not to download music illegally again.[56]

On its surface, the RIAA's amnesty program was quite attractive and creative. In reality, it represented another ineffective, costly, and disturbing attempt by the recording industry to fight the copyright wars. The most egregious copyright infringers were unlikely to participate in the program, as they typically did not believe, or did not care, that what they were doing was illegal. The RIAA was likely to end up enlisting mostly minor offenders in whom the recording industry had limited interest. Moreover, the amnesty program protected its participants only from suit by the RIAA on behalf of its members, not from suit by representatives of other powerful industries, like the movie or software industries. Nor did the amnesty program shield individuals from civil actions brought by music publishers and independent labels not represented by the RIAA and from federal criminal prosecution.[57]

Even worse from the file-traders' perspective, the participants would have admitted past illegal file-trading activities by signing the affidavits. If they were to commit any future infringement, no matter how trivial, the affidavits would provide evidence that the infringement was willful.[58] The affidavits would also create a potential blacklist of habitual offenders whose online activities the recording industry might monitor.[59] Finally, the participants' broad promises to refrain from copying and posting may have gone beyond what copyright law requires.[60] By signing the affidavits, the participants therefore may have contractually given up valuable rights that are available under existing law.

Concerned about these problems, a California resident filed a lawsuit on behalf of the general public of his state, asking the RIAA to shut down its amnesty program and inform the public that its offer was

---

56. Information about the RIAA's Clean Slate Program is available at http://www.musicunited.org. *See generally* Peter K. Yu, *Music Industry Hits Wrong Note Against Piracy*, DETROIT NEWS, Sept. 14, 2003, at 13A (criticizing the Clean Slate Program).

57. *See* Electronic Frontier Foundation, *Why the RIAA's "Amnesty" Offer Is a Sham, at* http://www.eff.org/share/amnesty.php (last visited Mar. 15, 2003).

58. *See* Bill Holland, *File Traders May Be Eligible for Amnesty*, BILLBOARD, Sept. 13, 2003, at 8 (stating that "[t]hose who renege on their promise [made in the affidavit] could be referred to the Department of Justice for willful copyright infringement"); *Record Labels to Offer Amnesty Program*, SAN DIEGO UNION-TRIB., Sept. 6, 2003, at C3 (stating that "Internet users who continue to copy music online after signing the affidavit could face possible criminal charges for willful copyright infringement").

59. *See* Benny Evangelista, *RIAA to Offer File Sharers Amnesty*, S.F. CHRON., Sept. 6, 2003, at B1 (stating that it remains unclear as to "what steps the RIAA would take to monitor and enforce the amnesty agreements").

60. *See Record Labels to Offer Amnesty Program*, *supra* note 58 (quoting Gigi Sohn, president of Public Knowledge, as expressing concern "that people may give up rights they may have, such as the right to limited sharing").

"false" and "misleading."[61] In April 2004, the trade group announced the discontinuation of the controversial program. In a document filed to dismiss this lawsuit, the RIAA claimed that "the program is no longer necessary or appropriate" in light of the fact that public awareness of the illegality of online file trading has increased substantially since the group launched the individual lawsuits and the amnesty program.[62]

From the recording industry's perspective, the many lawsuits it filed against individual file-swappers were necessary but costly—in financial, political, and public relations terms. For example, the September lawsuits created difficult cases with sympathetic defendants and wrongfully sued victims. One of the lawsuits targeted a seventy-one-year-old man whose teenage grandchildren downloaded music via P2P networks.[63] Another went after a twelve-year-old honors student living in public housing who had paid $29.99 for the KaZaA software and might not have been able to distinguish between KaZaA and PressPlay or other legal music subscription services.[64] A third lawsuit, which the industry subsequently dropped,[65] accused a sixty-six-year-old Boston woman of offering hardcore rap songs for download although her computer, as it turned out, could not run the file-swapping software she was alleged to be using.[66]

The lawsuits raised concerns not just with the public but also among congressional representatives, especially those whose constituents had been sued. In September 2003, Senator Norm Coleman of Minnesota called for congressional hearings to investigate the recording industry's enforcement tactics.[67] In response to Senator Coleman's harsh criticism,

---

61. Complaint for Injunctive and Declaratory Relief Against Fraudulent Business Practices (Business and Professions Code §§ 17200 *et. seq.*) and Demand for Jury Trial at 25, Parke v. Recording Indus. Ass'n of Am. (Cal. Super. Ct. Marin County), *available at* http://www.boycott-riaa.com/pdf/AmnestyComplaint.pdf (last visited December 30, 2004); *see also* Jon Healey, *RIAA Sued over Amnesty Program*, L.A. TIMES, Sept. 10, 2003, at C3.

62. *See* Matt Hines, *RIAA Drops Amnesty Program*, CNET NEWS.COM (Apr. 20, 2004), *at* http://news.com.com/2100-1027_3-5195301.html (quoting the RIAA's legal memo).

63. Chris Gaither, *Group Sues 261 over Music-Sharing*, BOSTON GLOBE, Sept. 9, 2003, at A1.

64. Tim Arango et al., *Music-Thief Kid Sings Sorry Song*, N.Y. POST, Sept. 10, 2003, at 21. The RIAA eventually settled with the student for $2,000. John Borland, *RIAA Settles with 12-year-old Girl*, CNET NEWS.COM (Sept. 9, 2003), *at* http://news.com.com/2100-1027-5073717.html.

65. *See* John Borland, *RIAA's Case of Mistaken Identity?*, CNET NEWS.COM (Sept. 24, 2003), *at* http://news.com.com/2100-1027-5081469.html.

66. John Schwartz, *Record Industry Warns 204 Before Suing on Swapping*, N.Y. TIMES, Oct. 18, 2003, at C1.

67. Amy Harmon, *In Court, Verizon Challenges Music Industry's Subpoenas*, N.Y. TIMES, Sept. 17, 2003, at C2 [hereinafter Harmon, *Verizon Challenges Music Industry's Subpoenas*] (reporting that Senator Coleman had scheduled a congressional hearing to privacy issues as well as the broader effect of technology on copyright enforcement). As Senator Cole-

the RIAA modified its enforcement policy. Although the industry continued with its mass-litigation campaign, it announced that it would begin notifying suspected infringers before suing them. This new policy held out hope of benefiting both the industry and prospective defendants. It gave record companies a chance to avoid the bad publicity that stemmed from suing innocent or sympathetic users and spared some users the cost and embarrassment of defending a lawsuit.[68]

In early October, the RIAA threatened to sue another 204 file-sharers, more than half of whom had approached industry lawyers for settlements.[69] On Halloween, the industry followed up these threats by filing eighty lawsuits around the country.[70] A month later, the RIAA filed forty-one more lawsuits while indicating that the association planned to warn another ninety file-sharers that they might be sued.[71] In sum, by the end of November the RIAA had filed three rounds of lawsuits targeting 382 individuals in 2003.

So far, the RIAA had only targeted egregious offenders.[72] Those named in the lawsuits had distributed on average more than one thousand copyrighted songs via P2P networks.[73] Given the amount of music swapped and downloaded, these individuals were unlikely to become the industry's customers. Even if they were purchasing CDs, there was no

---

man noted: "If you're taking someone else's property, that's wrong, that's stealing. . . . But in this country we don't cut off people's hands when they steal. One question I have is whether the penalty here fits the crime." Amy Harmon, *Efforts to Stop Music Swapping Draw More Fire*, N.Y. TIMES, Aug. 1, 2003, at C1.

68. Schwartz, *supra* note 66.

69. *See id.*

70. *Record Industry Files 80 More Lawsuits*, N.Y. TIMES, Oct. 31, 2003, at C6.

71. *Music Industry Files More Suits*, N.Y. TIMES, Dec. 4, 2003, at C9.

72. Targeting these egregious offenders is very important, as committed free riders can induce noncooperative behavior by others. As Dan Kahan explained, drawing on reciprocity literature:

> No matter how cooperative the behavior of others, the committed free riders will always free ride if they can get away with it. Indeed, the committed free riders' shirking could easily provoke noncooperative behavior by the less tolerant reciprocators, whose defection in turn risks inducing the neutral reciprocators to abandon ship, thereby prompting even the tolerant reciprocators to throw in the towel, and so forth and so on. If this unfortunate chain reaction takes place, a state of affairs once characterized by a reasonably high degree of cooperation could tip decisively toward a noncooperative equilibrium in which only the angelic, Kantian, unconditional cooperators are left contributing (probably futilely) to the relevant public good.

Dan M. Kahan, *The Logic of Reciprocity: Trust, Collective Action, and Law*, 102 MICH. L. REV. 71, 79 (2003).

73. *See* Benny Evangelista, *RIAA Warns 204 More People It Plans to Sue*, S.F. CHRON., Oct. 18, 2003, at B1 (quoting the RIAA in saying that the lawsuits they planned focused on file-sharers who "were offering an average of more than 1,000 songs on their computers for others to download").

guarantee that they would buy them from the major labels, which primarily distribute mainstream artists. Moreover, as studies have shown, a small percentage of P2P file sharers was responsible for almost all the music files shared.[74] By targeting egregious offenders, the industry therefore sought to alleviate the unauthorized copying problem.

To earn public support for its mass-litigation campaign, the industry had repeatedly compared unauthorized copying to theft and likened file-sharers to shoplifters. Unfortunately, the industry's analogy was far from correct. First, the law on copyright infringement is not as clear and well settled as laws against theft and shoplifting. Copyright law is "notoriously complex and subtle."[75] It includes many "muddy rules," such as the idea-expression dichotomy, the fair use privilege, the first sale doctrine, and various statutory exemptions that allow for limited sharing of copyrighted works.[76] Indeed, the RIAA and civil liberties groups have significant disagreements over the extent of legitimate private copying.[77]

Second, unlike theft, copyright infringement does not necessarily deprive copyright holders of the use of their copyrighted materials. As the United States Supreme Court observed in *Dowling v. United States*,[78] a case involving the manufacture and distribution of bootleg recordings

---

74. *See* Eytan Adar & Bernardo A. Huberman, *Free Riding on Gnutella*, FIRST MONDAY (Oct. 2000), *at* http://firstmonday.org/issues/issue5_10/adar/index.html (citing a study by researchers at Xerox's Palo Alto Research Center showing that the top twenty percent of Gnutella users were responsible for ninety-eight percent of all the files shared), *cited in* Peter S. Menell, *Envisioning Copyright Law's Digital Future*, 46 N.Y.L. SCH. L. REV. 63, 161 (2002); Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1399 & n.219 (2004) (citing other studies that suggest that a small percentage of P2P file sharers was responsible for almost all the music files shared).

75. Menell, *supra* note 74, at 67–68.

76. *See generally* Dan L. Burk, *Muddy Rules for Cyberspace*, 21 CARDOZO L. REV. 121 (1999).

77. As the RIAA wrote on its Web site:

> First, for your personal use, you can make analog copies of music. For instance, you can make analog cassette tape recordings of music from another analog cassette, or from a CD, or from the radio, or basically from any source. Essentially, all copying onto analog media is generally allowed.
>
> Second, again for your personal use, you can make some digital copies of music, depending on the type of digital recorder used. For example, digitally copying music is generally allowed with minidisc recorders, DAT recorders, digital cassette tape recorders, and some (but not all) compact disc recorders (or CD-R recorders). As a general rule for CD-Rs, if the CD-R recorder is a stand-alone machine designed to copy primarily audio, rather than data or video, then the copying is allowed. If the CD-R recorder is a computer component, or a computer peripheral device designed to be a multipurpose recorder (in other words, if it will record data and video, as well as audio), then copying is not allowed.

DIGITAL DILEMMA, *supra* note 11, at 47.

78. 473 U.S. 207 (1985).

by Elvis Presley, "interference with copyright does not easily equate with theft, conversion, or fraud."[79] According to the Court,

> The infringer invades a statutorily defined province guaranteed to the copyright holder alone. But he does not assume physical control over the copyright; nor does he wholly deprive its owner of its use. While one may colloquially link infringement with some general notion of wrongful appropriation, infringement plainly implicates a more complex set of property interests than does run-of-the-mill theft, conversion, or fraud.[80]

Although the industry is correct in theory that each copy of a recording could translate into royalties and profits, the public has little sympathy for the recording industry when it hears artists repeatedly complain that they have not received royalties owed to them by their record companies.[81] The industry's image was also hurt by the widely held belief that it engages in collusive pricing to overcharge consumers.[82] As Paul Goldstein observed, "Public respect for the rights of entertainment companies cannot be separated from the public's perception of the respect these companies pay to the rights of the authors and artists who are the source of their products."[83] File-sharers may not be con-

---

79. *Id.* at 217.

80. *Id.* at 217–18.

81. Artist Courtney Love said it best in the Digital Hollywood Conference in New York in May 2000:

> What is piracy? Piracy is the act of stealing an artist's work without any intention of paying for it. I'm not talking about Napster-type software. I'm talking about major label recording contracts. . . . Although I've never met anyone at a record company who 'believed in the Internet,' they've all been trying to cover their asses by securing everyone's digital rights. Not that they know what to do with them. Go to a major label-owned band site. Give me a dollar for every time you see an annoying 'under construction' sign. I used to pester Geffen (when it was a label) to do a better job. I was totally ignored for two years, until I got my band name back. The Goo Goo Dolls are struggling to gain control of their domain name from Warner Bros., who claim they own the name because they set up a shitty promotional Web site for the band.

JOHN ALDERMAN, SONIC BOOM: NAPSTER, MP3, AND THE NEW PIONEERS OF MUSIC 126 (2001). The unedited transcript is available at http://www.goteamfrog.org/gotohell/gthvol4/fall2000/swindlefall2000.html. *See generally* FREDRIC DANNEN, HIT MEN (1991) (providing a portrayal of the inner workings of the music industry).

82. *See* Benny Evangelista, *$143 Million Settlement in CD Price-Fixing Suit*, S.F. CHRON., Oct. 1, 2002, at B1 (reporting that the five major labels and three national retail chains "have agreed to pay $143 million in refunds or free CDs to settle a price-fixing lawsuit by California and 39 other states").

83. PAUL GOLDSTEIN, COPYRIGHT'S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX 216 (rev. ed. 2003).

cerned about ripping off an anonymous corporation, but they may "think twice if the victim of their predation has a human face."[84]

While the industry was busy throughout 2003 filing lawsuits and planning new enforcement strategies, a new business model took off. In late April of that year, Apple Computer unveiled a new online music service, the iTunes Music Store, offering low-priced music downloads from the five major record labels.[85] The store charged ninety-nine cents for individual songs and $9.99 for most albums. In 2003 alone, Apple sold more than 30 million music downloads[86] (including at least some silent tracks).[87] *Fortune* named iTunes the "Product of the Year," and *Time* christened it the "Invention of the Year."[88]

In October 2003, Roxio, which purchased Napster's name and intellectual property assets in the service's bankruptcy proceedings,[89] relaunched the service on a subscription basis, featuring music from the major record labels.[90] A mix between PressPlay and the iTunes Music Store, the new Napster offers ninety-nine-cent downloads of single songs to anyone who downloads the free software. The service also gives those who pay a monthly subscription fee of less than $10 access to an unlimited number of music streams and "tethered" downloads that expire when a user stops subscribing to the service. To compete with Apple, Napster entered into agreements with Samsung to co-market the Samsung Nap-

---

84. *Id.*

85. Laurie J. Flynn, *Apple Offers Music Downloads with Unique Pricing*, N.Y. TIMES, Apr. 29, 2003, at C2.

86. Frank Ahrens, *Music Fans Find Online Jukebox Half-Empty*, WASH. POST, Jan. 19, 2004, at A1.

87. *See* Ina Fried, *Paying for the Sound of Silence*, S.F. CHRON., Feb. 6, 2004, at B1 (noting that "[a]mong the hundreds of thousands of downloadable songs for sale at Apple's online music store are at least nine tracks of silence"). As the *San Francisco Chronicle* reported:

> Apple treats the silent songs just like any piece of music. The silent tracks sell for the same 99 cents, feature free 30-second previews and are all wrapped in Apple's usual digital-rights management software to prevent unauthorized copying.
>
> . . . .
>
> Apple said most of the songs are there because the artists wanted silence to be part of the albums and because the recording industry provided the songs to Apple as sellable tracks.

Id.

88. Peter Lewis, *Product of the Year*, FORTUNE, Dec. 22, 2003, at 188; Chris Taylor, *The 99¢ Solution*, TIME MAG., Nov. 17, 2003, at 66, 68.

89. For a discussion of the lawsuits involving the old Napster, see Yu, *The Copyright Divide*, *supra* note 6, at 388–91. See generally ALL THE RAVE: THE RISE AND FALL OF SHAWN FANNING'S NAPSTER (2003) for a recent history of Napster.

90. John Borland, *Napster Launches, Minus the Revolution*, CNET NEWS.COM (Oct. 9, 2003), *at* http://news.com.com/2100-1027_3-5088838.html.

ster player and with Gateway Computers to preload the Napster software on selected personal computers.[91]

A month later, Napster announced a deal with Pennsylvania State University to provide students with campus-wide subscriptions.[92] Funded by student information technology fees, the service allows access to unlimited streams of music and tethered downloads.[93] The recording industry was excited about this deal because, from its standpoint, the service offered a legal alternative to Grokster, iMesh, KaZaA, Morpheus, and other allegedly illegal file-sharing networks while at the same time helping students to develop habits that the industry hopes will continue after the students graduate.[94] By the end of the year, Apple's success with iTunes had attracted competition from brick-and-mortar companies. Shortly before Christmas, Wal-Mart, the self-proclaimed low-price leader, undercut Apple and other fee-based download sites by offering eighty-eight-cent downloads.[95]

Although it is too early to evaluate iTunes's new business model, customers seem to be satisfied with the service.[96] As one customer told a reporter, "It's solved all my problems. It's so fast, and there's no guilt, no recriminations."[97] By using legitimate services, customers also save time and avoid those annoying decoy files, spyware, viruses, and computer crashes that often come with illegal downloads.[98] Nevertheless,

---

91. *Id.*

92. John Borland, *Napster to Give Students Music*, CNET NEWS.COM (Nov. 6, 2003), *at* http://news.com.com/2100-1027-5103557.html; *see also* John Borland, *Colleges Explore Legal Net Music Setups*, CNET NEWS.COM (Aug. 1, 2003), *at* http://news.com.com/2100-1027-5059030.html.

93. If a student wants to keep a permanent download or burn the song to a CD, the student can pay ninety-nine cents for the song.

94. *See* discussion *infra* Part IV.C.

95. Chris Cobbs, *File Swapping Goes Corporate*, ORLANDO SENTINEL, Jan. 11, 2004, at H1.

96. *But see* Chris Ayres, *Apple Acts After Battery of iPod Complaints*, TIMES (London), Jan. 12, 2004, at 9 (discussing the battery problems of the iPod); Rene A. Guzman, *Apple's Portable iPod Rotten to Some*, SAN ANTONIO EXPRESS-NEWS, Feb. 20, 2004, at 1F (discussing the class action lawsuits filed against Apple Computer alleging that the company misrepresented the battery life of its iPod).

97. Amy Harmon, *In Fight over Online Music, Industry Now Offers a Carrot*, N.Y. TIMES, June 8, 2003, at § 1 (quoting a regular user of file-sharing software).

98. *See* Yu, *The Copyright Divide*, *supra* note 6, at 432–33 (discussing the frustration in locating what one wants in illegal Web sites); *see also* DIGITAL DILEMMA, *supra* note 11, at 80–81.

there remain questions as to whether the purchased songs are resalable[99] and whether the delivery format is secure.[100]

Although the recording industry received several favorable rulings and benefited from the iTunes business model, it also suffered some major setbacks in 2003. A day after the RIAA's triumph in *Verizon II*, the industry got slammed in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*[101] The United States District Court for the Central District of California ruled that Grokster and Morpheus/Music City, two P2P networks, were not liable for the unauthorized copies made by individual end-users. Noting a "seminal distinction between Grokster/StreamCast and Napster,"[102] the court found "substantial noninfringing uses for Defendants' software—e.g., distributing movie trailers, free songs or other non-copyrighted works; using the software in countries where it is legal; or sharing the works of Shakespeare."[103] As the court explained:

> While Defendants, like Sony or Xerox, may know that their products will be used illegally by some (or even many) users, and may provide support services and refinements that indirectly support such use, liability for contributory infringement does not lie "merely because peer-to-peer file-sharing technology may be used to infringe plaintiffs' copyrights."[104]

The court also maintained that the defendants were not obliged to "police" the networks, as such a duty "arises only where a defendant has the 'right and ability' to supervise *the infringing conduct.*"[105] Unlike Napster, the distributors of Grokster and Morpheus do not have control over who uses the networks or what is shared through them. Thus, the court was unwilling to impose the additional burden on the defendants.

---

99. *See, e.g.*, Ina Fried & Evan Hansen, *Apple: Reselling iTunes Songs "Impractical,"* CNET NEWS.COM (Sept. 8, 2003), *at* http://news.com.com/2100-1027_3-5072842.html (quoting Peter Lowe, Apple's director of marketing for applications and services, who remarked that "Apple's position is that it is impractical, though perhaps within someone's rights, to sell music purchased online"); Alorie Gilbert, *iTunes Auction Treads Murky Legal Ground*, CNET NEWS.COM (Sept. 3, 2003), *at* http://news.com.com/2100-1025_3-5071108.html (discussing the legal and technical challenges concerning the resale of iTunes through Internet auctions); Evan Hansen, *Apple Customer Resells iTunes Song*, CNET NEWS.COM (Sept. 10, 2003), *at* http://news.com.com/2100-1027-5074086.html (reporting a customer's successful resale of online song he purchased from Apple Computer's iTunes Music Store).

100. *See, e.g.*, John Borland, *Program Points Way to iTunes DRM Hack*, CNET NEWS.COM (Nov. 24, 2003), *at* http://news.com.com/2100-1027-5111426.html (discussing a program that "served as a demonstration of how to evade, if not exactly break, the anticopying technology wrapped around the songs sold by Apple in its iTunes store").

101. 259 F. Supp. 2d 1029 (C.D. Cal. 2003).

102. *Id.* at 1041.

103. *Id.* at 1035.

104. *Id.* at 1043 (quoting A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1020–21 (9th Cir. 2001)).

105. *Id.* at 1045.

On appeal, the Ninth Circuit affirmed the lower court's decision.[106] Focusing on the relationship between the software and its users, the court avoided its precedents by distinguishing Grokster and StreamCast Networks from Napster. As the court reasoned, "the software design is of great import,"[107] and the networks were capable of substantial noninfringing uses, such as "significantly reducing the distribution costs of public domain and permissively shared art and speech, as well as reducing the centralized control of that distribution."[108] Writing for a unanimous panel, Judge Sidney Thomas explained why courts should be cautious when adjudicating claims that involve rapidly developing technology:

> The introduction of new technology is always disruptive to old markets, and particularly to those copyright owners whose works are sold through well-established distribution mechanisms. Yet, history has shown that time and market forces often provide equilibrium in balancing interests, whether the new technology be a player piano, a copier, a tape recorder, a video recorder, a personal computer, a karaoke machine, or an MP3 player. Thus, it is prudent for courts to exercise caution before restructuring liability theories for the purpose of addressing specific market abuses, despite their apparent present magnitude.[109]

In the last month of 2003, the recording industry suffered three more major unfavorable rulings. In early December, the Copyright Board of Canada declared that downloading files via P2P technologies does not violate Canadian law.[110] To compensate artists and copyright holders, the board imposed a tariff of up to $25 on portable MP3 play-

---

106. Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 380 F.3d 1154 (9th Cir.), *cert. granted*, 125 S. Ct. 686 (2004); *see also* John Borland, *Judges Rule File-Sharing Software Legal*, CNET NEWS.COM (Aug.19, 2004), *at* http://news.com.com/2100-1032_3-5316570.html.

107. *Metro-Goldwyn-Mayer Studios*, 380 F.3d at 1163.

108. *Id.* at 1164. To illustrate the substantial noninfringing use, the Ninth Circuit used the popular band Wilco:

> One striking example provided by the Software Distributors is the popular band Wilco, whose record company had declined to release one of its albums on the basis that it had no commercial potential. Wilco repurchased the work from the record company and made the album available for free downloading, both from its own website and through the software user networks. The result sparked widespread interest and, as a result, Wilco received another recording contract.

Id. at 1161.

109. *Id.* at 1167; *see also* Peter K. Yu, *Innovation Gains Edge in Music, Movie Battle*, DETROIT NEWS, Aug. 29, 2004, at 15A (discussing *Grokster*).

110. COPYRIGHT BD. OF CAN., PRIVATE COPYING 2003–2004, at 22 (2003) (stating that "[a]ll private copying is now exempt, subject to a corresponding right of remuneration"), *available at* http://www.cb-cda.gc.ca/decisions/c12122003-b.pdf.

ers,[111] thus putting the device in the same category as audiotapes and blank CDs. This tariff was struck down a year later by a federal Canadian court.[112] Although the court held that the Copyright Board did not have authority to impose such a tariff, it agreed with the board that making private copies of copyrighted works was legal.[113]

In mid-December, the United States Court of Appeals for the District of Columbia Circuit overruled the lower court's decisions in the two *Verizon* cases,[114] which required ISPs to turn over subscriber information to copyright holders without a pending lawsuit. As the appellate court maintained, "the overall structure of § 512 [the subpoena provision] clearly establish[es that the statute] . . . does not authorize the issuance of a subpoena to an ISP acting as a mere conduit for the transmission of information sent by others."[115] The D.C. Circuit also pointed out

---

111. *Id.* at 56.

112. John Borland, *Judge Tosses Canada's 'iPod Tax,'* CNET NEWS.COM (Dec. 17, 2004), *at* http://news.com.com/2100-1030_3-5495715.html.

113. In *BMG Canada Inc. v. Doe*, a Canadian federal court used similar reasoning to reject the request of Canadian record labels for authorization to identify alleged file-sharers. No. T-292-04 (Can. Mar 31, 2004), *available at* http://www.fct-cf.gc.ca/bulletins/whatsnew/T-292-04.pdf. *See generally* John Borland, *Judge: File Sharing Legal in Canada*, CNET NEWS.COM, *at* http://news.com.com/2100-1027-5182641.html (Mar. 31, 2004). As the court noted, the Canada Supreme Court's decision in *CCH Canada Ltd v. Law Society of Canada* established that setting up facilities to allow copying does not amount to *authorizing* infringement. *BMG Canada Inc.* ¶ 27 (quoting CCH Canada Ltd v. Law Society of Canada, [2004] S.C.C. 13). The court therefore did not find any "real difference between a library that places a photocopy machine in a room full of copyrighted material and a computer user that places a personal copy on a shared directory linked to a P2P service." *Id.* According to the court:

> In either case the preconditions to copying and infringement are set up but the element of authorization is missing. . . . The mere fact of placing a copy on a shared directory in a computer where that copy can be accessed via a P2P service does not amount to distribution. Before it constitutes distribution, there must be a positive act by the owner of the shared directory, such as sending out the copies or advertising that they are available for copying. No such evidence was presented by the plaintiffs in this case.

Id. ¶¶ 27–28.

114. Recording Indus. Ass'n of Am. v. Verizon Internet Servs. Inc., 351 F.3d 1229 (D.C. Cir. 2003), *cert. denied*, 125 S. Ct. 347 (2004).

115. *Id.* at 1237. As the court explained:

> This argument borders upon the silly. The details of this argument need not burden the Federal Reporter, for the specific provisions of § 512(h), which we have just rehearsed, make clear that however broadly "[Internet] service provider" is defined in § 512(k)(1)(B), a subpoena may issue to an ISP only under the prescribed conditions regarding notification. Define all the world as an ISP if you like, the validity of a § 512(h) subpoena still depends upon the copyright holder having given the ISP, however defined, a notification effective under § 512(c)(3)(A). And as we have seen, any notice to an ISP concerning its activity as a mere conduit does not satisfy the condition of § 512(c)(3)(A)(iii) and is therefore ineffective.

Id. at 1236.

that "P2P software was 'not even a glimmer in anyone's eye when the DMCA was enacted' . . . [and that] Congress had no reason to foresee the application of § 512(h) to P2P file sharing, nor did they draft the DMCA broadly enough to reach the new technology when it came along."[116] Thus, copyright holders cannot use the DMCA to force ISPs to turn over subscriber information without filing a lawsuit. The court, nevertheless, ended the opinion by acknowledging the industry's concern and suggested that copyright holders might seek Congress's assistance to address their economic woes. As the court wrote:

> We are not unsympathetic either to the RIAA's concern regarding the widespread infringement of its members' copyrights, or to the need for legal tools to protect those rights. It is not the province of the courts, however, to rewrite the DMCA in order to make it fit a new and unforseen [sic] internet architecture, no matter how damaging that development has been to the music industry or threatens being to the motion picture and software industries. The plight of copyright holders must be addressed in the first instance by the Congress; only the "Congress has the constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology."[117]

The recording industry immediately claimed that the decision would make the process more intrusive, because it prevents the RIAA from contacting suspected copyright infringers to try to reach a settlement and avoid filing a lawsuit.[118] The industry may be right, but it is cold comfort to individual file-sharers if their contacts with the RIAA would only result in expensive settlements that wipe away their savings or force them into bankruptcy. In fact, the *Verizon* ruling is likely to benefit file-sharers in three ways. First, although the decision did not determine whether it is legal to upload or download music, it slows the industry's mass-litigation campaign. Instead of suing file-sharers en masse, the industry now has to file John Doe actions against each individual file-sharer suspected of illegally trading music.[119] The process therefore will

---

116. *Id.* at 1238 (quoting *In re* Verizon Internet Servs., Inc., 240 F. Supp. 2d 24, 38 (D.D.C.), *rev'd*, 351 F.3d 1229 (D.C. Cir. 2003)).

117. *Id.* (quoting Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 431 (1983)).

118. *See* John Borland, *Court: RIAA Lawsuit Strategy Illegal*, CNET NEWS.COM (Dec. 19, 2003), *at* http://news.com.com/2100-1027-5129687.html.

119. *See* Katie Dean, *One File Swapper, One Lawsuit*, WIRED NEWS (Mar. 08, 2004), *at* http://www.wired.com/news/digiwood/0,1412,62576,00.html (reporting a ruling in Philadelphia that required the RIAA to file separate lawsuit for each defendant, rather than bundling all the defendants in a single lawsuit); *Florida Court Sends RIAA Away*, WIRED NEWS, *at* http://www.wired.com/news/digiwood/0,1412,62915,00.html (Apr. 1, 2004) (reporting a simi-

become more expensive, labor-intensive, and time-consuming, and the industry will have to be more selective about whom to sue. Second, the decision forced the industry to sue file-sharers without the benefit of weeding out sympathetic defendants or false positives. Even worse, the decision might generate public relations disasters should the industry sue the daughter or son of a record label executive or a close relative of a senator.[120] Third, the John Doe process will be more protective of privacy and other constitutional rights, as it will prevent ISPs from disclosing subscriber information without a pending lawsuit.

Just before Christmas, the industry received its final blow of the year, this time from across the Atlantic. On December 24, an appellate court in Norway affirmed a lower court's decision that Jon Johansen, a teenaged programmer, did not violate the Norwegian Criminal Code[121] by co-writing the DeCSS program, which circumvented the copy protection technology used by the U.S. motion picture industry.[122] This decision was subsequently reinforced by a California Court of Appeals decision that reversed an earlier order enjoining the publication of the DeCSS program on the Internet.[123]

---

lar ruling in Orlando). For a discussion of John Doe lawsuits, see *Verizon I*, 240 F. Supp. 2d at 39–41.

120. Declan McCullagh, *FAQ: How the Decision Will Affect File Swappers*, CNET NEWS.COM (Dec. 19, 2003), *at* http://news.com.com/2100-1028-5130033.html.

121. The Code punishes "any person who by breaking a protective device or in a similar manner, unlawfully obtains access to data or programs which are stored or transferred by electronic or other technical means." Declan McCullagh, *Teen on Trial in DVD Hacking Case*, CNET NEWS.COM (Dec. 9, 2002), *at* http://news.com.com/2100-1025-976687.html; *see also* Jon Bing, *A Legal Perspective on the Norwegian DeCSS Case*, *at* http://www.eff.org/IP/DRM/DeCSS_prosecutions/Johansen_DeCSS_case/20000125_bing_johansen_case_summary.html (Jan. 25, 2000) (stating that "[i]t is . . . unsettled whether the Criminal Code sect 145(2) can apply to a situation where someone breaks a code or other security measure in order to access material on a device of which that person is the owner").

122. Evan Hansen, *Will DVD Acquittal Mean Tougher Copyright Laws?*, CNET NEWS.COM (Dec. 24, 2003), *at* http://news.com.com/2100-1025-5133152.html. For a discussion of the DeCSS Program, see *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 311 (S.D.N.Y. 2000).

123. DVD Copy Control Ass'n v. Bunner, 10 Cal. Rptr. 3d 185 (Ct. App. 2004); *see also* Evan Hansen, *Court: DeCSS Ban Violated Free Speech*, CNET NEWS.COM (Feb. 27, 2004), *at* http://news.com.com/2100-1026-5166887.html. As the court explained: "The preliminary injunction . . . burdens more speech than necessary to protect DVD CCA's property interest and was an unlawful prior restraint upon Bunner's right to free speech." *Id.* In *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001), eight major movie studios successfully enjoined the hacker magazine *2600: The Hacker Quarterly* from posting the DeCSS program and related hyperlinks, citing the anticircumvention provision of the DMCA. *Id.* As a result of the reversal in *DVD Copy Control Ass'n v. Bunner*, *Corley* remains the only precedent in which copyright holders successfully enjoined third parties from disseminating information concerning how to circumvent encryption technology used to protect copyrighted works.

On the whole, 2003 was a turbulent year for the recording industry. It started with considerable fanfare when the industry successfully pursued KaZaA in U.S. courts while launching high-profile, unprecedented lawsuits against college students who offered copyrighted music for others to download. It ended, however, with four unfavorable court decisions that had the industry singing the blues.

II. THE FUTURE P2P FILE-SHARING WARS

As the P2P file-sharing problem spreads to other media industries, the copyright wars are likely to escalate. This Part first discusses the challenges confronting the recording industry at the domestic and international levels. Domestically, the industry will have to deal with a proliferation of new P2P technologies, the increasingly transnational nature of the copyright wars, the decreasing support the industry receives from its customers and political allies, and the counterattacks and setbacks the industry suffers due to its aggressive tactics. Internationally, the industry's increasing push for stronger intellectual property protection abroad will heighten the tension between the United States and less developed countries, invite criticisms of U.S. copyright policy in foreign countries, and result in the diversion of public attention from domestic copyright issues. This Part concludes by exploring the spread of the P2P file-sharing wars to the publishing, television, and motion picture industries. It suggests that other industries may adopt less confrontational strategies because of their differing structures and the lessons they may have learned from the recording industry.

A. Domestic Challenges

1. Proliferation of New P2P Technologies

Unlike MP3.com and Napster, all of the new P2P technologies, such as Grokster, iMesh, KaZaA, and Morpheus, do not have centralized servers.[124] Instead, they allow users to transfer files from one location to another while accommodating users' needs to employ different hardware and software. As a result, enforcement is likely to become difficult. There will be no deep pocket to sue, no chokepoint to target, and no human face to blame.

---

124. *See generally* Gene Kan, *Gnutella*, *in* PEER-TO-PEER, *supra* note 2, for a discussion of Gnutella-based engines.

Even worse, the industry's strong-arm tactics will threaten to drive unauthorized copying underground, forcing file-sharers to turn to proxy servers, offshore Web sites, and encrypted P2P systems.[125] Indeed, a wide variety of anonymizing technologies already exists. For instance, Freenet software allows file-swappers to encrypt download requests by passing them from one computer to another without disclosing how and where the user obtains the files.[126] Programs like Red Rover, Publius, and Free Haven provide attractive alternatives for file-sharers to avoid censorship and recrimination by remaining anonymous.[127] If the industry drove all the file-sharers to these anonymous networks, its enforcement efforts would be futile and would ultimately backfire on the constituents whom it was charged to protect—record companies, musicians, artists, songwriters, engineers, producers, retailers, and truck drivers.

2. Transnational Nature of the Future Copyright Wars

The future P2P file-sharing wars are likely to be transnational. Most of the existing networks already involve parties residing in foreign countries. The KaZaA software, for example, was originally developed by young Estonian programmers working for a Dutch company and now belongs to an Australian company incorporated in Vanuatu.[128] Although courts have allowed record companies and movie studios to proceed in the United States with their lawsuit against KaZaA's parent company, Sharman Networks, the multinational involvement has made the litigation process difficult.[129] Instead of relying on domestic enforcement, copyright holders now have to rethink their enforcement and litigation strategies from a global perspective.[130]

---

125. *See* Saul Hansell, *Crackdown on Copyright Abuse May Send Music Traders into Software Underground*, N.Y. TIMES, Sept. 15, 2003, at C1.

126. See generally Adam Langley, *Freenet*, *in* PEER-TO-PEER, *supra* note 2, at 123 for a discussion of Freenet software.

127. *See generally* Alan Brown, *Red Rover*, *in* PEER-TO-PEER, *supra* note 2, at 133 (describing Red Rover); Roger Dingledine et al., *Free Haven*, *in* PEER-TO-PEER, *supra* note 2, at 159 (describing Free Haven); Marc Waldman et al., *Publius*, *in* PEER-TO-PEER, *supra* note 2, at 145 (describing Publius).

128. Ariana Eunjung Cha, *File Swapper Eluding Pursuers*, WASH. POST, Dec. 21, 2002, at A1.

129. *See, e.g.*, Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 243 F. Supp. 2d 1073 (C.D. Cal. 2003), *aff'd*, 380 F.3d 1154 (9th Cir. 2004), *cert. granted*, 125 S. Ct. 686 (2004) (rejecting the defendant's claim that the company did not have substantial contacts with California and thus should not be subject to the court's jurisdiction).

130. In Australia, for example, the U.S. recording industry applied for an Anton Pilar order to raid Sharman Networks' Australian offices and the homes of its key corporate executives. *See* James Pearce, *Piracy Fighters Raid Offices of Sharman, Others*, CNET NEWS.COM (Feb. 6, 2004), *at* http://news.com.com/2100-1027-5154506.html. An Anton Pilar order allows

Moreover, if copyright holders had to litigate in foreign forums, they would have to deal with challenging problems commonly associated with transnational litigation, such as jurisdictional and conflict-of-law issues,[131] unexpected outcomes due to the application of foreign laws, and differing interpretations of comparable laws in foreign courts. Judges, in particular those trained in civil law countries, may interpret laws differently, especially in areas where fundamental philosophical differences exist.[132] They may also come to different conclusions even though they apply identical laws,[133] as they sometimes have to apply law by reference to national market conditions, social contexts, and local practices.[134] As a result, foreign litigation sometimes leads to outcomes unexpected by copyright holders. For example, in March 2002, the Dutch appellate court ruled that KaZaA was not liable for copyright infringement committed by users of its software.[135] In addition, subsequent rulings by the Norwegian courts found Jon Johansen innocent of charges concerning circumvention of the copy protection technology used by the U.S. movie industry.[136]

Even more problematic for copyright holders, some foreign countries, like China, do not have a sophisticated legal system or a strong respect for the rule of law. Although judicial reforms have taken place in

---

copyright holders to enter premises to search for and seize infringing material without alerting the target through court proceedings.

131. Cha, *supra* note 128. *But see* Michael Geist, *In Web Disputes, U.S. Law Rules the World*, TORONTO STAR, Feb. 24, 2003, at D1 (noting that United States laws were applied in most Internet disputes).

132. *See generally* George C. Christie, *Some Key Jurisprudential Issues of the Twenty-first Century*, 8 TUL. J. INT'L & COMP. L. 217, 218–23 (2000) (discussing the different approaches to judicial interpretation by common law and civil law judges).

133. *See* COMM'N ON INTELLECTUAL PROP. RIGHTS, INTEGRATING INTELLECTUAL PROPERTY RIGHTS AND DEVELOPMENT POLICY: REPORT OF THE COMMISSION ON INTELLECTUAL PROPERTY RIGHTS 114 (2003) (noting that "it is not uncommon for different courts in Europe, even when applying identical law, to come to different conclusions on whether a patent is or is not obvious"); Graeme B. Dinwoodie, *International Intellectual Property Litigation: A Vehicle for Resurgent Comparativist Thought?*, 49 AM. J. COMP. L. 429, 436 (2001) [hereinafter Dinwoodie, *International Intellectual Property Litigation*] (noting that "even identical rules of law may lead to different results when applied in different social contexts by different tribunals"); *see also* Christie, *supra* note 132, at 217 (noting that "the decisions in concrete legal cases will be influenced as much by what we believe to be the proper method for deciding legal disputes as by the views that we entertain on the merits of the controversies before us").

134. Dinwoodie, *International Intellectual Property Litigation*, *supra* note 133, at 436–37. For an insightful analysis of how American and foreign judges conceive fairness differently, see George P. Fletcher, *Comparative Law as a Subversive Discipline*, 46 AM. J. COMP. L. 683, 699–700 (1998).

135. John Borland, *Ruling Bolsters File-Traders' Prospects*, CNET NEWS.COM (Mar. 28, 2002), *at* http://news.com.com/2100-1023-870396.html.

136. Hansen, *Will DVD Acquittal Mean Tougher Copyright Laws?*, *supra* note 122.

China, especially in the wake of its accession to the World Trade Organization ("WTO"), these reforms have not kept pace with the country's economic growth. As a result, the judiciary remains underfunded, enjoys limited judicial independence, and continues to be vulnerable to outside influence, corruption, and local protectionism.[137] The shortage of lawyers, in particular intellectual property lawyers, also makes it difficult for foreign firms to secure protection and competent legal advice.[138] Moreover, in a country where local conditions, customs, and personal connections (*guanxi*) are important to successful commercial dealings, copyright holders who intend to continue doing business in the country have been reluctant to sue local companies.[139]

3. Increased Political Alienation of the Recording Industry

As the recording industry continues to pursue individual file-sharers, it is likely to face harsh criticism from commentators, civil liberties groups, and the public. Since the MP3.com and Napster battles, the public has become increasingly aware of copyright issues, and a growing portion has viewed copyright law with disdain. The situation worsened after the United States Supreme Court upheld the Sonny Bono Copyright Term Extension Act in *Eldred v. Ashcroft* in January 2003.[140] Reacting

---

137. Peter K. Yu, *From Pirates to Partners: Protecting Intellectual Property in China in the Twenty-First Century*, 50 AM. U. L. REV. 131, 217–18 (2000) [hereinafter Yu, *From Pirates to Partners*] (discussing the weaknesses of Chinese courts). For discussions of the development of the rule of law and Chinese courts in China, see, for example, RONALD C. BROWN, UNDERSTANDING CHINESE COURT AND LEGAL PROCESS: LAW WITH CHINESE CHARACTERISTICS (1997); CHINA'S LEGAL REFORMS (Stanley Lubman ed., 1996); DOMESTIC LAW REFORMS IN POST-MAO CHINA (Pitman B. Potter ed., 1994); RONALD C. KEITH, CHINA'S STRUGGLE FOR THE RULE OF LAW (1994); THE LIMITS OF THE RULE OF LAW IN CHINA (Karen G. Turner et al. eds., 2000); MURRAY SCOT TANNER, THE POLITICS OF LAWMAKING IN POST-MAO CHINA: INSTITUTIONS, PROCESSES AND DEMOCRATIC PROSPECTS (1999); Stanley Lubman, *Studying Contemporary Chinese Law: Limits, Possibilities and Strategy*, 39 AM. J. COMP. L. 293 (1991).

138. Peter K. Yu, *The Harmonization Game: What Basketball Can Teach About Intellectual Property and International Trade*, 26 FORDHAM INT'L L.J. 218, 240 (2003) [hereinafter Yu, *The Harmonization Game*].

139. *See* Yu, *From Pirates to Partners*, *supra* note 137, at 210 (discussing the importance of *guanxi* to conducting business in China); Gregory S. Kolton, Comment, *Copyright Law and the People's Courts in the People's Republic of China: A Review and Critique of China's Intellectual Property Courts*, 17 U. PA. J. INT'L ECON. L. 415, 451 (1996) (contending that "it may be difficult for foreign firms which plan to continue doing business in China to sue because doing so may wreck their '*guanxi*'—personal contacts or favors—that are integral for doing business in the PRC").

140. 537 U.S. 186 (2003). For discussion of the *Eldred* decision, see Marci Hamilton, *Now That the Supreme Court Has Declined to Limit Copyright Duration, Those Who Want to Shorten the Term Need to Look at Other Options, Including Constitutional Amendment*, FINDLAW'S WRIT: LEGAL COMMENTARY (Feb. 13, 2003), *at* http://writ.news.findlaw.com/

bitterly to the decision, supporters of the public domain movement have accused the Court of selling out to private corporations. A radical few even advocated civil disobedience in the form of hacking and free distribution of copyrighted music and movies.[141] Even Mickey Mouse, the protagonist of the copyright term extension drama, could not help but give an interview blasting his owner:

> For almost 70 years, I've only been allowed to do what the Disney people say I can do. Sometimes someone comes up with a new idea, and I think to myself, "Great! Here's a chance to stretch myself!" But of course they won't let me leave the reservation. If I do, they send out their lawyers to bring me home. . . . Do you have *any idea* what it's like to have to greet kids at Disneyland every single day, always smiling, never slipping off for a cigarette?[142]

To make matters worse, the RIAA's aggressive litigation tactics have antagonized many CD-buying music lovers who did not even use P2P networks, as they watched the industry file lawsuits against their children, friends, and relatives. As the defendant Jesse Jordan's father, who owns thousands of records and CDs, declared:

> [The RIAA] ha[s] sued one of their most avid customers. The RIAA says that they wanted to teach these kids and their families a lesson. The lesson we learned is that we will never, ever buy another product from any of those companies again. That's the lesson we're going to tell everyone.[143]

---

hamilton/20030213.html; Peter K. Yu, *Four Remaining Questions on Copyright Law After* Eldred, GIGALAW.COM (Feb. 2003), *at* http://www.gigalaw.com/articles/2003/yu-2003-02.html; Peter K. Yu, *Mickey Mouse, Peter Pan, and the Tall Tale of Copyright Harmonization*, IP L. & BUS., Apr. 2003, at 24.

141. *See* Siva Vaidhyanathan, *After the Copyright Smackdown: What Next?*, SALON.COM (Jan. 17, 2003), *at* http://archive.salon.com/tech/feature/2003/01/17/copyright/print.html (recounting the radical reaction of some members of the public). As Glynn Lunney explained, "civil disobedience may offer the only effective means for ordinary consumers to express their political discontent with copyright's excessive scope," in light of the decided political advantage of copyright holders as a concentrated, well-organized constituency and the courts' general abdication of their duty to police copyright's boundaries. Lunney, *supra* note 11, at 869–70; *see also* Lord Macaulay, Speech Delivered in the House of Commons (Feb. 5, 1841), *reprinted in* THOMAS BABINGTON MACAULAY, PROSE AND POETRY 743 (G.M. Young ed., 1952). *But see* Vaidhyanathan, *supra* (discouraging acts of civil disobedience by noting that "[w]hile disobedience might be more fun, the power of civil discourse remains" in the post-*Eldred* era).

142. Jesse Walker, *Mickey Mouse Clubbed*, REASON, Jan. 17, 2003, *available at* http://reason.com/links/links011703.shtml.

143. Healey & Huffstutter, *supra* note 30.

Even worse, in its desperate attempt to protect itself against digital piracy, the recording industry has sued, or threatened to sue, virtually everybody[144]—telecommunications service providers,[145] consumer electronics developers,[146] new media entrepreneurs,[147] venture capitalists,[148] corporate employers,[149] universities,[150] lawyers,[151] college researchers,[152] hackers and cryptographers,[153] and

144. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 7–8 (noting that the P2P file-sharing wars represent "the copyright industries' increasingly brazen—some say desperate—attempts to shut down P2P file-swapping networks, disable P2P technology, and shift the costs of control onto third parties, including telecommunications companies, consumer electronics manufacturers, corporate employers, universities, new media entrepreneurs, and the taxpayers"); Yu, *Escalating Copyright Wars*, *supra* note 8, at 944 (noting that the RIAA's "war on piracy has now become a war against the whole world").

145. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 12 (discussing the recording industry's conflict with telecommunications companies); *see also* Recording Indus. Ass'n of Am. v. Verizon Internet Servs., 351 F.3d 1229 (D.C. Cir. 2003).

146. *See, e.g.*, Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072 (9th Cir. 1999) (lawsuit to enjoin the manufacture and distribution of the Rio portable MP3 player); Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 243 F. Supp. 2d 1073 (C.D. Cal. 2003), *aff'd*, 380 F.3d 1154 (9th Cir. 2004), *cert. granted*, 125 S. Ct. 686 (2004).

147. *See, e.g.*, A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001) (lawsuit against Napster); TeeVee Toons v. MP3.com, Inc., 134 F. Supp. 2d 546 (S.D.N.Y. 2001) (lawsuit against MP3.com); UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349 (S.D.N.Y. 2000) (lawsuit against MP3.com); Paramount Pictures Corp. v. Replay TV, Inc., No. 2:01-CV9358, 2002 WL 1301268 (C.D. Cal. Apr. 26, 2002) (lawsuit concerning the illegality of Replay TV).

148. *See* Joseph Menn, *Universal, EMI Sue Napster Investor*, L.A. TIMES, Apr. 23, 2003, pt. 3, at 1 (reporting the suit Universal Music and EMI filed against Hummer Winblad Venture Partners and two of the San Francisco firm's general partners).

149. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 16 (discussing the recording industry's conflict with corporate employers).

150. *See* Benny Evangelista, *Metallica Suit Rocks Napster*, S.F. CHRON., Apr. 14, 2000, at B3 (discussing the lawsuit Metallica filed against the University of Southern California, Indiana University, Yale University, and other educational institutions).

151. *See* Sonia K. Katyal, *A Legal Malpractice Claim by MP3.com*, FINDLAW'S WRIT: LEGAL COMMENTARY (Feb. 7, 2002), *at* http://writ.news.findlaw.com/commentary/20020207_katyal.html (discussing the malpractice lawsuit MP3.com filed against its former attorney).

152. *See* Yu, *The Copyright Divide*, *supra* note 6, at 395 (discussing the RIAA's threat of lawsuit against Professor Edward Felten of Princeton University).

153. As Joseph Liu noted:

> The [recording industry's lawsuits], along with the criticisms of the encryption research exemption, have led to a good deal of concern within the encryption research community. In particular, a number of encryption researchers have refused to publish their research results in response to concerns about DMCA liability. For example, the Dutch cryptographer Niels Ferguson declined to publish the results of research he had conducted regarding High Bandwidth Digital Content Protection, a system used by Intel to encrypt video. Ferguson, an independent cryptography consultant, indicated that he had found weaknesses in that system, but decided not to publish the results and removed all references to this research from his website for fear of DMCA liability. Other researchers have similarly indicated that they have withheld or declined to publish their research results out of the same concern.

students.[154] In doing so, the industry has lost major political allies on Capitol Hill and has become increasingly isolated, especially after it sued individual citizens en masse.

When the Senate convened a hearing to examine the industry's enforcement tactics and associated privacy problems in September 2003,[155] RIAA President Cary Sherman was forced to defend his organization's actions and tactics instead of telling Congress what his industry needed. The trade group also had to deal with an adverse bill that Senator Sam Brownback introduced shortly before the hearing,[156] which sought to repeal the DMCA's controversial subpoena provision. As the senator explained:

> I support strong protections of intellectual property, and I will stand on my record in support of property rights against any challenge. . . . But I cannot in good conscience support any tool such as the DMCA information subpoena that can be used by pornographers, and potentially even more distasteful actors, to collect the identifying information of Americans, especially our children.[157]

Senator Brownback's concern was understandable, as gay-porn producer Titan Media attempted to use copyright law to rid the Internet of the unauthorized distribution of its copyrighted works over P2P networks.[158] Because anybody who has written a letter or composed an e-mail can claim copyright holder status, snoops and stalkers, by claiming

---

> Professional associations and conferences have also modified their practices in response to the fear of DMCA liability. Some encryption researchers have suggested boycotting encryption research conferences held in the United States. Some conference organizers have decided to hold their conferences outside the U.S., in order to minimize concerns about liability. In addition, in November 2001, the Institute of Electrical and Electronics Engineers (IEEE), a major publisher of computer science journals, began requiring that all authors indemnify the IEEE for DMCA liability resulting from the publication of their research in the journal. The IEEE later withdrew this requirement in response to widespread objections.

Joseph P. Liu, *The DMCA and the Regulation of Scientific Research*, 18 BERKELEY TECH. L.J. 501, 514–15 (2003); *see also* Peter K. Yu, *Chilling Effect*, IP L. & BUS., Mar. 2004, at 27.

154. *See* discussion *supra* Part I (discussing the RIAA's mass litigation campaign).

155. *See* Harmon, *Verizon Challenges Music Industry's Subpoenas*, *supra* note 67 (reporting that Senator Coleman had scheduled a congressional hearing regarding privacy issues as well as the broader effect of technology on copyright enforcement).

156. Consumers, Schools, and Libraries Digital Rights Management Awareness Act of 2003, S. 1621, 108th Cong. (2003).

157. Declan McCullagh, *In DMCA War, a Fight over Privacy*, CNET NEWS.COM (Sept. 18, 2003), *at* http://news.com.com/2100-1027-5078609.html.

158. *Id.*; *see also* John Schwartz, *File-Swapping Is New Route for Internet Pornography*, N.Y. TIMES, July 28, 2001, at C1 (reporting the popularity of trading pornography over P2P networks).

copyright infringement, can freely exploit the DMCA subpoena process to obtain their targets' personal information.

The recording industry has also lost support from the computer and consumer electronics industries. Although these former allies backed the enactment of the DMCA and collaborated with the industry on the Secure Digital Music Initiative,[159] they are now concerned that increased copyright protection would stifle innovation and the development of new technology and have since expressed regret and disappointment over the development and interpretation of the DMCA.[160]

Their concerns are understandable. From an economic standpoint, copyright law creates a limited monopoly that allows copyright holders to charge consumers economic rents without making any additional investment.[161] Forced to pay supracompetitive prices for copyrighted products, consumers have fewer resources to invest in new technology and other products. As a result, technology developers do not have adequate incentives to innovate, and copyright holders have very few incentives to improve products and services unless those improvements will allow them to make even more profits (and collect more economic rents).

Even worse, copyright holders lobby Congress hard to protect their royalty streams and lock up political gains. By controlling access to critical content, incumbent media industries have sought to slow the development of competing new technologies. For example, as Mark Nadel pointed out, "the film industry tried to stymie television by denying broadcasters access to films, . . . broadcasters constrained cable television systems' access to broadcast programming, and cable programmers tried to deny satellite companies access to cable networks."[162] Today, the incumbent industries are using similar strategies to "hinder[] the roll-out of broadband, digital video recorders, and Internet distribution technologies."[163]

In recent years, the media industries have lobbied Congress persistently for more protective standards in the hope that these efforts will

---

159. *See* Menell, *supra* note 74, at 163–78 (discussing the deepening conflict between the content and technology sectors). The Secure Digital Music Initiative is an association of electronic companies that were involved in designing copy protection technologies that protect copyrighted works against unauthorized access.

160. *See DRM Foes Turn Aside Hollywood Peace Gestures*, WASH. INTERNET DAILY, Aug. 5, 2002.

161. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 304 (Aspen 5th ed. 1998) (discussing how copyright holders appropriate much of the consumer surplus).

162. Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: The Overlooked Impact of Marketing*, 19 BERKELEY TECH. L.J. 785, 808–09 (2004) (footnotes omitted); *see also* Timothy Wu, *Copyright's Communications Policy*, 103 MICH. L. REV. 278 (2004) (discussing the copyright's role in regulating competition among rival disseminators).

163. Nadel, *supra* note 162, at 809.

give them more control over copyrighted works.[164] Recent examples include the Serial Copy Management System mandated by the Audio Home Recording Act of 1992,[165] the Secure Digital Music Initiative,[166] the abandoned Hollings bill,[167] and the motion picture industry's request for the placement of broadcast flags in digital broadcasts.[168] Although heightened standards are necessary to protect copyright interests, at some point these standards will prevent U.S. technology companies from competing with their counterparts in Asia and Europe, which are not subject to similar constraints unless they intend to import the concerned technology into the U.S. market. It is small wonder that the district court in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* reminded the industry that "using the software in countries where it is legal" can be considered a substantial noninfringing use of P2P software.[169]

As the interests of the computer, consumer electronics, and recording industries diverge, there may be a point where the computer and consumer electronics industries find it too costly to support the recording industry. If these industries were to flex their political muscles, the recording industry might have awakened a sleeping giant. After all, these industries are many times more powerful economically than the recording and motion picture industries combined. As Susan Crawford noted:

> Despite the recent slump . . . activity in the consumer electronics market directly or indirectly impacts ten percent of U.S. economic activity (GDP)—producing nearly $950 billion in commerce yearly. Revenues for consumer electronics products are expected to total a record $99.5 billion in 2003, marking a 3.5 percent increase over 2002. The information technology industry (computer hardware, software, and services) was the engine of economic growth in the

---

164. *See* DIGITAL DILEMMA, *supra* note 11, at 93 (stating that "control of a standard, particularly a proprietary standard, puts some degree of control over publishing into the hands of the standard owners"); *see also* Jane C. Ginsburg, *Copyright and Control Over New Technologies of Dissemination*, 101 COLUM. L. REV. 1613, 1644–45 (2001) [hereinafter Ginsburg, *Copyright and Control*] (contending that copyright holders are likely to persuade consumers to switch to a new access- and copy-protected format).

165. 17 U.S.C. § 1002(c) (2000). The Serial Copy Management System provides copyright and generation status information and prevents the recording devices from producing a chain of perfect digital copies through "serial copying."

166. *See* discussion *supra* Part I.

167. Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (2002) (enabling the Federal Communications Commission to mandate a security standard that is protective of digital content for all digital media devices).

168. *See generally* Susan P. Crawford, *The Biology of the Broadcast Flag*, 25 HASTINGS COMM. & ENT. L.J. 603 (2003) (discussing the broadcast flag controversy).

169. 259 F. Supp. 2d 1029, 1035 (C.D. Cal. 2003).

> 1990s. While IT-producing industries represent only 7 percent of all U.S. businesses, they accounted for roughly 28 percent of overall real economic growth between 1996–2000. IT's share of GDP rose from 3.2 percent in 1990 to 4.9 percent at the peak in 2000, and still accounts for 4.2 percent. These numbers overshadow the revenues of the movie and video industry over the same period. While it is important to ensure the proper functioning of the copyright system, it is fair to ask whether shifting encryption and design costs to the information technology industry, and constraining this industry's ability to innovate, makes sense.[170]

4. Counterattacks and Setbacks

As the recording industry continues its fight against individual file-sharers, it is likely to suffer counterattacks from civil liberties groups and ISPs. In September 2003, the American Civil Liberties Union responded to the industry's mass litigation campaign by filing a lawsuit against the RIAA, claiming that the trade group's subpoena suffered from "procedural deficiencies" and violated constitutional due process and free expression guarantees.[171] A month later, Charter Communications filed a lawsuit challenging the RIAA's subpoenas before the United States District Court for the Eastern District of Missouri.[172] In mid-November, SBC Communications also challenged the legality of RIAA's subpoena, contending that the process was unconstitutional because the RIAA had yet to file a lawsuit.[173]

While each of these lawsuits may be insignificant compared to the many complaints the RIAA has filed against individual file-sharers, the combined lawsuits may create a multiplier effect that makes the industry's litigation campaign very expensive and time-consuming. As the plaintiffs in these actions—telecommunications providers and civil liber-

---

170. Crawford, *supra* note 168, at 635.

171. Declan McCullagh, *ACLU Takes Aim at Record Labels*, CNET NEWS.COM (Sept. 29, 2003), *at* http://news.com.com/2100-1027-5083800.html. As the ACLU noted: "The consequences from this lack of procedural protections are far from trivial. . . . In addition to being deprived of one's constitutional rights, there is nothing to stop a vindictive business or individual from claiming copyright to acquire the identity of critics." *Id.*

172. Stefanie Olsen, *Charter Files Suit Against RIAA*, CNET NEWS.COM (Oct. 6, 2003), *at* http://news.com.com/2100-1027-5087304.html. In January 2005, the Eighth Circuit reversed the district court's decision to issue the subpoena and remanded the case to the lower court. *In re* Charter Communications, Inc., 393 F.3d 771 (8th Cir. 2005).

173. John Borland, *SBC Challenges RIAA over Subpoenas*, CNET NEWS.COM (Nov. 20, 2003), *at* http://news.com.com/2100-1027-5110296.html.

ties groups—are repeat players,[174] they may carefully select cases to maximize the number of obstacles to the industry's enforcements efforts.

In addition, some courts may be sympathetic toward individual file-sharers who downloaded music for noncommercial purposes. Others have become concerned about the privacy intrusions associated with the industry's enforcement tactics. In February 2004, for example, the United States District Court for the Eastern District of Pennsylvania required that the RIAA file separate lawsuits against each defendant rather than bundling all the defendants in a single action.[175] Other courts have since followed its lead.[176] As the industry continues its pursuit of individual file-sharers, such unfavorable rulings are likely to increase.

B. International Challenges

1. Heightened Tension Between the United States and Less Developed Countries

In the near future, developers of new P2P networks may consider relocating abroad, as many foreign countries offer lower copyright protection than the United States.[177] To eliminate these pirate havens, the recording industry has worked very closely with foreign copyright holders and trade associations. In March 2004, the International Federation of the Phonographic Industry unleashed its first wave of international lawsuits, against file-sharers in Canada, Denmark, Germany, and Italy.[178]

Meanwhile, the recording industry heavily lobbies the U.S. government to strengthen intellectual property protection abroad through international treaties and free trade agreements. In November 2003, for example, lawmakers established an anti-international piracy caucus in Congress to induce other countries to enforce copyright laws and to stop

---

174. For an excellent discussion of the differences between "one-shot" and repeat players in the litigation world, see Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 LAW & SOC'Y REV. 95, 97–114 (1974).

175. Dean, *One File Swapper, One Lawsuit.*, *supra* note 119; *see also* Katie Dean, *New Flurry of RIAA Lawsuits*, WIRED NEWS (Feb. 17, 2004), *at* http://www.wired.com/news/digiwood/0,1412,62318,00.html.

176. *See, e.g.*, *Florida Court Sends RIAA Away*, *supra* note 119, *at* http://www.wired.com/news/digiwood/0,1412,62915,00.html (reporting that the United States District Court for the Middle District of Florida has made a similar ruling).

177. *See* discussion *supra* Part II.A.2.

178. Mark Landler, *Fight Against Illegal File Sharing Is Moving Overseas*, N.Y. TIMES, March 31, 2004, at W1.

sales of counterfeit CDs, DVDs, books, software, and video games.[179] To strengthen collaboration, lawmakers and industry leaders also formed the Entertainment Industry Coalition for Free Trade.[180]

Unfortunately, the United States did not fare well in international trade forums in 2003. In October, the WTO ministerial meeting ended prematurely in Cancun after member countries failed to reach a consensus over issues concerning investment, competition policy, government procurement, and trade facilitation.[181] A month later, the United States was forced to table many difficult and sensitive issues in its negotiation over the Free Trade Area of the Americas,[182] which sought to extend the North American Free Trade Agreement ("NAFTA") to all of the countries in North and South America except Cuba.

As a result of these international setbacks, U.S. trade officials have shifted their focus to bilateral, plurilateral, and regional arrangements.[183] As then-United States Trade Representative Robert Zoellick declared, it is important to distinguish the can-do countries from the won't-dos.[184] Using a divide-and-conquer strategy, U.S. trade officials now seek to undermine the efforts by Brazil, India, and other less developed countries in the Group of 21 to establish a united negotiating front.

By October 2004, the United States had concluded bilateral or regional free trade agreements with Jordan, Chile, Singapore, Guatemala,

---

179. *Internet Piracy Not to Be Overlooked by Antipiracy Caucus*, WASH. INTERNET DAILY, Oct. 22, 2003. The Caucus also seeks to influence trade agreements, educate other members of Congress, and demonstrate new technologies that reduce piracy. *See* Adam Jones, *New Caucus to Fight International Intellectual Piracy*, COX NEWS SERVICE, Oct. 21, 2003.

180. Bill Holland, *The Hill Did Little with Music*, BILLBOARD, Dec. 20, 2003.

181. Elizabeth Becker, *Poorer Countries Pull Out of Talks over World*, N.Y. TIMES, Sept. 15, 2003, at A1; Editorial, *The Cancun Failure*, N.Y. TIMES, Sept. 16, 2003, at A24.

182. *See* Paul Blustein, *Free Trade Area of Americas May Be Limited*, WASH. POST, Nov. 19, 2003, at E1; Simon Romero, *Trade Talks in Miami End Early*, N.Y. TIMES, Nov. 21, 2003, at C1; *see also* Editorial, *Free Trade, à la Carte*, N.Y. TIMES, Nov. 22, 2003, at A14; Peter K. Yu, *Globaphobia: Why the Arguments Against the FTAA Were Flawed*, CNN.COM (Nov. 25, 2003), *at* http://www.cnn.com/2003/LAW/11/25/findlaw.analysis.yu.ftaa (discussing criticisms of the Free Trade Area of the Americas).

183. *See generally* Peter K. Yu, *Currents and Crosscurrents in the International Intellectual Property Regime*, 38 LOY. L.A. L. REV. 323 (2004) (discussing the increasing focus of the United States trade officials on bilateral, plurilateral, and regional free trade agreements). For excellent discussions of the recent bilateral free trade agreements, see generally DAVID VIVAS-EUGUI, REGIONAL AND BILATERAL AGREEMENTS AND A TRIPS-PLUS WORLD: THE FREE TRADE AREA OF THE AMERICAS (FTAA) (2003), *available at* http://www.geneva.quno.info/pdf/FTAA(A4).pdf; Peter Drahos, *BITs and BIPs: Bilateralism in Intellectual Property*, 4 J. WORLD INTELL. PROP. 791 (2001); Ruth L. Okediji, *Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection*, 1 U. OTTAWA L. & TECH. J. 127 (2004).

184. *See* Robert Zoellick, *US Commitment to Transparent Global Trade Negotiations Must Be Reciprocated by Others*, FIN. TIMES, Oct. 3, 2003, at 20; *see also* Becker, *supra* note 181; Simon Romero, *Frustrated, U.S. Will Seek Bilateral Trade Pacts*, N.Y. TIMES, Nov. 19, 2003, at C2.

El Salvador, Honduras, Nicaragua, Costa Rica, Australia, Morocco, the Dominican Republic, and Bahrain[185] (in addition to NAFTA with Canada and Mexico[186]). Trade talks are underway with Colombia, Ecuador, Panama, Peru, Thailand, and the Southern African Customs Union (including Botswana, Lesotho, Namibia, South Africa, and Swaziland).[187]

On their face, bilateral and regional arrangements are not bad, as long as they are not coercive.[188] At times, they may be more effective than multilateral agreements in addressing local concerns and circumstances.[189] Such agreements may facilitate the gradual inclusion of trading partners into the global economy. Interjurisdictional competition in trade rules may also encourage countries to try out new ideas, which in turn improves the quality and diversity of available legal and regulatory solutions.[190]

Nevertheless, intellectual property agreements can create tension among foreign countries, especially if the recording industry and U.S. policymakers do not recognize the changing geopolitical landscape. When less developed countries signed on to the WTO agreements a decade ago, they were divided and unclear as to what they wanted. Some of the issues involved in the agreements—such as intellectual property rights—were relatively new and arguably of low priority to these countries.[191] These days, however, less developed countries have become more vigilant, organized, and sophisticated. Led by such heavyweights

---

185. Office of the USTR, Press Release, United States and Bahrain Sign Free Trade Agreement, *available at* http://www.ustr.gov/Document_Library/Press_Releases/2004/September/United_States_Bahrain_Sign_Free_Trade_Agreement.html (Sept. 14, 2004) [hereinafter USTR Press Release].

186. North American Free Trade Agreement, Dec. 17, 1992, U.S.-Can.-Mex., 32 I.L.M. 289 (1993).

187. USTR Press Release, *supra* note 185.

188. *See* Peter K. Yu, *Toward a Nonzero-Sum Approach to Resolving Global Intellectual Property Disputes: What We Can Learn from Mediators, Business Strategists, and International Relations Theorists*, 70 U. CIN. L. REV. 569, 573–82 (2002) [hereinafter Yu, *Toward a Nonzero-sum Approach*] (discussing and criticizing the coercive approach); *see also* Yu, *The Copyright Divide*, *supra* note 6, at 437–44 (discussing the limitation of coercion).

189. *See* John F. Duffy, *Harmony and Diversity in Global Patent Law*, 17 BERKELEY TECH. L.J. 685, 703–06 (2002) (discussing how legal variation permits each jurisdiction to match its laws to the unique tastes and preferences of its population).

190. *See id.* at 707–09 (discussing interjurisdictional competition and legal experimentation).

191. For background on the history of the TRIPs Agreement, see generally DANIEL GERVAIS, THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS (2d ed. 2003); MICHAEL P. RYAN, KNOWLEDGE DIPLOMACY: GLOBAL COMPETITION AND THE POLITICS OF INTELLECTUAL PROPERTY (1998); Frederick M. Abbott, *The WTO TRIPS Agreement and Global Economic Development*, *in* PUBLIC POLICY AND GLOBAL TECHNOLOGICAL INTEGRATION 39 (Frederick M. Abbott & David J. Gerber eds., 1997); A. Jane Bradley, *Intellectual Property Rights, Investment and Trade in Services in the Uruguay Round: Laying the Foundation*, 23 STAN. J. INT'L L. 57 (1987).

as Brazil and India and supported by China,[192] which remains a sleeping giant, these countries now have a better sense of what they want.[193] They understand the importance of intellectual property bargains and are willing to take a more aggressive collective stance.

Contrary to what the trade officials and other commentators have claimed,[194] this changing stance of less developed countries may benefit the United States and result in a more harmonized international trading system. After all, it is more efficient and effective to negotiate with players who know what they want than with those who do not.[195] As the managements of some corporations have acknowledged, providing strategic planning to help labor unions organize is beneficial because it enables the unions to understand the preferences of their members. Such assistance, in turn, will speed up the negotiation process and perhaps lead to an outcome that is more satisfactory to both sides.[196]

Cognitive psychologists have shown that decision makers tend to devalue proposals offered by their adversaries even when they would accept identical proposals from allies or neutral parties.[197] Because many less developed countries view the United States as their adversary, they are likely to devalue U.S. proposals. The frustration that less developed countries have built up at recent WTO and FTAA meetings in Seattle, Cancun, and Miami can only have made matters worse.

Moreover, as less developed countries believe they received a bad bargain in the Uruguay Round and were forced to adopt trade legislation that ignored their needs and interests, their policymakers would be par-

---

192. China became the 143rd member of the WTO on December 11, 2001. For a discussions of China's entry into the WTO, see generally GORDON G. CHANG, THE COMING COLLAPSE OF CHINA (2001); NICHOLAS R. LARDY, INTEGRATING CHINA INTO THE GLOBAL ECONOMY (2002); SUPACHAI PANITCHPAKDI & MARK CLIFFORD, CHINA AND THE WTO: CHANGING CHINA, CHANGING WORLD TRADE (2002); Symposium, *China and the WTO: Progress, Perils, and Prospects*, 17 COLUM. J. ASIAN L. 1 (2003).

193. For a discussion of the position taken by less developed countries and the Group of 21, see, for example, Editorial, *Lessons from the Cancun Debacle*, BUS. TIMES SING., Sept. 16, 2003; David Greising & Andrew Martin, *U.S. to Pursue Regional, Individual Trade Talks*, CHI. TRIB., Sept. 17, 2003, at C1; *Hopes Dashed for Poor at WTO*, TORONTO STAR, Sept. 18, 2003, at P2.

194. *See, e.g.*, sources cited *supra* note 181.

195. *See* Yu, *Toward a Nonzero-Sum Approach*, *supra* note 188, at 603 (discussing the strategic partnership between management and a labor union).

196. *See* STEPHEN M. DENT, PARTNERING INTELLIGENCE: CREATING VALUE FOR YOUR BUSINESS BY BUILDING STRONG ALLIANCES 131–32 (1999).

197. "Reactive devaluation" refers to the tendency to "devalue a proposal received from someone perceived as an adversary, even if the identical offer would have been acceptable when suggested by a neutral or an ally." ROBERT H. MNOOKIN ET AL., BEYOND WINNING: NEGOTIATING TO CREATE VALUE IN DEALS AND DISPUTES 165 (2000); *see id.* at 165–66 (discussing reactive devaluation); *see also* Yu, *Toward a Nonzero-Sum Approach*, *supra* note 188, at 594 & n.155 (discussing cognitive barriers in negotiation).

ticularly cautious about proposals introduced by the United States (and the European Union). Thus, the U.S. government is likely to face staunch resistance, or even opposition, from less developed countries when it seeks stronger intellectual property protection in bilateral treaty negotiations, even if such protection would be in the best interest of the less developed countries.[198]

2. Severe Criticisms of U.S. Copyright Policy in Foreign Countries

Through international trade negotiations, the United States has successfully pushed many countries to accept intellectual property provisions that are controversial on U.S. soil. For example, it strong-armed Chile and Singapore to adopt the controversial provisions of the DMCA in their free trade agreements.[199] Likewise, even though many Americans fiercely opposed the recent copyright term extension,[200] the U.S. government included the extension in free trade agreements with Singapore and Australia.[201] Small countries like the Dominican Republic have also been willing to accept the U.S. demands for stronger copyright protection in exchange for other more tangible trade benefits and concessions.[202]

Ultimately, the increasing pressure for stronger intellectual property protection abroad will hurt the United States. First, the bad publicity and local resistance created by the agreements will reduce the appeal of U.S. intellectual property laws.[203] So far, intellectual property laws have ap-

---

198. *See* Hansen, *Will DVD Acquittal Mean Tougher Copyright Laws?*, *supra* note 122 (quoting Professor Peter Jaszi as noting that "there is an increasing sense within that community that the U.S. has a very strong protectionist agenda and that may not be in every case the best approach for countries at different stages of development").

199. *Capitol Hill*, WASH. INTERNET DAILY, June 19, 2003.

200. *See supra* text accompanying note 141.

201. Emma Caine et al., *Copyright "Harmony" Profits US Firms*, AUSTL. FIN. REV., Nov. 19, 2003, at 71; Eddie Lee, *Taking the Mickey Out of Innovation*, STRAITS TIMES (Sing.), Jan. 20, 2004.

202. Michael Geist, *Why We Must Stand on Guard over Copyright*, TORONTO STAR, Oct. 20, 2003, at D3.

203. As Michael Geist wrote in an excellent opinion piece that called for caution in Canada:

> The reticence to adopt the WIPO [copyright] standard is understandable. Many believe the U.S. experience illustrates the dangers of adopting copyright protections that may ultimately stifle innovation. The Digital Millennium Copyright Act, the U.S. statute that implements the WIPO standard, has led to scholars declining to publish their research out of fear of lawsuits, hundreds of individual Internet users having their privacy rights ignored, and copyright law being strangely applied to garage door openers and computer printers.

pealed to leaders of less developed countries because they hold out promise of new jobs, foreign investments, tax revenues, technology transfer, and the development of local artists, inventors, and indigenous industries.[204] Policymakers and commentators at times have attributed the prosperous U.S. entertainment, computer, pharmaceutical, and biotechnology industries to strong intellectual property laws. However, this perception might change if the laws the United States forced on them through the free trade agreements turn out to stifle innovation and threaten the survival of local establishments.

Eventually, the agreements will reduce the United States' hard-earned soft power by making American ideas and concepts less appealing. As Robert Keohane and Joseph Nye explained, soft power allows a country to transform the preferences of other countries by appealing to ideas and culture rather than by threatening military action.[205] This intangible power is particularly important in today's globalized world as countries increasingly need to cooperate to resolve difficult cross-border problems, such as illicit drug trafficking, refugees and illegal immigration, environmental degradation, illegal arms sales, nuclear proliferation, terrorism, and corruption.

Second, the controversial intellectual property provisions in the free trade agreements are likely to result in local discontent—at least in the short run before the long-term benefits materialize. Such discontent in turn will threaten the established relationships of local governments and businesses. To reduce the impact of these provisions, government leaders may relax enforcement or become cautious about the efforts they undertake to combat piracy. For example, in the 1980s, the South Korean government took very seriously the political threat made by college students who feared that the government's antipiracy efforts would increase textbook prices.[206] In the early 1990s, Chinese leaders also acted quite cautiously when they signed intellectual property agreements with the

---

Id.

204. *See* Yu, *From Pirates to Partners*, *supra* note 137, at 192–93; Yu, *The Harmonization Game*, *supra* note 138, at 246–47.

205. ROBERT O. KEOHANE & JOSEPH S. NYE, POWER AND INTERDEPENDENCE 220 (3d ed. 2001) (defining soft power as "the ability to get desired outcomes because others want what you want" and "the ability to achieve desired outcomes through attraction rather than coercion"); *see generally* JOSEPH S. NYE, JR., SOFT POWER: THE MEANS TO SUCCESS IN WORLD POLITICS (2004) [hereinafter NYE, SOFT POWER]; *see also id.* at 55 ("Perceived hypocrisy is particularly corrosive of power that is based on proclaimed values. Those who scorn or despise us for hypocrisy are less likely to want to help us achieve our policy objectives."); JOSEPH S. NYE, JR., THE PARADOX OF AMERICAN POWER: WHY THE WORLD'S ONLY SUPERPOWER CAN'T GO IT ALONE xvi (2002) (noting the increasing importance of soft power).

206. *See* RYAN, *supra* note 191, at 75.

United States so that the Chinese people would not perceive their leaders as bowing to U.S. pressure.[207] In Thailand, Prime Minister Prem Tinsulanond's administration was even ousted in a no-confidence vote in 1987 after his administration attempted to strengthen the country's copyright law.[208]

Third, the push for stronger intellectual property protection abroad may lead to unexpected outcomes that adversely affect U.S. economic interests. For example, despite the inclusion of stronger copyright protection in the U.S.-Vietnam free trade agreement, software companies like Microsoft did not receive the intended benefits. Instead of proprietary software, Vietnam now embraces open source software as its solution to software piracy. In 2003, the country announced its plan to require all state-owned companies and government ministries to use open-source software within a year.[209] Other less developed countries that are concerned about their intellectual property-related obligations under the free trade agreements may follow its lead.

Finally, despite the agreements, copyright holders may not receive the protection that the U.S. government negotiated on their behalf. There are no universally accepted intellectual property principles, and countries signing the bilateral or regional agreements may not agree with the United States on the extent of intellectual property protection. Unless U.S. negotiators are able to show foreign government leaders why it is in their interest to adopt higher intellectual property standards, it is unlikely that they will be willing to accept the agreements—or, more importantly, to commit scarce resources to support the implementation and enforcement of those agreements.

Indeed, negotiators from less developed countries have become increasingly skeptical of the U.S. position because of successful challenges to U.S. laws before the Dispute Settlement Body of the WTO. For example, in 2000, the European Union successfully challenged section

---

207. For the cautious approach taken by Chinese leaders in negotiating the intellectual property agreements with the United States in the late 1980s and early 1990s, see Yu, *From Pirates to Partners*, *supra* note 137, at 140–51. As one commentator noted, the careful approach taken by Chinese leaders "goes some way towards explaining much of the brinkmanship which has characterised the negotiations between China and the United States on this [intellectual property] issue." Robert Burrell, *A Case Study in Cultural Imperialism: The Imposition of Copyright on China by the West*, *in* INTELLECTUAL PROPERTY AND ETHICS 207 (Lionel Bently & Spyros M. Maniatis eds., 1998); *see also* SUSAN K. SELL, POWER AND IDEAS: NORTH-SOUTH POLITICS OF INTELLECTUAL PROPERTY AND ANTITRUST 215 (1998) (noting that if the leaders of these countries "succumb to U.S. pressure, they are subject to criticisms of selling out sovereignty to foreign interests").

208. *See* SELL, *supra* note 207, at 192.

209. Lee, *Taking the Mickey Out of Innovation*, *supra* note 201.

110(5) of the U.S. Copyright Act,[210] which exempted U.S. restaurants, bars, and retail stores that use "homestyle" audio and video equipment to play broadcast music from the obligation to pay royalties.[211] In a slightly earlier WTO panel decision, the European Union effectively curtailed the ability of the United States Trade Representative to impose sanctions under section 301 of the Trade Act of 1974, including those related to intellectual property protection.[212] If the media industries are to lobby for an international regime that targets digital piracy, they must take into account the United States' international treaty obligations and domestic controversies when they design their proposals.[213]

3. Diversion of Public Attention from Domestic Copyright Issues

As the P2P file-sharing problem grows, some U.S. policymakers, industry executives, and media pundits may seek to divert public attention from the privacy intrusions associated with industry's enforcement tactics to piracy of copyrighted materials in foreign countries. For ex-

---

210. 17 U.S.C. § 110(5)(B) (2000).

211. United States—Section 110(5) of the U.S. Copyright Act: Report of the Panel, WTO Doc. WT/DS/160/R (June 15, 2000), *available at* http://www.wto.org/english/tratop_e/dispu_e/1234da.pdf. The European Union contended that the Fairness in Music Licensing Act and the homestyle exemption of the United States Copyright Act violated United States' obligations under the TRIPs Agreement. The United States defended that the exemption was valid under article 13 of the Agreement. Ultimately, the dispute settlement panel held for the European Union, maintaining that the FIMLA violated articles 11*bis*(1)(iii) and 11(1)(ii) of the Berne Convention as incorporated into the TRIPs Agreement. For excellent discussions of the dispute, see generally Graeme B. Dinwoodie, *The Development and Incorporation of International Norms in the Formation of Copyright Law*, 62 OHIO ST. L.J. 733 (2001); Laurence R. Helfer, *World Music on a U.S. Stage: A Berne/TRIPS and Economic Analysis of the Fairness in Music Licensing Act*, 80 B.U. L. REV. 93 (2000). Notwithstanding the loss before the WTO dispute settlement panel, the United States did not amend the Copyright Act. For a discussion of the implications of the United States' action, see Richard Owens, *TRIPs and the Fairness in Music Arbitration: The Repercussions*, 25 EUR. INTELL. PROP. REV. 49 (2003).

212. United States—Sections 301–310 of the Trade Act of 1974, WTO Doc. WT/DS152/R (Dec. 22, 1999), *available at* http://docsonline.wto.org/DDFDocuments/t/WT/DS/152R.doc.

213. Many commentators already recognized these needs by including discussion of the United States' international treaty obligations in their proposals. *See* FISHER, *supra* note 11, at 248–49 (contending that his proposal would require treaty modifications because it would not be limited to noncommercial uses); Eckersley, *supra* note 11, at 153–58 (discussing the interaction between his virtual market proposal and the three-step test as enunciated in Article 13 of the TRIPs Agreement); Litman, *Sharing and Stealing*, *supra* note 11, at 45–46 (contending that her proposal would comply with the United States' treaty obligations under the Berne Convention and the WIPO Copyright Treaty); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 60 n.199 (maintaining that "there is a colorable argument that [his proposal] would comport with [United States obligations under intellectual property treaties], and in particular would fall within the scope of permissible limitations to copyright holder rights under Article 13 of TRIPS").

ample, they may discuss how the unauthorized copying problem in the United States is miniscule as compared to piracy problems abroad.[214] They may also emphasize the textbook[215] or software piracy problems in Africa, Asia, and South America.[216] As Rick McCallum, the producer of the latest *Star Wars* trilogy, put it, the drive to protect copyrighted works needs to be "as concentrated an international event as the war on terrorism."[217]

To some extent, this strategy resembles the tactics of the Reagan and first Bush administrations in the face of a growing domestic budget deficit in the 1980s and early 1990s.[218] Instead of discussing domestic problems and looking for a solution within the country, policymakers and the public media focused on countries with which the United States had large trade imbalances, such as China, Japan, Korea, and Taiwan.[219] Although the administrations threatened to impose sanctions on these countries, they ultimately abandoned their threats. If policymakers and industry executives were to divert public attention to international piracy, they would make the same mistake. Although it is true that piracy abroad is a serious problem, piracy at home is just as serious. Until the media industries are able to reduce domestic piracy, their sales are unlikely to increase, as U.S. businesses tend to focus on the domestic, rather than foreign, markets.

International copyright piracy has been a long-standing problem. From nineteenth-century book piracy in Belgium, Holland, and the United States to unauthorized private copying over P2P networks today, the efforts of copyright holders to eradicate piracy have been futile.[220] Although the copyright industries successfully lobbied their governments for favorable terms in international agreements[221] and bilateral trea-

214. *See, e.g.*, Mark Landler, *For Music Industry, U.S. Is Only the Tip of a Piracy Iceberg*, N.Y. TIMES, Sept. 26, 2003, at A1 (noting that "the recording industry's problems with the illegal online distribution of music in the United States pale beside the rampant piracy that goes on overseas").

215. *See, e.g.*, Metin Munir, *A Tale of Thefts and Pirates*, FIN. TIMES, July 2, 2003, at 2.

216. *See, e.g.*, INTERNATIONAL PLANNING & RESEARCH CORPORATION, EIGHTH ANNUAL BSA GLOBAL SOFTWARE PIRACY STUDY: TRENDS IN SOFTWARE PIRACY 1994–2002 (2003), *available at* http://global.bsa.org/globalstudy/2003_GSPS.pdf.

217. Lynden Barber, *Net Raiders Zap Film-makers*, AUSTRALIAN, Nov. 15, 2002, at 5, *quoted in* Matt Jackson, *Harmony or Discord? The Pressure Toward Conformity in International Copyright*, 43 IDEA 630 (2003).

218. *See* Yu, *From Pirates to Partners*, *supra* note 137, at 178 (discussing the United States-China trade deficit).

219. *See generally* RYAN, *supra* note 191, at 67–89.

220. *See generally* Yu, *The Copyright Divide*, *supra* note 6 (comparing piracy in nineteenth-century America, twentieth-century China, and twenty-first-century cyberspace).

221. *See, e.g.*, Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C,

ties[222] and for unilateral sanctions,[223] international piracy remains a major problem. In light of this history, it would be a waste for copyright holders to devote vast resources to combating international piracy, instead of directing them toward stemming piracy at home.

C. P2P File-Sharing Wars in Other Industries

Although the P2P file-sharing wars began in the recording industry, they already have spread to the publishing, television, and motion picture industries.[224] Pirated books are now widely traded online. Shortly after the release of *Harry Potter and the Order of the Phoenix*, the fifth installment of the best-selling Harry Potter series, unlicensed reproductions of the book were distributed on the Internet.[225] Although many people find it uncomfortable to read books online, electronic books are attractive to experienced file-sharers because book files are small and fast to download, and they allow users to conduct text searches, highlight, annotate, and perform other research tasks. Thus, some commentators have claimed that the publishing industry may ultimately be the most vulnerable to digital piracy,[226] and that such piracy would harm writers the

---

LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 31, 33 I.L.M. 1197 (1994); Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, *last revised at Paris* July 24, 1971, 828 U.N.T.S. 221; International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, *adopted* Oct. 26, 1961, 496 U.N.T.S. 43; WIPO Copyright Treaty, *adopted* Dec. 20, 1996, WIPO Doc. CRNR/DC/94 (Dec. 23, 1996); WIPO Performances and Phonograms Treaty, *adopted* Dec. 20, 1996, WIPO Doc. CRNR/DC/95 (Dec. 23, 1996).

222. *See, e.g.*, Memorandum of Understanding Between China (PRC) and the United States on the Protection of Intellectual Property, Jan. 17, 1992, P.R.C.-U.S., 34 I.L.M. 677 (1995); Agreement Regarding Intellectual Property Rights, Feb. 26, 1995, P.R.C.-U.S., 34 I.L.M. 881 (1995).

223. *See* Kim Newby, *The Effectiveness of Special 301 in Creating Long Term Copyright Protection for U.S. Companies Overseas*, 21 SYRACUSE J. INT'L L. & COM. 29, 39 (1995) (discussing the United States' use of Special 301 actions on Taiwan, China, and Thailand); Yu, *From Pirates to Partners*, *supra* note 137, at 140–48 (discussing the United States' success in using § 301 sanctions to pressure China to reform its intellectual property regime).

224. For a discussion of why digital piracy began within the recording industry, see DIGITAL DILEMMA, *supra* note 11, at 77–78.

225. *See* Amy Harmon, *Harry Potter and the Internet Pirates*, N.Y. TIMES, July 14, 2003, at C1; Michael Pollitt, *Like Music, Books Have Now Fallen Prey to Internet Pirates*, INDEPENDENT (London), July 30, 2003, at 11.

226. As Peter Menell pointed out:

> [U]ltimately the publishing industry may be the most vulnerable content industry to unauthorized reproduction and distribution because the content (text) will always be directly perceptible (and hence subject to copying, even if through scanning or retyping). Furthermore, libraries have become interested in distributing eBooks through their websites. . . . Whereas music and audiovisual content can be encrypted in such a way that the user cannot see the content without authorization, the essence

most, as writers "rely far more completely on copyright royalties than musicians . . . or film producers."[227]

Like books, movies and television programs will not be immune to widespread digital piracy. Lower-quality copies of feature films have already appeared in P2P networks, sometimes soon after their box-office release or even before release.[228] Likewise, episodes of prime-time television series like *The Sopranos*, *The West Wing*, and *Sex and the City* have appeared online before they were exported abroad or put on DVDs and videos.[229]

So far, the low bandwidths and the long downloading time, along with protected formats used in videos and DVDs, have prevented widespread file sharing of movies and television programs. However, with increased broadband deployment, higher bandwidths, and more advanced compression technologies, downloading of audiovisual files is likely to be as commonplace as music downloading. Indeed, the movie industry, mindful of the threat, is already experimenting with legitimate online movie downloads via Movielink and CinemaNow.[230] Only heavy restrictions and unsatisfactory user experience have kept these services from taking off.

Ultimately, these industries, especially the motion picture industry, may respond to P2P file sharing differently, for two reasons. First, they may have learned from mistakes made by the recording industry. Second, the unique structure of these industries protects them against widespread file sharing. As Peter Menell explained, the motion picture industry's "tight controls over theatrical release, pay-per-view, and premium channel distribution . . . will continue to work into the digital future."[231] While the video market's prior experience with encryption offers some protection against unauthorized distribution, the "competitive pricing of DVDs and the potential for directors' cuts (with previously unreleased scenes), behind-the-scenes footage, game and merchandising tie-ins, and other added features will keep many consumers within the legitimate

---

> of books (the text) will always be available to the extent that the books are sold in hard copy form. Therefore, would-be copyists will be in a position to scan such content into digital form within hours of a book's release.

Menell, *supra* note 74, at 128–29.

227. Eckersley, *supra* note 11, at 112.

228. *See, e.g.*, Jon Healey & Richard Verrier, *Latest Plot Twist for 'Star Wars': Attack of the Cloners*, L.A. TIMES, May 10, 2002, pt. 1, at 1 (reporting that the new "Star Wars" episode appeared on the Internet a week before the movie's release); Laura M. Holson, *Studios Moving to Block Piracy of Films Online*, N.Y. TIMES, Sept. 25, 2003, at A1 (reporting suggestion by industry analysts that "there could be as many as 500,000 copies of movies swapped daily").

229. Brian Buchanan, *Move with the TV Times*, GUARDIAN (London), May 1, 2003, at 19.

230. Jon Healey, *Piracy Fears Limit Film Downloads*, L.A. TIMES, Mar. 7, 2004, at C1.

231. Menell, *supra* note 74, at 124.

market for content. . . . [In fact], digital technology may significantly improve the film industry's delivery and revenue models."[232]

Since early 2004, record sales have rebounded, and the recording industry seems to have mounted a comeback. For the first time in years, the continuous sharp decline of record sales has slowed down. A recent study by the Pew Internet and American Life Project showed that music downloads fell drastically, by more than fifty percent in spring 2003,[233] while a study commissioned by the recording industry showed that more than sixty percent of the respondents, as compared to thirty-five percent prior to the lawsuits, now understand the illegality of online file trading.[234] Although these recent developments could be attributed in part to many other factors, such as an improving economy, a better selection of artists and albums,[235] and an increasing tendency to deny downloading activities,[236] recent developments are encouraging—although the industry's mass-litigation strategy remains disturbing.

---

232. *Id.* at 124–25; *see also* Crawford, *supra* note 168, at 607 (listing domestic and international box office, airline performances, pay-per-view, rental, home sale, satellite, premium and basic cable, over-the-air broadcast among the distribution windows for the motion picture industry).

233. *See* PEW INTERNET & AMERICAN LIFE PROJECT, SHARP DECLINE IN MUSIC FILE SWAPPERS: DATA MEMO FROM PIP AND COMSCORE MEDIA METRIX (2004) (reporting a survey that showed that the percentage of music file downloaders had fallen to 14 percent (about 18 million users) from 29 percent (about 35 million)), *available at* http://www.pewinternet.org/PPF/r/109/report_display.asp. *But see* Marguerite Reardon, *Oops! They're Swapping Again*, CNET NEWS.COM, *at* http://news.com.com/2100-1027-5142382.html (Jan. 16, 2004) (reporting survey by The NPD Group, an independent market research firm, that "peer-to-peer usage was up 14 percent in November 2003 from September").

234. John Borland, *RIAA Embarks on New Round of Piracy Suits*, CNET NEWS.COM (Jan. 21, 2004), *at* http://news.com.com/2100-1027_3-5144558.html.

235. Chris Nelson, *CD Sales Rise, but Industry Is Too Wary to Party*, N.Y. TIMES, Feb. 23, 2004, at C1.

236. As Siva Vaidhyanathan queried:

> Clearly the music industry has lost sales in the years since it killed off Napster. Is this lull a historical anomaly? Is it the result of alienating consumers? Is it the result of fewer titles for sale? Are compact discs overpriced? Do consumers have fewer marginal entertainment dollars to send to the recording companies, and do they have more entertainment options? If downloading is pervasive and detrimental to music sales, why aren't these companies doing worse than they are? Why does anyone who has a networked computer buy music at all?

VAIDHYANATHAN, THE ANARCHIST IN THE LIBRARY, *supra* note 15, at 42. The recent study by the Committee for Economic Development concurred and attributed the recording industry's recent revenue decline to the following additional factors:

> The consolidation of ownership of radio outlets and the increasing importance of mass market retailers (as opposed to specialty stores), who have doubled their share of the market, has led to a smaller number of artists receiving air play and having their materials available to a mass audience. The industry significantly reduced the number of new releases from 38,900 in 1999 to between 27,000 and 31,000 in 2001—a 20–25 percent drop. Cyclical changes in musical tastes also seem to have

III. EIGHT MODEST PROPOSALS

> *For economic incentives to work appropriately, property rights must protect the rights of capital assets. . . . At present . . . severe economic damage [is being done] to the property rights of owners of copyrights in sound recordings and musical compositions[;] . . . under present and emerging conditions, the industry simply has no out. . . . Unless something meaningful is done to respond to the . . . problem, the industry itself is at risk.*
>
> — Alan Greenspan[237]

Since the beginning of the P2P file-sharing controversy, commentators have proposed a whole host of solutions. Part III sorts these solutions into eight categories based on their underlying models and enforcement techniques: (1) mass licensing, (2) compulsory licensing, (3) voluntary collective licensing, (4) voluntary contribution, (5) technological protection, (6) copyright law revision, (7) administrative dispute resolution proceeding, and (8) alternative compensation. After evaluating the benefits and limitations of each category of proposals, this Part contends that policymakers need to embrace a range of solutions, as each individual solution will target only part of the unauthorized copying problem.

A. Mass Licensing

The mass-licensing model was pioneered by Apple Computer when it launched its iTunes Music Store in April 2003. Roxio relaunched Napster six months later as a legitimate music subscription service and

---

had an impact. Even prior to Napster, the industry was experiencing a substantial decline in 1995–2000 sales to 14–19 year-olds, traditionally its highest-spending group. In addition, during the boom years of the 1990s the industry continued to raise prices, with the average CD increasing in cost from approximately $12 to $15. This overall price increase may well have affected sales as the U.S. entered an economic downturn—indeed, the industry has continued to raise prices in the 2000s. Another factor may have been fierce competition for the discretionary consumer entertainment dollar: DVD sales rose by 61 percent in 2002, and video games are competing directly for the attention of the crucial 14–19 year old purchaser.

COMM. FOR ECON. DEV., PROMOTING INNOVATION AND ECONOMIC GROWTH: THE SPECIAL PROBLEM OF DIGITAL INTELLECTUAL PROPERTY 20–21 (2004) (footnotes omitted), *available at* http://www.ced.org/docs/report/report_dcc.pdf.

237. *Hearings on the Home Recording Act Before the Subcomm. on Patents, Copyrights, and Trademarks of the S. Comm. on the Judiciary*, 99th Cong. (1983) (testimony of Alan Greenspan), *quoted in* STAN J. LIEBOWITZ, RE-THINKING THE NETWORK ECONOMY: THE TRUE FORCES THAT DRIVE THE DIGITAL MARKETPLACE 144 (2002).

entered into agreements shortly afterwards with Pennsylvania State University and the University of Rochester to provide students with unlimited access to the music service.[238] Since then, more than twenty colleges and universities have signed on to legal music downloading services such as MusicNet, Napster, and Rhapsody.[239] Buy.com, Musicmatch, Sony, and Microsoft have also announced their intention to open similar stores.[240]

The popularity of iTunes, 125 million of which were sold in its first fifteen months,[241] has made the mass-licensing model seem attractive. However, like copy-protected CDs, iTunes have been hacked and traded without authorization.[242] The mass-licensing model therefore comes with several challenges. First, unless record companies are willing to provide content, these services may eventually meet the same fate as other earlier and failed music subscription services. While it is impressive that the iTunes Music Store offers more than 500,000 songs, this figure pales when compared with the tens of millions of songs traded on other P2P networks.[243]

In fact, record companies may not have the rights to release all the content they want on the Internet.[244] For example, they may have only

---

238. *See supra* Part I.

239. *See* John Borland, *College P2P Use on the Decline?*, CNET NEWS.COM (Aug. 24, 2004), *at* http://news.com.com/2100-1027_3-5322329.html (citing a report of the Joint Committee of the Higher Education and Entertainment Communities); Jefferson Graham, *Students Score Music Perks as Colleges Fight Piracy*, USA TODAY, Aug. 24, 2004, at 1A [hereinafter Graham, *Students Score Music Perks*] (reporting about arrangements universities and colleges made with the record industry for their students).

240. *See* John Borland, *Sony to Launch Net Music Service*, CNET NEWS.COM (Sept. 4, 2003), *at* http://news.com.com/2100-1027-5071475.html; John Borland & John G. Spooner, *MusicMatch, Dell to Launch Music Stores*, CNET NEWS.COM (Sept. 26, 2003), *at* http://news.com.com/2100-1027-5082948.html; Ina Fried & John Borland, *Microsoft Considering Music Store*, CNET NEWS.COM (July 25, 2003), *at* http://news.com.com/2100-1027-5055392.html; Sandeep Junnarkar, *Buy.com Founder Launches Music Service*, CNET NEWS.COM (July 22, 2003), *at* http://news.com.com/2100-1027_3-5051609.html.

241. *Apple to Pay for Referrals to iTunes Site*, L.A. TIMES, Sept. 2, 2004, at C9.

242. *See* Lars Pasveer, *Hacker Takes Bite Out of Apple's iTunes*, CNET NEWS.COM (Aug. 12, 2004), *at* http://news.com.com/2100-1002_3-5308337.html (reporting that Jon Johansen, the Norwegian programmer who circumvented the copy protection technology used to protect DVDs, had revealed the public key that Apple AirPort Express uses to encrypt music sent between iTunes and a wireless base station).

243. *See* EFF WHITE PAPER, *supra* note 11.

244. As Professor Loren explained:

> Anytime a downstream user reproduces copies or distributes copies of a sound recording, or publicly performs that sound recording, or makes a derivative work of that sound recording, authorization from not only the sound recording copyright owner is needed, but authorization must be obtained from the musical work copyright owner as well. Unless one of the limitations on the rights granted to copyright owners applies, multiple clearances will be needed, particularly if the use involves

the copyright in the sound recording but not the one in the underlying composition, even though they may obtain a statutory license to use the composition. They may have the right to release a song on a compact disc or a cassette tape, but not in digital format online.[245] As digital release involves rights in both the sound recording and the underlying composition, confusion over overlapping rights has made it difficult for record companies to clear rights for online releases.[246] As Mark Lemley

---

more than one right. For example, in webcasting a sound recording, not only will the webcaster need to have authorization the public performance (for both the sound recording copyright and the musical work copyright), but the webcaster will also need to have authorization for the reproductions of both copyrighted works that are made in the process of webcasting.

Loren, *supra* note 11, at 697–98.

245. *See* John Borland, *Beatles Catalog Headed for Digital Distribution?*, CNET NEWS.COM (June 8, 2004), *at* http://news.com.com//2100-1027_3-5228914.html (reporting that The Beatles were exploring arrangement to sell its songs online).

246. As Professor Litman explained:

[I]n many if not most cases, it can be difficult and sometimes impossible to discover who the copyright owners of all of those rights are. One of the more disturbing revelations of the Napster litigation was that record companies insisted that they were unable to generate a list of the copyrighted works they claimed to own. (This is particularly disquieting because one would assume they kept records in order to send out those royalty checks they're supposed to be sending out, but apparently not.) Some of the problem, apparently, is record keeping, but not most of it. In addition to difficulties caused by lost or misfiled records, there is significant legal uncertainty about the ownership of rights to control digital exploitation of works that are subject to contracts contemplating conventional exploitation. Record companies, for example, have claimed to own all copyright rights in the recorded music they distribute under the work-made-for-hire doctrine, but most experts agree that those claims are unpersuasive. . . . *New York Times v. Tasini* and *Random House v. Rosetta Books* teach us that contractual assignments of copyright may not necessarily include the electronic rights. We'd have to examine the contracts to be sure. We might need to know whether the case would be coming up on the east coast or the west coast. We'd also need to see the contract between the composer and the music publisher for each song on the recording, and the contracts between each of the music publishers and the record company that recorded each song. Those contracts aren't publicly available. One suspects that a large number of them are no longer in anyone's file cabinets either. Bottom line: we don't know with any certainty who owns the digital rights in any number of recorded musical performances. That may be why record companies have scrambled to settle cases when their ownership of sound recordings is actually put in issue.

Litman, *Sharing and Stealing*, *supra* note 11, at 21–22 (footnote omitted); *see also* N.Y. Times Co. v. Tasini, 533 U.S. 483 (2001) (holding that contractual assignments of copyright may not include electronic rights); Random House, Inc. v. Rosetta Books LLC, 150 F. Supp. 2d 613 (S.D.N.Y. 2001) (denying a request for preliminary injunction enjoining book company from selling e-books of novels whose authors had granted the plaintiff exclusive right to publish, print, and sell their copyrighted works "in book form"), *aff'd*, 283 F.3d 490 (2d Cir. 2002); John Schwartz, *Music-Sharing Service at M.I.T. Is Shut Down*, N.Y. TIMES, Nov. 3, 2003, at C13 (reporting that MIT shut down its groundbreaking Library Access to Music System be-

pointed out, some of the confusion over these rights may be resolved not as a contract issue but as a policy matter:

> [C]onsider the licensing of rights to musical works. ASCAP controls and licenses the right to publicly perform most musical compositions, while a different group (the publishers or record labels) generally controls the right to reproduce such works. These groups will likely fight vigorously over who has the right to license the network transmission of musical compositions (and to receive revenue from that transmission). *The answer cannot be found in the license agreement, nor is it likely to be found in some presumed "intent" of the parties. The question will have to be answered as a policy matter, by courts or by Congress.*[247]

Out-of-print songs, many of which are currently available in P2P networks, present especially difficult copyright clearance problems for record companies.[248] It may be unclear who, if anyone, has the right to reissue the song. For example, the copyright in the composition may have reverted to the music publisher or the recording artist. The record company that originally released the song may have gone bankrupt or have lost or misfiled the original recording contract. The company may simply refuse to grant digital rights because it prefers projects with a wider audience and a larger profit margin. As a result, many of the songs available on the P2P networks may never be released.

Second, the many restrictions that copyright holders place on licensed downloads make the switch to licensed services less desirable. For example, iTunes and Napster offer only "tethered" downloads, which limit use of music files to selected computers for the monthly subscription period.[249] As the recent National Research Council study noted,

---

cause of confusion over licensed rights). *See generally* Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547 (1997).

247. Lemley, *supra* note 246, at 574.

248. As one commentator wrote passionately:

> It wasn't just free instant access to big hits; it was that you could discover things that no radio would play, uncover songs from years old memories. If online music were shut down altogether there would be no more tracking down the song your mother used to sing to you, no more *Fat Albert* theme song, no more lost television live bootlegs from 1975, no more Jim Morison at a moment of unreleasable vulgarity jamming with Jimi Hendrix.

ALDERMAN, *supra* note 81, at 169; *see also* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 3 (contending that "P2P file-sharing is not just downloading music and movies for free . . . [but] a vehicle for finding works that are otherwise not available, discovering new genres, making personalized compilations, and posting creative remixes, sequels, and modifications of popular works").

249. *See* discussion *supra* Part I.

"Buy a book and you own it forever; pay for a service and when the period of service is over, you (typically) retain nothing."[250]

Indeed, by converting the product into a service, the mass-licensing model may take away protections afforded to consumers under existing copyright law, such as the first-sale doctrine, which allows a person who legally acquires a copy of a copyrighted work (say, a book or CD) to trade or resell that copy. Moreover, problems will arise when consumers replace their computers or move music from one home entertainment system to another. Unless music content is released without restrictions, consumers are unlikely to be satisfied and will eventually turn to black markets in the Darknet or use illegal means to relocate their legally purchased music files.[251]

Third, in times of budget crisis for most public universities, it is unclear whether tuition should be allocated for entertainment. There is also a wide disagreement among students and administrators over how schools should select a service and how much they should pay for one. A heavy metal fan may find unappealing a service that focuses primarily on classical and jazz music. Likewise, a fan of rap and hip-hop music may find unattractive a service that focuses largely on alternative rock. Until a single service can satisfy the wide range of musical tastes on campus, there will be serious questions concerning the type of service to which the university has subscribed, the cost of that service, and the fairness of asking non-file-sharing students to subsidize their file-sharing counterparts.

This debate about allocating campus-wide computing resources for music downloads is not new. During the height of the Napster boom, many colleges and universities were concerned about the costs of computing resources that were allocated to music downloads and the resulting network congestion that interferes with teaching and research.[252] As

250. DIGITAL DILEMMA, *supra* note 11, at 101 (comparing the impact on libraries of cancellation of hardcopy and electronic journal subscriptions).

251. Such black markets flourish in countries whose government maintains a stringent information control policy, such as China. *See* Peter K. Yu, *Piracy, Prejudice, and Perspectives: An Attempt to Use Shakespeare to Reconfigure the U.S.-China Intellectual Property Debate*, 19 B.U. INT'L L.J. 1, 28–32 (2001) (discussing China's censorship and information control policy). For discussions of regulation of media and audiovisual products in China, see generally Anna S.F. Lee, *The Censorship and Approval Process for Media Products in China*, *in* PROTECTING INTELLECTUAL PROPERTY RIGHTS IN CHINA 127 (Mary L. Riley ed., 1997); Mary L. Riley, *The Regulation of the Media in China*, *in* CHINESE INTELLECTUAL PROPERTY: LAW AND PRACTICE 355 (Mark A. Cohen et al. eds., 1999).

252. As one commentator explained:

> Napster users eat up large and unbounded amounts of bandwidth. By default, when a Napster client is installed, it configures the host computer to serve MP3s to as many other Napster clients as possible. University users, who tend to have faster

an article in the Indiana University student newspaper put it, "Students attempting to hunker down to coursework should not have to be inconvenienced by a strain on the network."[253]

Eventually, some universities banned Napster, and many of those who did not were sued. In April 2000, the heavy-metal rock band Metallica filed lawsuits against the University of Southern California, Indiana University, Yale University, and other educational institutions for violating copyright and racketeering laws by allowing students to use Napster to share music performed by the band.[254] In response to these lawsuits, more than 200 colleges and universities banned the use of Napster over their networks, while others, like MIT, Princeton, and Stanford, refused to follow along, citing concerns over free speech and academic freedom.[255]

Once music downloading is legitimized, questions about allocation of computing resources will resurface. As a result of this legitimization, the number of music downloaders will increase, as will the frequency of network congestion. The service may also attract those who otherwise would not download music because they believed such action was illegal.[256] Indeed, due to high bandwidth and reliable service, universities are likely to become targets—or supernodes—for file-sharing software.[257] Ultimately, students not only will have to pay for a campus-wide music service about which they have reservations but also will have to bear the cost of increased computing resources and higher bandwidth needed for music downloads unless the music downloading services provide alternate servers outside the campus network.

---

connections than most others, are particularly effective servers. In the process, however, they can generate enough traffic to saturate a network. It was this reason that Harvard University cited when deciding to allow Napster, yet limit its bandwidth use.

Roger Dingledine, *Accountability*, *in* PEER-TO-PEER, *supra* note 2, at 271.

253. ALDERMAN, *supra* note 81, at 112.

254. Evangelista, *Metallica Suit Rocks Napster*, *supra* note 150.

255. As James Bruce, vice president of MIT, wrote to Metallica's attorney, "MIT has had a long history of providing its faculty, staff, and students with uncensored access to the Internet and its vast array of resources. This policy is consistent with MIT's educational mission and our deeply held values of academic freedom." ALDERMAN, *supra* note 81, at 112.

256. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 70.

257. *See* Dingledine, *Accountability*, *supra* note 252, at 271 (noting that University users tend to be targeted in a P2P system because they tend to have faster connections than most others).

B. Compulsory Licensing

To compensate artists and copyright holders for the revenue losses caused by private, noncommercial digital copying, some commentators have proposed compulsory licensing schemes by which the government would impose fees on P2P goods and services. For example, Raymond Ku proposed statutory levies on Internet service subscriptions and the sales of computers and audio and video equipment.[258] Under his plan, the government would collect and distribute the proceeds to artists, as compared to copyright holders, based on aggregate Internet use. Glynn Lunney favored levy-based compulsory licensing over strong encryption-based copyright protection as a fairer and more efficient means to regulate the market in creative works.[259] According to Lunney, unauthorized private copying and sharing may be a positive market force, as it "will . . . enable consumers to recapture a portion of the excess incentives otherwise associated with the production of more popular, non-marginal works . . . [and thus] . . . reduce the corrupting influence that excess incentives would otherwise exert on the authorship process."[260]

Neil Netanel advanced the compulsory licensing model by drawing a comprehensive blueprint for establishing and administering a "noncommercial use levy" ("NUL").[261] As he described the proposal:

> The levy . . . would be imposed on the sale of any consumer product or service whose value is substantially enhanced by P2P file sharing (as determined by a Copyright Office tribunal). Likely candidates include Internet access, P2P software and services, computer hardware, consumer electronic devices (such as CD burners, MP3 players, and digital video recorders) used to copy, store, transmit, or perform downloaded files, and storage media (like blank CDs) used with those devices. In return for imposing the NUL, the law would provide copyright immunity for individuals' noncommercial copying and distribution of any expressive content that the copyright owner

258. *See* Ku, *supra* note 11, at 311–22.

259. Lunney, *supra* note 11, at 916 (stating that "a government-set levy is likely to be more fair and efficient than prices set by the copyright industry and enforced through strong encryption-based protection").

260. *Id.* at 869. As Mark Nadel explained:

> [P]rotection against unauthorized copying provides dramatically disproportionate benefits to the most popular creations: it enables the publishers seeking to create blockbusters to finance enormous promotional campaigns, which drown out valuable, artistic creations that lack competitive marketing efforts. In this way, § 106 of the Copyright Act may actually serve to raise entry barriers for many new creations by diminishing expected profits for these economically marginal works.

Nadel, *supra* note 162, at 790.

261. Netanel, *Noncommercial Use Levy*, *supra* note 11, at 4.

> has previously released to the public. Individuals' noncommercial adaptations and modifications of such content would also be noninfringing as long as the derivative creator clearly identifies the underlying work and indicates that it has been modified.[262]

William Fisher, in his book *Promises to Keep*, recommended rewarding copyright holders for both commercial and noncommercial uses.[263] As he summarized his proposal:

> A creator who wished to collect revenue when his or her song or film was heard or watched would register it with the Copyright Office. With registration would come a unique filename, which would be used to track transmissions of digital copies of the work. The government would raise, through taxes, sufficient money to compensate registrants for making their works available to the public. Using techniques pioneered by American and European performing rights organizations and television rating services, a government agency would estimate the frequency with which each song and film was heard or watched by consumers. Each registrant would then periodically be paid by the agency a share of the tax revenues proportional to the relative popularity of his or her creation. Once this system were in place, we would modify copyright law to eliminate most of the current prohibitions on unauthorized reproduction, distribution, adaptation, and performance of audio and video recordings. Music and films would thus be readily available, legally, for free.[264]

Whether you call these proposals taxes, levies, or tariffs, they all are derived from the compulsory licensing model, which has been used repeatedly in the past to settle copyright disputes over new media and technologies. In 1909, after the Supreme Court declined to extend copyright protection to player piano rolls,[265] Congress amended the copyright statute to grant compulsory licenses that enable record companies, artists, and others to produce and distribute "mechanical reproductions" of nondramatic musical works.[266] Congress soon expanded this provision to include "covers" (musical works composed by somebody other than the performer and previously released by another recording artist).[267] As the Internet emerged, Congress amended the statute even further to in-

---

262. *Id.* (footnote omitted).

263. FISHER, *supra* note 11, at 199–258.

264. *Id.* at 202.

265. White-Smith Publ'g Co. v. Apollo Co., 209 U.S. 1 (1908) (rejecting the extension of copyright to player piano rolls).

266. 17 U.S.C. § 115 (2000).

267. *Id.* § 115(c)(3)(A).

clude the distribution of sound recordings via digital transmission and the transmission of sound recordings by Webcasters.[268]

Moreover, Congress has used compulsory licensing to nurture the development of new, emerging technologies. In the early decades of television, all programming was publicly broadcast over the airwaves, and consumers were able to see the copyrighted telecasts without paying any service fees.[269] When cable television emerged as a fee-based service in the late 1960s, however, copyright holders in the telecasts sued the operators to collect a share of the service fees. The Supreme Court ultimately decided the issue in favor of the cable industry, holding in two cases that cable transmissions did not implicate the copyright laws because cable operators did not engage in the public performance of transmitted works.[270] In response to these cases, which were handed down during the time when the 1909 Copyright Act was being revised, copyright holders lobbied Congress for changes to bring cable transmissions under the new statute. The resulting 1976 Copyright Act therefore included a compromise that requires cable operators to pay copyright holders statutory royalties in exchange for the retransmission of broadcast signals under limited conditions.[271] As satellite television became popular, Congress further extended compulsory licenses to cover satellite retransmission of television programming into private homes.[272]

In the 1980s, the emergence of digital audio recording technology, which allows consumers to reproduce unlimited, near-perfect copies of prerecorded music, posed a substantial threat to the recording industry. In 1992, Congress responded by enacting the Audio Home Recording Act ("AHRA").[273] Using the compulsory licensing model, the AHRA prohibits legal actions for copyright infringement based on the manufacture, importation, or distribution of digital audio equipment or media for private, noncommercial recording.[274] The provision also immunizes consumers for the use of digital audio recording equipment or media for noncommercial, analog, or digital home audio taping. In return, AHRA requires manufacturers and importers of digital hardware and blank digital media to pay compensatory royalties to copyright holders injured by

268. *Id.* § 114(d)(2).

269. *See* JULIE E. COHEN ET AL., COPYRIGHT IN A GLOBAL INFORMATION ECONOMY 423 (2002).

270. Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968); Teleprompter Corp. v. Columbia Broad. Sys., Inc., 415 U.S. 394 (1974).

271. 17 U.S.C. § 111.

272. *Id.* § 119.

273. Pub. L. No. 102–563, 106 Stat. 4237 (codified in scattered sections of 17 U.S.C.).

274. 17 U.S.C. § 1008.

the new technology.[275] The act also mandates that all digital audio recording machines be equipped with a Serial Copy Management System,[276] which provides copyright and generation status information while preventing recording devices from producing a chain of very high-quality digital copies that could supplant factory copies. Although the AHRA was created to alleviate the digital threat, courts have found the statute inapplicable to P2P networks and audiovisual works.[277]

Compulsory licenses not only have been used in the United States but also are popular in Canada, Germany, and many other European countries, which have imposed taxes on blank recording media and equipment to compensate artists and songwriters injured by the unauthorized reproduction of their works.[278] In addition, many of these countries have imposed levies on portable MP3 players and P2P goods and services. For example, Germany imposed a tax of €7.50 on PC-integrated CD burners,[279] and the Copyright Board of Canada sought to impose a

---

275. *Id.* § 1003.

276. *Id.* § 1002(c).

277. *In re* Aimster Copyright Litig., 252 F. Supp. 2d 634 (N.D. Ill. 2002) (issuing preliminary injunction against P2P service and holding that the AHRA does not immunize the service from making music files available for others to copy on the network).

278. *See* P. BERNT HUGENHOLTZ ET AL., THE FUTURE OF LEVIES IN A DIGITAL ENVIRONMENT 10–31 (2003) (discussing the private copying levy provisions of the European Union), *available at* http://www.ivir.nl/publications/other/DRM&levies-report.pdf; Ysolde Gendreau, *Canada*, *in* 1 INTERNATIONAL COPYRIGHT LAW AND PRACTICE § 8[2][f][ii] (Paul E. Geller & Melville B. Nimmer eds., 2002) (discussing the private copying levy provisions of Canada). As the EC Information Society Directive stated:

> Member States may provide for exceptions or limitations to the reproduction right provided for in Article 2 . . . in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders *receive fair compensation* which takes account of the application or non-application of technological measures referred to in Article 6 to the work or subject-matter concerned.

Directive 2001/29/EC of the European Parliament and of the Council on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society art. 5(2), 2001 O.J. (L 167) 10 [hereinafter EC Information Society Directive] (emphasis added); *see also* Peter K. Yu, *An Overview of the EU Information Society Directive*, GIGALAW.COM (Nov. 2001), *at* http://www.gigalaw.com/articles/2001-all/yu-2001-11-all.html (discussing the EC Information Society Directive).

279. *See* FISHER, *supra* note 11, at 312 n.27; *see also* HUGENHOLTZ ET AL., *supra* note 278, at 25–27 (discussing the extension of private levies to digital media and equipment); Lunney, *supra* note 11, at 853–55 (discussing the use of levies in Europe); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 32 & n.109 (discussing the Germany's levy provisions). *See generally* Reinhold Kreile, *Collection and Distribution of the Statutory Remuneration for Private Copying with Respect to Recorders and Blank Cassettes in Germany*, 23 INT'L REV. INDUS. PROP. & COPYRIGHT L. 449 (1992).

levy of $15 on portable MP3 players with up to ten gigabytes of nonremovable memory and $25 on devices with more memory.[280]

In sum, the compulsory licensing model has a wide variety of benefits. It rewards copyright holders while permitting the public to have unrestricted access to copyrighted works for private, noncommercial use. It also harmonizes U.S. copyright law with that of many foreign countries. It may even "fund a broader spectrum of creators than under our current copyright system," as Neil Netanel suggested.[281]

Notwithstanding these benefits, the model presents a number of challenges and concerns. First, it is not easy to determine how to divide the royalty pool. Commentators have suggested solving this problem by employing new technologies such as digital watermarking, digital sampling, metering software, and monitoring tools. However, these technologies—at least at their current state—are far from reliable and accurate. Fans are able to abuse the system by repeatedly downloading songs of their favorite artists or by inflating download counts using "ballot-stuffing" programs or mistaken identities.[282]

In fact, some artists may feel cheated, as the system may not accurately reflect the market value of many downloaded songs.[283] Moreover, subsequent uses are sometimes more valuable than initial downloads, many of which amount to only music sampling. A mechanical system that counts all downloads equally therefore may skew the results, leading to improper and disproportionate compensation to some artists and songwriters. Although a more sophisticated digital monitoring system may alleviate this weakness, the new system may raise consumer con-

---

280. *See* COPYRIGHT BD. OF CAN., *supra* note 110, at 56. This tariff was recently struck down by a federal Canadian court, which held that the Copyright Board did not have authority to impose such a tariff. *See supra* Part I.

281. Netanel, *Noncommercial Use Levy*, *supra* note 11, at 6.

282. *But see* Eckersley, *supra* note 11, at 104–06 (discussing precautionary measures against "identity rental"); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 55–57 (discussing why efforts to game the system are unlikely to undermine the integrity of his proposal).

283. Professor Netanel designed his proposal so that it could distinguish subsequent uses from initial downloads. As he explained:

> Subsequent uses, which might entail viewing or listening to a work or copying it onto an MP3 player or other portable device, should be given greater weight than initial downloads. Metering such uses would more accurately reflect each work's value to users than merely counting the number of downloads or even the number of hard copy purchases. Certain types of works tend to be subject to more repeated viewing, reading, or listening than others, and such ongoing use is an important component of a work's value. In addition, it appears that users often download works from P2P networks merely to determine whether they like the work, not because the user knows that she values the work in advance of downloading.

See Netanel, *Noncommercial Use Levy*, *supra* note 11, at 53.

cerns if it does not have sufficient safeguards to protect individual end-users against privacy intrusions.[284]

Second, compulsory levies may not generate sufficient funds to compensate artists, songwriters, and copyright holders, especially when playback devices become cheaper and memory capacity larger.[285] Consider, for example, a one-terabyte (thousand-gigabyte) MP3 player, which enables most consumers to store their entire CD collection. How much levy can the law impose on the manufacturer of this device? If the levy is higher than what consumers can afford—say, $10,000—very few people will buy the device, and the development of this technology will be stifled. However, if the levy is set at an affordable price—say, $500—it is unlikely to sufficiently compensate artists, songwriters, and copyright holders. At most, these rights holders will collectively receive $500, assuming manufacturers will give away devices free of charge (which is very unlikely to happen unless the manufacturers are also the copyright holders).

Third, a levy system may create cross-subsidization problems by requiring low-volume users, such as those who rarely use P2P networks, to subsidize copyright holders and high-volume users.[286] As Jane Ginsburg

---

284. *See* FISHER, *supra* note 11, at 228 (discussing the privacy implications of his proposal); Eckersley, *supra* note 11, at 160–61 (same); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 55 (same).

285. *See* Lunney, *supra* note 11, at 855 (noting that private copying levies received by the Society for Musical Performing Rights and Mechanical Reproduction Rights (GEMA), one of Germany's collective rights organizations, "amounted to roughly 2.6% of its total revenues both in 1998 and 1999" even though Germany has one of the most extensive private levy systems). *But see* Ku, *supra* note 11, at 313 (contending that "[a] 2 percent levy on these sales would yield approximately $1.3 billion for distribution to artists per year . . . [which] represents the projected revenues for the entire digital downloading market under copyright in 2002, or roughly $48,000 per new release"); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 60–67 (explaining why private copying levies would generate sufficient funds to satisfy copyright holders without imposing price increases that consumers deem unacceptable).

286. *But see* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 67–74 (challenging the cross-subsidization argument and offering measures to reduce cross-subsidization). As Professor Netanel pointed out:

> The low-volume user subsidy problem is somewhat overstated, however. For one, many low-volume users will happily pay a surcharge for the possibility of unlimited file sharing even if they don't actually engage in much file sharing. After all, consumers regularly buy computers with far more memory and processing capacity than they actually use . . . .
>
> Further, imposing the levy will encourage some low-volume users to become high-volume users. If paying an extra $35 for a personal computer enables me legally to use it to trade music and video files, I will be more likely to use the computer for that purpose and I might find that I enjoy doing so.

Netanel, *Noncommercial Use Levy*, *supra* note 11, at 70; *see also* Eckersley, *supra* note 11, at 15 (noting that cross-subsidies may not present a major problem, because "[i]ncentives to pro-

wrote when she discussed Bertlesmann-Napster's proposal of a $4.95 monthly surcharge, "From the user's point of view, 'all you can eat' is not necessarily the best formula, at least not for those whose diet of copyrighted works is modest."[287] By increasing monthly subscription fees, the private copying levies will also make Internet service less affordable, thus threatening to slow down broadband deployment while widening the digital divide.[288]

Fourth, the levies may drive consumers to switch to alternative (and often cheaper) products that do not bear the levy.[289] By creating an artificial price increase, the levy system discourages the creation and dissemination of new distribution technologies, resulting in a suboptimal use of scarce resources.[290] The artificial price increase may also facilitate the creation of gray markets in countries that do not impose similar levies.[291] When these cheaper gray-market goods are imported to com-

---

duce digital writing and music will (almost always) result in great numbers of cheaper works in tangible form").

287. Ginsburg, *Copyright and Control*, *supra* note 164, at 1644.

288. The digital divide is the proverbial gap between those who have access to information technology and digital content and those who do not. For discussions of the digital divide, see generally THE DIGITAL DIVIDE: FACING A CRISIS OR CREATING A MYTH? (Benjamin M. Compaine ed., 2001); RANETA LAWSON MACK, THE DIGITAL DIVIDE: STANDING AT THE INTERSECTION OF RACE & TECHNOLOGY (2001); PIPPA NORRIS, DIGITAL DIVIDE: CIVIC ENGAGEMENT, INFORMATION POVERTY, AND THE INTERNET WORLDWIDE (2001); MARK WARSCHAUER, TECHNOLOGY AND SOCIAL INCLUSION: RETHINKING THE DIGITAL DIVIDE (2003); Peter K. Yu, *Bridging the Digital Divide: Equality in the Information Age*, 20 CARDOZO ARTS & ENT. L.J. 1 (2002); Peter K. Yu, *Digital Revolution Would Help Connect Detroit and Suburbs*, DETROIT NEWS, Mar. 17, 2004, at 11A.

289. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 68.

290. As Professor Lunney explained in economic terms:

> [A] levy discourages the creation and dissemination of new distribution technologies. With the introduction of innovative copying technology, a manufacturer is likely to enjoy some market power with the new technology, whether as a result of a patent or simple lead-time advantage. This market power offers the manufacturer the opportunity to earn rents on the new technology that serve in turn as the incentive for developing and producing the new technology. If a levy is imposed on such technology, the levy will increase the price of the technology to consumers, creating an artificial price increase and its resulting inefficiencies, as it would for existing technologies. The levy will also reduce the rents available to the manufacturer for introducing the new technology. With a levy, part of the rents otherwise available to the manufacturer will be collected through the levy and turned over to copyright owners. Reducing the rents available reduces, in turn, the manufacturer's incentive to innovate. Reduced incentives, together with an increased price to consumers for the new technology, are likely to slow the creation and introduction of new copying and distribution technologies.

Lunney, *supra* note 11, at 856–57.

291. *See* Declan McCullagh, *Cyberpiracy North of the Border*, CNET NEWS.COM (Oct. 27, 2003), *at* http://news.com.com/2008-1028-5097180.html (interviewing Professor Michael Geist about the gray market issue); *see also* Arthur J. Cockfield, *Designing Tax Policy for the*

pete with the indigenous originals, the compulsory levies will hurt local retailers without providing benefits to artists, songwriters, and copyright holders.[292]

Finally, as many copyright holders and commentators have noted (and feared), compulsory licensing may create a culture that assumes everything should be licensed.[293] Even worse for the copyright holders, a levy system, by expressly authorizing private copying, may "move private copying from the margins into the mainstream, converting private copying from a minor annoyance into a major threat to copyright revenues."[294] Such a system also "would . . . limit the ability of copyright owners to price discriminate and otherwise price their works as they see fit."[295]

Digital Biosphere: How the Internet Is Changing Tax Laws, 34 CONN. L. REV. 333, 342 (2002) (noting that "information goods that attract taxation may shift to the lowest tax jurisdiction because it is almost costless to do so"). For a discussion of gray-market goods, see generally Margreth Barrett, *The United States' Doctrine of Exhaustion: Parallel Imports of Patented Goods*, 27 N. KY. L. REV. 911 (2000); Carl Baudenbacher, *Trademark Law and Parallel Imports in a Globalized World—Recent Developments in Europe with Special Regard to the Legal Situation in the United States*, 22 FORDHAM INT'L L.J. 645 (1999); Shubha Ghosh, *An Economic Analysis of the Common Control Exception to Gray Market Exclusion*, 15 U. PA. J. INT'L BUS. L. 373 (1994); Seth Lipner, *Trademarked Goods and Their Gray Market Equivalents: Should Product Differences Result in the Barring of Unauthorized Goods from the U.S. Markets?*, 18 HOFSTRA L. REV. 1029 (1990).

292. Nevertheless, unless the levy imposed on the P2P goods and services is prohibitively high, it is unlikely that many consumers will travel abroad primarily to avoid the levy. Moreover, most consumers will be concerned about the inconvenience and complication created by foreign ISPs, even though it is technically possible to subscribe to these services.

293. *See* Evan P. Schultz, *Jane Says*, IP L. & BUS., June 2003, at 24 (interview with Professor Jane Ginsburg of Columbia Law School, who expressed her concern that "a generalization of the levy technique could lead to an even greater feeling on consumers' parts that they're entitled to copy and 'share' anything they want"). Lydia Loren, however, noted that the sense of entitlement can go in the other direction:

> It may not be an exaggeration to say that the compulsory license is the root of the problem in the music industry. Because of the mechanical license and its statutorily provided royalty rate, there exists a sense of entitlement across the music publishing industry: musical work copyright owners are entitled to eight cents per "mechanical" copy of their work, regardless of the form that copy takes, the manner of the distribution, or the price charged for the distribution. After all, musical work copyright owners are not permitted to refuse to license these derivative works, so they darn well should be paid for any and all copies that are distributed.

Loren, *supra* note 11, at 710.

294. Lunney, *supra* note 11, at 857.

295. *Id.* at 857–58. As Professor Lunney explained:

> With a levy-based approach, responsibility for setting prices would no longer reside with copyright owners alone, subject only to the market; the government and equipment manufacturers would also play a central role. Whether set by statute or by negotiation with the manufacturers, copyright owners worry that the resulting levies will prove inadequate to compensate them for lost sales should private copying become widespread.

Under existing copyright law, copyright holders have the exclusive right to decide whether, when, how, and to whom they want to license their creative works.[296] Except for a few minor statutory exceptions, there is no requirement that copyright holders release their works against their wishes. If a copyright holder believes that it would be less profitable to release a DVD version of his or her work along with a VHS version, the right holder can choose to release only one of the two formats. With a levy system, however, copyright holders would have no choice but to release the product in exchange for a statutorily determined compulsory licensing fee. From the industry's perspective, such a system would set a bad precedent by requiring copyright holders to conform their business plans to behavior that they believe is illegal and illegitimate. Indeed, the United States Court of Appeals for the Ninth Circuit was concerned about this type of precedent when it refused to impose a compulsory royalty payment scheme in lieu of an injunction in *A & M Records, Inc. v. Napster, Inc.*[297] As the court noted:

> Imposing a compulsory royalty payment schedule would give Napster an "easy out" of this case. If such royalties were imposed, Napster would avoid penalties for any future violation of an injunction, statutory copyright damages and any possible criminal penalties for continuing infringement. The royalty structure would also grant Napster the luxury of either choosing to continue and pay royalties or shut down. On the other hand, *the wronged parties would be forced to do business with a company that profits from the wrongful use of intellectual properties.* Plaintiffs would lose the power to control their intellectual property: they could not make a business decision not to license their property to Napster, and, in the event they planned to do business with Napster, compulsory royalties would take away the copyright holders' ability to negotiate the terms of any contractual arrangement.[298]

C. Voluntary Collective Licensing

In February 2004, the Electronic Frontier Foundation ("EFF") released a white paper recommending that the recording industry adopt a voluntary collective licensing model similar to the one used by radio stations.[299] The document outlined the proposal as follows:

Id. at 858.

296. *See* 17 U.S.C. § 106 (2000).

297. 239 F.3d 1004 (9th Cir. 2001).

298. *Id.* at 1028–29 (emphasis added).

299. EFF WHITE PAPER, *supra* note 11.

> [T]he music industry forms a collecting society, which then offers file-sharing music fans the opportunity to "get legit" in exchange for a reasonable regular payment, say $5 per month. So long as they pay, the fans are free to keep doing what they are going to do anyway—share the music they love using whatever software they like on whatever computer platform they prefer—without fear of lawsuits. The money collected gets divided among rights-holders based on the popularity of their music.
>
> In exchange, file-sharing music fans will be free to download whatever they like, using whatever software works best for them. The more people share, the more money goes to rights-holders. The more competition in applications, the more rapid the innovation and improvement. The more freedom to fans to publish what they care about, the deeper the catalog.[300]

Under this voluntary licensing scheme, "[a]rtists and rights holders would have the choice to join the collecting society, and thereby collect their portion of the fees collected, or to remain outside the society."[301]

Before the EFF released its white paper, Daniel Gervais submitted a similar proposal to the Department of Canadian Heritage of the Canadian government.[302] Based on copyright models from Scandinavian countries, Gervais's proposal calls for an extended collective licensing system in which rights holders opt out of a P2P licensing system while remaining inside on default.[303] As Professor Gervais explained:

> [T]he extended collective licence system . . . offers many benefits. Users gain peace of mind, as they sign a contract giving them unrestricted access to a CMO's repertoire apart from specified exclusions. In other words, they will not have to face a lawsuit from a rights holder who turns up after the contract is signed and was neither represented nor expressly excluded from the system. Rights holders have the advantage of better protection of their rights, and by presenting a united front they increase their clout in negotiations with users. Finally, non-represented rights holders also have their rights pro-

300. *Id.* at 1; *see also* Daniel J. Gervais, *The Price of Social Norms: Towards a Liability Regime for File-Sharing*, 12 J. INTELL. PROP. L. 39, 73 n.23 (2004) (contending that $5/month "is clearly an optimal price point, i.e., one that accelerates adoption (or reduces the transition period) and generates maximum income").

301. EFF WHITE PAPER, *supra* note 11, at 5.

302. DANIEL GERVAIS, APPLICATION OF AN EXTENDED COLLECTIVE LICENSING REGIME IN CANADA: PRINCIPLES AND ISSUES RELATED TO IMPLEMENTATION (2003), *available at* http://www.canadianheritage.gc.ca/progs/ac-ca/progs/pda-cpb/pubs/regime/regime_e.pdf.

303. *Id.* at 5.

> tected and can benefit from the remuneration they deserve, since their works are being used for the benefit of the general public.[304]

Both proposals are strongly supported by existing systems used by collective rights organizations, such as ASCAP, BMI, and SESAC, and by copyright clearinghouses.[305] By paying a flat fee, anybody can make a public performance of songs in the repertories of these organizations, which will collect the license fees and distribute the proceeds to their members. Although the Copyright Act does not stipulate the fees an organization can charge, ASCAP and BMI are subject to court-administered antitrust consent decrees that allow users to petition a judge for a binding determination of "reasonable fees" should the licensee and the organization disagree on the amount of the license fees.[306]

The voluntary collective licensing model is attractive for two reasons. First, it allows consumers to determine whether they want to participate in the system. Given the industry's aggressive approach, most consumers are likely to participate regardless of the volume and frequency of their file-sharing activities. Five dollars a month is nothing compared to the severe penalty a consumer would face in an industry lawsuit and to the increasingly high transaction costs due to spoofing and other technological protection measures.

Second, the model permits copyright holders to determine whether they want to participate in the regime. This allows them to continue to maintain strong control over the licensing of their creative works while reducing the chance of creating a new copyright culture that assumes the licensability of all works—a danger, as we have seen, of compulsory licensing. The exclusive control of the copyright holders is important, for the scope of fair use is partly defined by acceptable norms and customary practice.[307]

Nevertheless, the collective licensing proposals discussed in this section may turn out to be more expensive to implement than their proponents anticipated. Consider, for example, the EFF's proposal. As P2P

---

304. *Id.* at 44.

305. *See* Loren, *supra* note 11, at 683–86 (discussing collective rights organizations).

306. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 31; *see also* Michael A. Einhorn, *Intellectual Property and Antitrust: Music Performing Rights in Broadcasting*, 24 COLUM.-VLA J.L. & ARTS 349 (2001) (discussing ASCAP and BMI's antitrust consent decrees).

307. *See* Lloyd L. Weinreb, *Fair's Fair: A Comment on the Fair Use Doctrine*, 103 HARV. L. REV. 1137, 1160 (1990) (stating that a use should be found to be fair if it is "within . . . accepted norms and customary practice"); *see also* Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 550 (1985) (suggesting that "the fair use doctrine was predicated on the author's implied consent to 'reasonable and customary' use when he released his work for public consumption").

file sharing spreads to other industries, those industries are likely to ask for the establishment of a similar system to compensate for the damages they sustain from online file trading. As Jane Ginsburg noted when Bertlesmann proposed to place a monthly surcharge on Napster:

> Pricing the surcharge may be problematic . . . . For example, a proposed component of the Napster-Bertelsmann settlement would give Napster subscribers a license to copy anything from the Bertelsmann catalogue for $4.95 a month. But will it still be only $4.95 if other record producers join in? And what about other kinds of works potentially subject to file sharing, such as text, photographic images, and audiovisual works? What sum will seem reasonable to the consumer, yet generate enough return to make a blanket license fee appeal to an increasingly broad class of copyright owners?[308]

Moreover, voluntary collective licenses may suffer from the many weaknesses associated with compulsory licenses.[309] These include the difficulty in dividing the royalty pool; the lack of sufficient funds to compensate artists, songwriters, and copyright holders; the requirement that low-volume users subsidize copyright holders and high-volume users; and the creation of a copyright culture that assumes everything should be licensed.

Being voluntary, such a system will also encourage free riding. Many end-users may choose to stay outside of the system, "borrowing" songs from their friends and from strangers they meet on the Internet. Eventually, the system will break down. Thus, it remains questionable whether voluntary collective licenses will provide effective compensation to artists and songwriters injured by widespread unauthorized copying on the Internet.

D. Voluntary Contribution

Many commentators and industry executives believe that "most consumers . . . will infringe copyrights at every opportunity unless they are dissuaded from doing so by the fear of punishment."[310] As economic theory has shown, consumers have a narrow view of self-interest and tend to maximize utility by free-riding on others' efforts.[311] From this

---

308. Ginsburg, *Copyright and Control*, *supra* note 164, at 1642–43.

309. *See* discussion *supra* Part III.B.

310. Ann Bartow, *Electrifying Copyright Norms and Making Cyberspace More Like a Book*, 48 VILL. L. REV. 18, 62 (2003).

311. *See generally* Earl R. Brubaker, *Free Ride, Free Revelation, or Golden Rule?*, 18 J.L. & ECON. 147 (1975).

perspective, copyright is needed to generate incentives for authors to create and disseminate works of social value, because free riding will ultimately drive down prices and result in underproduction of copyrighted works.

This conclusion, however, does not take into account the transaction costs incurred in file-sharing activities. Anybody who has tried to download music from unlicensed Web sites knows how time-consuming and frustrating it can be to locate what you want. Just think of the typos you have to make to find music you like, the "Host not responding" messages, or the slow connection speeds between the host and your computer. You might even get a different song because the uploader has used a disguised title. To a teenager, it is not cool to get Backstreet Boys when she wants to listen to *NSYNC, or Britney Spears when she wants to listen to Christina Aguilera. It would be even more disappointing for a teenager to find Bach and Mozart when he wants to impress his friends with Pink and Outkast (although some of his friends who have never listened to Bach and Mozart may come to appreciate their music).

Moreover, people do give and share. They cooperate, sacrifice themselves, and make charitable donations.[312] They also pay for products that are available free of charge, such as drinking water and copyrighted materials.[313] Over the years, economists and sociologists have identified many factors that lead individuals to contribute voluntarily to a public good. Examples include altruism, the "warm glow" effect,[314] long-term self-interest, reputation, and informal cooperation.[315] From time to time, we also notice that "people contribute to public television and radio, nonprofit theater groups, [public] museums, and a wide variety of other cultural activities that could probably not survive without

312. *See* Lunney, *supra* note 11, at 859–60.

313. The free versions of many of these products are not perfect substitutes. For example, tap water is not a perfect substitute for bottled water. Nevertheless, we should not ignore the free availability of many of these products in different form or under different packaging. Consider books for example. *The Digital Dilemma*, the National Research Council's recent study on digital copyright, is available free of charge at http://www.nap.edu/html/digital_dilemma. Yet, it is available for purchase in both physical and digital formats. Most recently, Lawrence Lessig released his new book, *Free Culture*, under a creative commons license on its Web site, http://www.free-culture.cc. Yet, many people, including the author and many of his colleagues, still purchased the book.

314. "Warm-glow preferences mean that the act of contributing, independent of how much it increases group payoffs, increases a subject's utility by a fixed amount." Thomas R. Palfrey & Jeffrey E. Prisbrey, *Anomalous Behavior in Public Goods Experiments: How Much and Why?*, 87 AM. ECON. REV. 829, 830 (1997), *quoted in* Lunney, *supra* note 11, at 861 n.162.

315. *See* Lunney, *supra* note 11, at 861.

their voluntary support, even though in those cases . . . they cannot exclude those who never pay a cent."[316]

Indeed, the Internet started when users networked their computers, offering information gratis to other users with no firewalls, no technological protection measures, and no intellectual property protection.[317] Arguably, P2P technologies also started under the same principle.[318] As Gnutella's developer, the late Gene Kan, wrote:

> The basic premise underlying all peer-to-peer technologies is that individuals have something valuable to share. The gems may be computing power, network capacity, or information tucked away in files, databases, or other information repositories, but they are gems all the same. Successful peer-to-peer applications unlock those gems and share them with others in a way that makes sense in relation to the particular applications.[319]

---

316. Zimmerman, *Authorship Without Ownership*, *supra* note 11, at 1150.

317. As Professor Litman explained:

> The most powerful engine driving this information space turns out not to be money—at least if we're focusing on generating and disseminating the content rather than constructing the pipes that it moves through. What seems to be driving the explosive growth in this information space is that people like to look things up, and they want to share. This information economy is largely a gift economy. The overwhelming majority of the information I'm talking about is initially posted by volunteers. Many of them are amateurs, motivated by enthusiasm for their topics, a desire to share, and, perhaps, an interest in attention and the benefits it may bring. When one is a volunteer, the time and effort one is willing to put into contributing to the information space can seem limitless. Volunteers move on, of course: they get bored, or broke, or caught up in other things, but there seems to be an inexhaustible supply of new volunteers to take their places, and, luckily, the new volunteers are able to build on earlier volunteers' foundations. I potentially know all of the information the other participants know. Their knowledge can be my knowledge with a few clicks of a mouse. In return, I make my knowledge available to anyone who happens by. Each of us can draw on the information stores of the others.

Litman, *Sharing and Stealing*, *supra* note 11, at 8–9 (footnote omitted); *id.* at 4 (noting that "[t]he information space that has grown up on the world wide web is largely the result of anarchic volunteerism").

318. "One of Fanning's avowed aims was to circumvent the established channels of commercial CD distribution, offering garage bands and other new acts a ready, wired audience." GOLDSTEIN, *supra* note 83, at 165.

319. Kan, *supra* note 124, at 122. One commentator described how Napster coordinates externalities in a way that encourages altruism:

> As long as Napster users are able to find the songs they want, they will continue to participate in the system, even if the people who download songs from them are not the same people they download songs from. And as long as even a small portion of the users accept this bargain, the system will grow, bringing in more users, who bring in more songs.

Clay Shirky, *Listening to Napster*, *in* PEER-TO-PEER, *supra* note 2, at 21, 33.

Commentators have discussed three possible models of voluntary contribution. The first is the "ransom model."[320] Best-selling author Stephen King experimented with this model by offering on the Internet his novella *Riding the Bullet*,[321] and installments of a full-length novel, *The Plant*.[322] Instead of demanding money up front, he asked readers who downloaded his work to pay him $1 (and subsequently $2) per installment and announced that he would not finish the work unless he received payments for at least three-quarters of the downloads.

When King released *Riding the Bullet*, more than 400,000 copies were downloaded in the first twenty-four hours.[323] Unfortunately, the book's copy protection mechanism was soon cracked, and unlicensed copies appeared on the Internet. When he released *The Plant*, free riders had already become abundant, and soon both the novella and the novel chapters were freely distributed on the Internet. Even those who were willing to continue to pay King his "ransom" became concerned that he might not complete the novel despite their contributions. In the end, King's fans were caught up in a threshold public goods game,[324] in which many people found not paying contributions to be in their self-interest. By the time the fourth installment was released, less than half of the readers had paid for it.[325] King eventually announced that he would "temporarily suspend" the project and offered the sixth installment for free. He has yet to finish *The Plant*, and the ransom experiment was folded within less than a year.

Since King's experiment, commentators have explored modified versions of the ransom model. Raymond Ku suggested that musicians might improvise the model by putting out teasers and free samples while withholding the full album or their tour until they had received sufficient

---

320. *See* Ku, *supra* note 11, at 310.

321. Evan Hansen, *Simon & Schuster Offers Net-Only Stephen King Novel*, CNET NEWS.COM (Mar. 8, 2000), *at* http://news.com.com/2100-1017_3-237756.html.

322. For a discussion of Stephen King's experiment, see Ku, *supra* note 11, at 310; Litman, *Sharing and Stealing*, *supra* note 11, at 2 & n.2; Zimmerman, *Authorship Without Ownership*, *supra* note 11.

323. Sandeep Junnarkar, *Horrors for Publishing Industry: King e-book Cracked*, CNET NEWS.COM (Mar. 31, 2000), *at* http://news.com.com/2100-1023-238694.html.

324. As Professor Lunney described:

> In a threshold public goods game, individuals in a group must decide whether to contribute voluntarily to the provision of a public good. If enough contributions are made, the public good is provided. If not, the public good is not provided and individuals lose any contributions they have made. All individuals are better off if the public good is provided, but individuals who do not contribute are better off than those who do contribute whether the public good is provided or not.

Lunney, *supra* note 11, at 862.

325. *See* Gwendolyn Mariano, *Stephen King Puts "The Plant" on Ice*, CNET NEWS.COM (Nov. 28, 2000), *at* http://news.com.com/2100-1023-249133.html.

rewards.[326] The Street Performer Protocol, as endorsed by Diane Zimmerman, provides a mechanism through which authors may withhold releasing their works until consumers have contributed sufficient funds to meet their asking price.[327] Open Culture pushes the ransom model even further by requiring authors to release their works subject to permanent free-use licenses once the asking price is met.[328] Nevertheless, the failure of King's experiment casts doubt on the model's technical and financial feasibility. The model would also put artists in the awkward position of having to decide between reneging on their promise to issue a work and forgoing income.[329]

Tipping is the second model of voluntary contribution. File-sharing services like Espra and Snarfizilla allow users to tip artists while downloading their songs.[330] Contrary to what many believe and some commentators have argued in the P2P context, people do tip, and tip handsomely when there is an established social norm supporting the practice. According to Internal Revenue Service estimates, consumers pay more than $20 billion in tips to waiters and other service personnel every year.[331]

Today, file-sharers trade billions of songs on the Internet each month. If individual file-sharers are willing to tip a penny a song—assuming our existing credit system would support such micropayments[332]—the model will yield hundreds of millions of dollars a year. This figure is considerable even compared to existing industry figures.

---

326. Ku, *supra* note 11, at 310.

327. John Kelsey & Bruce Schneier, *The Street Performer Protocol and Digital Copyrights*, FIRST MONDAY (June 7, 1999), *at* http://www.firstmonday.dk/issues/issue4_6/kelsey/index.html.

328. *See* Zimmerman, *Authorship Without Ownership*, *supra* note 11, at 1126. For details of how Open Culture operates, see generally OpenCulture, *Frequently Asked Questions*, *at* http://www.openculture.org/About/faq.html (last visited Feb. 25, 2005).

329. As one commentator noted:

> I think that whole motto of sort of nickel-and-diming people of this per chapter basis was a mistake. . . . Every chapter was another test of whether people would pay the threshold that (King) determined. I thought it got in the way of the relationship between the writer and audience—it was too mercantile.

Mariano, *supra* note 325 (quoting Forrester analyst Dan O'Brien).

330. Ku, *supra* note 11, at 310 (discussing Espra and Snarfizilla); *see also* David Kushner, *Tipping for Tunes*, ROLLINGSTONE.COM (Mar. 7, 2001), *at* http://www.rollingstone.com/news/newsarticle.asp?nid=13427.

331. *See* Dan Seligman, *Why Do You Leave Tips?*, FORBES, Dec. 14, 1998 at 138, *cited in* Nadel, *supra* note 162, at 839 (reporting the IRS's estimate that tips would amount to $15–18 billion in 1996); Ofer H. Azar, *The Social Norm of Tipping: A Review*, SOC. SCI. RES. NETWORK (Sept. 5, 2002), *at* http://www.ssrn.com/abstract=370081 (estimating the total amount of tips would reach $26 billion).

332. *See generally* Dingledine, *Accountability*, *supra* note 252, at 286–307 (discussing micropayment schemes as accountability measures in P2P systems).

Although the recording industry is presently worth tens of billions of dollars, the billion-dollar figure does not take into account the industry's cost savings on CD manufacturing, shipping, storage, shelf space, and now enforcement and litigation, as a result of online distribution. As the user base and file-sharing network expands, the tipping model will become even more attractive.

Magnatune provides an exciting new business model by combining tipping with dynamic pricing (as exemplified by eBay and Priceline.com). Functioning as an on-demand radio station, the service allows users to listen to an album free of charge by streaming it over the Internet.[333] If users want to burn the album on a CD, they have to buy it. Magnatune displays a "suggested price" but allows users to pay as little as $5 or as much as they want. In fact, Magnatune has received an average of $8.93 per CD, well above the $5 minimum.[334]

The Magnatune model may provide a solution that could salvage Stephen King's ransom model. The problem with King's experiment was that he expected every reader to pay him the same amount and ignored the reality that different customers place different values on his work. Some customers may be willing to pay $10 per chapter, while others may be willing to pay only $1. (Obviously, some may prefer not to pay any money even if they are very interested in King's works.) Thus, if King uses the Magnatune model, he may be able to acquire three-quarters of his total expected revenues even though fewer than three-quarters of his readers make a contribution.

The final model is the honor system, familiar to most high school and college students in the form of honor codes. Stephen King maintained that his ransom model was derived from the honor system used by newspapers in New York City in the early twentieth century.[335] Likewise, in the eighteenth century, major publishing houses in the United States abided by the courtesy copyright system, in which each publishing house refrained from publishing editions of a foreign work if there was a pre-existing publishing agreement between the author and another pub-

333. *See* Kevin Maney, *Apple's iTunes Might Not Be Only Answer to Ending Piracy*, USA TODAY, Jan. 21, 2004, at 3B.

334. *Id.*; *see also* Lunney, *supra* note 11, at 863 (noting that economic studies and game theory research "have shown that voluntary contribution rates can reach the level necessary to ensure efficient production of a public good").

335. As Stephen King noted, "newsboys at the time were often blind, and had to rely on the public's conscience to pay for the newspapers people took." Zimmerman, *Authorship Without Ownership*, *supra* note 11, at 1125 n.17 (quoting Stephen King, *How I Got That Story*, TIME EUR., Jan. 8, 2000, *available at* http://www.time.com/time/europe/magazine/2001/0108/king.html (last visited Mar. 23, 2005)).

lishing house.[336] As students and teachers well know, honor codes have not been effective in curbing cheating.[337] Thus, it is no surprise that voluntary contributions have yet to yield any "meaningful remuneration" for authors and artists.[338]

E. Technological Protection

To protect against widespread piracy on the Internet, the entertainment industry has developed many copy protection technologies, such as encryption, digital watermarking, and the use of trusted systems.[339] The industry has also explored the use of digital rights management-based business models that allow copyright holders to manage access while re-

---

336. *See* VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS, *supra* note 9, at 52; Sam Ricketson, *The Birth of the Berne Union*, 11 COLUM.-VLA J.L. & ARTS 9, 13–14 (1986); Yu, *The Copyright Divide*, *supra* note 6, at 342. By virtue of the "courtesy copyright" system, some English authors, like Charles Dickens and Anthony Trollope, "received large sums in respect of the American sales of their works, although they did not enjoy protection under United States copyright law." Ricketson, *supra*, at 14. At that time, the United States had yet to offer copyright protection to foreign authors. *See* Yu, *The Copyright Divide*, *supra* note 6, at 336–53 (discussing copyright protection for foreign authors in the United States in the eighteenth and early nineteenth centuries). Unfortunately, the system soon became ineffective as competition grew and publication was no longer limited to major publishing houses. With the large number of cheap library editions published by smaller houses, the courtesy copyright system eventually collapsed. As Professor Vaidhyanathan described the cheap library edition:

> The paper was uniformly cheap and flimsy, the typesetting sloppy, and the format hard to read. Some of the earlier editions lacked covers to keep their costs low. But soon the cheap publishers realized that the spine was in many cases the most attractive—and most visible—part of a book. So by the 1880s, most of the cheap books libraries appeared in cloth bindings at a slightly higher price, but with the same cheap paper inside. Needless to say, none of these publishers were part of the eastern seaboard elite club of publishers who were led by Henry Holt [a leading publisher at the time]. So none of them conformed to the courtesy principle.

VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS, *supra* note 9, at 53.

337. *See, e.g.*, Kim Breen, *Public Schools Taking Interest in Honor Codes*, DALLAS MORNING NEWS, Jan. 18, 2004, at 1B; Susan C. Thomson, *Amid Wave of Cheating, Universities Push "Academic Integrity,"* ST. LOUIS POST-DISPATCH, Feb. 8, 2004, at A7.

338. Netanel, *Noncommercial Use Levy*, *supra* note 11, at 76; *see also* Janet Kornblum, *Ain't Too Proud to Beg on the Net*, USA TODAY, Jan. 8, 2002, at 3D (noting that "tip jars aren't likely to replace ads or other revenue sources"). Ironically, two of the defendants sued by the RIAA in April 2003 have successfully used the Internet to raise money to pay for their settlements. *See* discussion *supra* Part I.

339. "A trusted system is a system that can be relied on to follow certain rules. In the context of digital works, a trusted system follows rules governing the terms, conditions and fees for using digital works." Mark Stefik, *Shifting the Possible: How Trusted Systems and Digital Property Rights Challenge Us to Rethink Digital Publishing*, 12 BERKELEY TECH. L.J. 137, 139 (1997). *See generally* DIGITAL DILEMMA, *supra* note 11, at 153–76 (discussing technological protection).

quiring consumers to pay for content usage.[340] Notwithstanding these self-help measures, the industry remains vulnerable. Although copy protection technologies allow copyright holders to lock up creative works, these technologies lose their protective function when they are decrypted. Even worse, once the decryption key is disclosed, the copyrighted work will become available not only to those "techies" who successfully broke the code but also to unsophisticated users around the world.

As Edward Felten explained, there is no perfect encryption technology, and "strong encryption" techniques that a moderately skilled person cannot break do not exist in the real world.[341] Even the best encryption technology performs merely like "a speed bump that will frustrate people who want to copy illegally."[342] Moreover, technology developers have to struggle with the trade-offs between cost and effectiveness[343] and between protection and inconvenience.[344] If the copy protection technol-

340. For a collection of articles discussing digital rights management, see generally Symposium, *The Law and Technology of Digital Rights Management*, 18 BERKELEY TECH. L.J. 487 (2003).

341. *See Competition, Innovation, and Public Policy in the Digital Age: Is the Marketplace Working to Protect Digital Creative Works?: Hearing Before the Senate Comm. on the Judiciary*, 107th Cong. 89–92 (2002) (testimony of Edward W. Felten, Associate Professor of Computer Science, Princeton University), *available at* http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?Ipaddress=162.140.64.21&filename=85758.pdf&directory=/diskc/wais/data/107_ senate_hearings; *see also* P. Biddle et al., *The Darknet and the Future of Content Distribution, at* http://crypto.stanford.edu/DRM2002/ darknet5.doc (2002), *quoted in* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 10 (noting that digital rights management systems "are doomed to failure").

342. *A "Speed Bump" vs. Music Copying*, BUS. WK., Jan. 9, 2002, *available at* http://www.businessweek.com/bwdaily/dnflash/jan2002/nf2002019_7170.htm, *quoted in* GOLDSTEIN, *supra* note 83, at 184 (interview with Professor Edward Felten of Princeton University). Although no encryption technology can protect perfectly, such technology does not need to be perfectly robust to have a positive effect. As the recent National Research Council study observed:

> Most people are not technically knowledgeable enough to defeat even moderately sophisticated systems and, in any case, are law-abiding citizens rather than determined adversaries. TPSs [technical protection services] with what might be called "curb-high deterrence"—systems that can be circumvented by a knowledgeable person—are sufficient in many instances. They can deter the average user from engaging in illegal behavior and may deter those who may be ignorant about some aspects of the law by causing them to think carefully about the appropriateness of their copying. Simply put, TPSs can help to keep honest people honest.

DIGITAL DILEMMA, *supra* note 11, at 218.

343. *See* DIGITAL DILEMMA, *supra* note 11, at 153 (noting "inherent trade-offs between the engineering design and implementation quality of a system on the one hand and the cost of building and deploying it on the other"); *id.* at 164 (stating that "[a] good mechanism is one that provides the degree of disincentive desired to discourage theft but remains inexpensive enough so that it doesn't greatly reduce consumer demand for the product").

344. *See id.* at 154 (contending that "the quality and cost of a TPS [technical protection service] should be tailored to the values of and risks to the resources it helps protect").

ogy were too complicated, it would jeopardize the user experience and make content inaccessible. However, if the technology were too simple and easy to break, it would not offer sufficient protection for copyright holders. Thus, "overly stringent protection is as bad as inadequate protection" in the commercial context, because revenues will be zero in either extreme.[345]

To prevent the public from breaking the copy protection technology, copyright holders must constantly upgrade their technology. Such upgrading, unfortunately, will further attract the attention of hackers, who are eager to tinker with the latest technology. Eventually, the repeated encryption and decryption will create a vicious cycle in which the entertainment industry and the hacker community engage in an endless copy protection arms race.[346] Instead of devoting resources to develop artists and improve products, the industry will have to invest resources in developing encryption technology and preventing consumers from accessing copyrighted works. This strategy is counterproductive and will hurt artists, the entertainment industry, and ultimately consumers.

Moreover, the growing use of encryption technologies in copyrighted products has raised some consumer concerns.[347] An encrypted CD may not perform all the functions to which consumers have become accustomed,[348] including those to which they may have a legal right un-

345. *Id.*

346. As Professor Ku explained:

> [C]opy protection for digital content necessitates an expensive technological arms race .... Given the difficulty of protecting digital works from copying, copyright holders will be forced constantly to spend significant resources developing technology just to keep the cat in the bag. These costs will in turn be passed on to the public, not to provide the public with access to new works, but for the sole purpose of limiting access. Given that hackers appear to be as adept, if not more so, at picking the locks of copyright protection as those trying to lock up digital works, the costs associated with a copy protection arms race would be unending.

Ku, *supra* note 11, at 319–20 (footnote omitted); *see also* Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. CHI. LEGAL F. 217, 251 (discussing the "wasteful 'arms race' of technological-protection schemes, with each side increasing its spending to outperform the other's technology"); Peter K. Yu, *How the Motion Picture and Recording Industries Are Losing the Copyright War by Fighting Misdirected Battles*, FINDLAW'S WRIT: LEGAL COMMENTARY, (Aug. 15, 2002), *at* http://writ.news.findlaw.com/commentary/20020815_yu.html (last visited Feb. 25, 2005) [hereinafter Yu, *How the Motion Picture and Recording Industries Are Losing*].

347. *See* Yu, *How the Motion Picture and Recording Industries Are Losing*, *supra* note 346; Kevin Hunt, *Record Industry Opens Attack on Consumer Rights*, HARTFORD COURANT, May 23, 2002, at 21.

348. For example, in January 2001, BMG experimented with encrypted CDs by partnering with Midbar, an Israeli firm, to release two albums using Midbar's Cactus Data Shield technology. That technology prevented CD owners from copying music with burners. After releasing about 100,000 CDs in the new format, BMG got so many returns that it eventually

der copyright law. It may not be playable on car stereos, some PCs, and old CD players, forcing consumers to buy new hardware they do not otherwise need or cannot afford. It is therefore no surprise that the recording industry encountered a highly negative response—including a class action lawsuit by two California consumers[349]—when Sony released Celine Dion's album as an encrypted CD in 2002.[350] In response to the industry's action, some consumer advocates have called for record companies to label encrypted CDs properly to avoid confusion and to allow consumers to choose whether they want to purchase those CDs.

To strengthen protection, the entertainment industry has lobbied Congress hard for laws to protect against the circumvention of copy protection technologies. The DMCA was the crowning achievement of this effort. Since its enactment, the industry has used the statute repeatedly against circumventors. For example, the industry cited potential violation of the DMCA when it asked Edward Felten, a computer science professor at Princeton University, to withdraw from a scientific conference his paper on how to break the copy protection technologies designed by the Secure Digital Music Initiative.[351] Using the DMCA, eight major movie studios brought a lawsuit to enjoin a hacker magazine from including on its Web site hyperlinks to other sites that posted the code of the DeCSS program, which decrypts the encryption-based system used by the motion picture industry to protect DVDs.[352] In July 2001, the Russian cryptographer Dmitry Sklyarov was arrested and charged with violating the DMCA in the United States for giving a presentation to a computer hacker convention on the software that removed security pro-

---

canceled the experiment and replaced the returns with nonprotected discs. *See* ALDERMAN, *supra* note 81, at 110.

349. Jon Healey & Jeff Leeds, *Record Labels Grapple with CD Protection*, L.A. TIMES, Nov. 29, 2002, § 3, at 1 (reporting that "[t]wo California consumers . . . have filed a class-action lawsuit against the five major record companies, alleging that copy-protected CDs are defective products that shouldn't be allowed on the market").

350. *See* George Cole, *Celine Dion and the Copycats*, FIN. TIMES, July 19, 2002, at 11.

351. *See* David P. Hamilton, *Digital-Copyright Law Faces New Fight*, WALL ST. J., June 7, 2001, at B10; *see also* Yu, *The Copyright Divide*, *supra* note 6, at 395 (discussing the RIAA's threat of lawsuit against Professor Edward Felten of Princeton University); Letter from Matthew J. Oppenheim, Senior Vice President—Business and Legal Affairs, Recording Industry Association of America, to Professor Edward Felton [sic], Department of Computer Science, Princeton University (Apr. 9, 2001) (asserting that Professor Felten's disclosure of information that "would allow the defeat of [those technologies that were part of the Challenge] would violate both the spirit and terms of the Click-Through Agreement . . . [and] could subject [Professor Felten and his] research team to actions under the Digital Millennium Copyright Act"), *available at* http://www.eff.org/IP/DMCA/Felten_v_RIAA/20010409_riaa_sdmi_letter.html (last visited Feb. 25, 2005).

352. *See* Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001); Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000); *see also* Yu, *The Copyright Divide*, *supra* note 6, at 395–97 (discussing *Reimerdes*).

tection from Adobe e-books.[353] In October 2003, SunnComm, the manufacturer of copy protection technology used in BMG's CDs, threatened to sue a Princeton University computer science graduate student under the DMCA for posting a paper on his Web site explaining how to disarm SunnComm's technology by pushing the shift key when loading a CD into a computer.[354]

Although the entertainment industry's need for legislation to keep hackers away from copyrighted content and to avoid a wasteful arms race with the hacker community is understandable, the deleterious effects of the ill-drafted DMCA are substantial. In addition, the statute has been repeatedly misused to stifle innovation and competition over such products as printer toner cartridges,[355] garage door openers,[356] electronic

353. Jennifer 8. Lee, *U.S. Arrests Russian Cryptographer as Copyright Violator*, N.Y. TIMES, July 18, 2001, at C8 (reporting Sklyarov's arrest); *see also* Symposium, *Implications of Enforcing the Digital Millennium Copyright Act: A Case Study, Focusing on* United States v. Sklyarov, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 805 (2002); Yu, *The Copyright Divide*, *supra* note 6, at 397 (discussing the Sklyarov incident). The charges against Sklyarov were later dropped in response to strong protests in the United States and in light of his agreement to testify for the United States government against his former employer, ElcomSoft. *See* David Frith, *A Promotion a Day Keeps Apple A-weigh*, CANBERRA TIMES (Austl.), Jan. 7, 2002, at A12 (reporting that Sklyarov was released in a deal that "saw him admit the facts of the case but not any illegal activity"). Subsequently, his Moscow-based employer, ElcomSoft, was prosecuted for illegally selling software that permitted users to circumvent security features in an electronic book. *See* Matt Richtel, *Russian Company Cleared of Illegal Software Sales*, N.Y. TIMES, Dec. 18, 2002, at C4. In December 2002, a federal jury acquitted ElcomSoft of all charges. *See id.*

354. John Borland, *Student Faces Suit over Key to CD Locks*, CNET NEWS.COM (Oct. 9, 2003), *at* http://news.com.com/2100-1025-5089168.html. The company reacted by threatening to sue the student under the DMCA, claiming that the student's revelation of this obvious and well-documented limitation had cost the company millions of dollars. SunnComm eventually dropped the lawsuit. Declan McCullagh, *SunnComm Won't Sue Grad Student*, CNET NEWS.COM (Oct. 10, 2003), *at* http://news.com.com/2100-1027-5089448.html.

355. *See* Lexmark Int'l, Inc. v. Static Control Components, Inc., 253 F. Supp. 2d 943 (E.D. Ky., 2003) (granting preliminary injunction to Lexmark, which claimed that its competitor copied the encrypted code used by computer chips in its cartridges to enable remanufactured cartridges to work with its printers); *see also* Frank Ahrens, *Caught by the Act*, WASH. POST, Nov. 12, 2003, at E1 (discussing the case); Memorandum from Marybeth Peters, Register of Copyrights, to James H. Billington, Librarian of Congress, Recommendation of the Register of Copyrights in RM 2002-4: Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies 172–83 (Oct. 21, 2003) (suggesting that § 1201(f) would exempt Static Control from violating the DMCA), *available at* http://www.copyright.gov/1201/docs/registers-recommendation.pdf (last visited Feb. 25, 2005). The case is currently on appeal before the United States Court of Appeals for the Sixth Circuit.

356. *See* Chamberlain Group, Inc. v. Skylink Techs., Inc., 292 F. Supp. 2d 1040 (N.D. Ill. 2003), *aff'd*, 2004 U.S. App. LEXIS 18513 (7th Cir. Aug. 31, 2004) (dismissing Chamberlain Group's lawsuit against its competitor for manufacturing a universal garage-door opener that works with Chamberlain's products); *see also* John Borland, *Judge Shuts Garage Opener Copyright Suit*, CNET NEWS.COM (Nov. 14, 2003), *at* http://news.com.com/2100-1025-5107779.html (discussing the dismissal).

pets,[357] and voting machines.[358] It has also upset the historical balance between copyright interests and access to information, thus raising serious concerns about free speech, privacy, academic freedom, learning, culture, and democratic discourse.[359]

In the past few years, the entertainment industry has deployed technology to protect its products and develop new markets. Spoofing is an offensive technique recently used by the industry. By inserting fake or corrupted files into P2P networks[360] and thereby forcing file-sharers to sort out genuine music files from a large number of decoys, spoofing increases transaction costs substantially,[361] undermines consumer trust in file-swapping networks,[362] and discourages unauthorized downloading.

The technique also enables copyright holders to insert educational messages to remind file-sharers that unauthorized downloading is illegal and that it harms artists and songwriters. Teenage file-sharers may ignore RIAA warnings, but they may be receptive to personal pleas from their favorite musicians telling them how hard these musicians have worked to make the new album. An overaggressive message, however, could backfire. Before releasing Madonna's album *American Life*, War-

---

357. Dave Wilson & Alex Pham, *Sony Dogs Aibo Enthusiast's Site*, L.A. TIMES, Nov. 1, 2001, pt. 3, at 1 (reporting about the threat of lawsuit by Sony against the owner of the Aibohack.com Web site for offering upgrades to software used in Sony's electronic pet dogs). By November 2001, the site was back up "with more cautions and legal mumbo jumbo." Gareth Cook, *High-Tech Pet Tricks*, BOSTON GLOBE MAG., Jan. 20, 2002, at 9.

358. *See* John Schwartz, *File-sharing Pits Copyright Against Free Speech*, N.Y. TIMES, Nov. 3, 2003, at C1 (reporting about lawsuits filed by Diebold Election Systems against those who are posting on the Internet copies of the company's internal communications about the flaws in its electronic voting machines).

359. For criticisms of the DMCA, see generally Liu, *supra* note 153; Lunney, *supra* note 11; David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673 (2000); Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519 (1999); Diane Leenheer Zimmerman, *Adrift in the Digital Millennium Copyright Act: The Sequel*, 26 U. DAYTON L. REV. 279 (2001); Yu, *Escalating Copyright Wars*, *supra* note 8.

360. *See, e.g.*, Paul Bond, *Mercenaries in P2P Tech War*, HOLLYWOOD REP., Oct. 22, 2003 (reporting that spoofing "appears to be gaining traction in the entertainment industry as a leading technology employed in the war on digital piracy"); Lev Grossman, *It's All Free!*, TIME, May 5, 2003, at 66 (reporting about the spoofing technique concerning Madonna's single, *American Life*).

361. *See* DIGITAL DILEMMA, *supra* note 11, at 81 (questioning who wants to "experience 30 minutes or an hour of frustration, if for a dollar or so you can have what you want easily, reliably, and quickly?"). As the study stated: "[I]n the digital age, content industries may mutate, at least in part, into service companies. The key product is not only the song; it is also the speed, reliability, and convenience of access to it." *Id.*; *see also* Gervais, *supra* note 300 (noting that "value comes from a combination of availability . . . , user-friendliness, price, and quality (and security) of the product (file)").

362. *See* Strahilevitz, *supra* note 12, at 531; *see also* LIEBOWITZ, *supra* note 237, at 175–76 (discussing the economics of the use of "antifreeloading" tools in P2P networks).

ner Brothers Records circulated a spoofed version on the Internet with the singer calling out "What the f___ do you think you're doing?"[363] In response, a hacker broke onto the Web site Madonna.com and posted real, downloadable MP3s of every song on the album.[364] Angry fans pitched in to remix Madonna's tirade with other songs.[365]

Another technique the entertainment industry has used to develop and segment its markets involves versioning technology. Through price discrimination, such technology enables copyright holders to offer discounted downloads to customers interested in a nonsharable version of the song while charging premium prices for versions that are fully sharable or that include other valuable features. In doing so, it "increase[s the copyright holders'] ability to profit from their works . . . [and] expand[s] consumers' access to copyrighted material by lowering the minimum price that creators and distributors of copyrighted works must charge to recoup their investment."[366] It also facilitates differential pricing that frees low-usage customers from subsidizing their high-usage counterparts while ensuring that they are not priced out of the market.

F. Copyright Law Revision

An overhaul of the 1976 Copyright Act is long overdue. The statute is unwieldy, counterintuitive, and internally inconsistent.[367] As Jessica Litman put it, "We can continue to write copyright laws that only copyright lawyers can decipher, and accept that only commercial and institutional actors will have good reason to comply with them, or we can contrive a legal structure that ordinary individuals can learn, understand and even regard as fair."[368] For some commentators, the only solution is to wipe the slate clean and start afresh.

As Lydia Loren pointed out, Congress has been tinkering at the margins of copyright law each time a new technological development occurs, and this process "has led to a cumbersome and complicated set of rules that creates significant obstacles to dissemination [of copyrighted

363. Grossman, *supra* note 360.

364. *Id.*

365. *See* Nik Bonopartis, *Firms Say the Swap Must Stop*, POUGHKEEPSIE J., July 16, 2003, at 1A.

366. CONGRESSIONAL BUDGET OFFICE, U.S. CONGRESS, *Preface* to COPYRIGHT ISSUES IN DIGITAL MEDIA ix (2004), *available at* http://www.cbo.gov/ftpdocs/57xx/doc5738/08-09-Copyright.pdf.

367. *See* Yu, *The Copyright Divide*, *supra* note 6, at 404.

368. Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 39 (1996).

works] rather than facilitating such dissemination."[369] In Loren's view, three main problems in the copyright arena confront the music industry:

> First, as a result of the dual layer of copyrights [in the sound recording and the underlying composition] and the divided rights granted to each owner, there are too many vested industry players for downstream users to be able to efficiently obtain the authorizations needed for downstream use of recorded music. Second, the divisible yet overlapping rights granted to copyright owners leads to industry gridlock and problems with holdout behavior. Finally, the demands for payment from the downstream user by too many vested industry players, combined with industry consolidation, result in the price being too high to achieve the goal of copyright. In the words of economists, the music industry is full of market failures.[370]

Because of these market failures, industry players are eager to "build[] up vested interests around different statutory rights and then caus[e] trouble when distribution technology changes and each industry player asserts a right to obtain royalties for the new methods of exploitation."[371] To avoid this trouble, Professor Loren maintains that Congress needs to rewrite the Copyright Act to consolidate the six exclusive rights into "one 'right to commercially exploit' the copyrighted expression" and to recognize the independence of derivative works.[372]

Notwithstanding her fresh and interesting proposal, revising copyright law is easier said than done. The last revision of the Copyright Act started in the mid-1950s and took more than twenty years to complete.[373] Since then, Congress has been reluctant to undertake any major revision of the copyright statute even in the face of the digital challenge created by the Internet and new communications technologies.[374] In 1993, President Clinton formed an Information Infrastructure Task Force to reexamine intellectual property laws in light of this changing environment.

---

369. Loren, *supra* note 11, at 678–79.

370. *Id.* at 698–99.

371. *Id.* at 678.

372. *Id.* at 703.

373. For comprehensive discussions of the copyright law revision process, see generally LITMAN, *supra* note 9; Jessica D. Litman, *Copyright, Compromise, and Legislative History*, 72 CORNELL L. REV. 857 (1987).

374. Congress's reaction is understandable given the great difficulty in obtaining sustained support for a multi-year revision process, the rapid proliferation of new communications technologies, stakeholders, and media entrepreneurs, and the constant evolution of the market.

Disappointingly, the group's final report concluded that the existing copyright regime would work perfectly in the digital context.[375]

The biggest problem with the copyright system today is that the public interest is not adequately represented in the legislative process.[376] The situation may change, however, as the interests of the computer and consumer electronics industries increasingly align with those of the consuming public. Unlike public interest groups, industry representatives always find a way to inject their proposals into the political debate. Nevertheless, copyright revision will remain difficult to accomplish, as it will involve many different stakeholders—writers, performers, publishers, libraries, schools, and individual consumers—with many different interests.[377] Consumers expect free, easy and unrestricted access to copyrighted materials. Publishers are eager to maintain their existing markets. Performers are concerned about their exposure and royalties. Distributors want to protect the continued use of their trucks, warehouses, and workers. And retailers seek to maintain their existing profit margins. It is virtually impossible to align all of these goals and interests. Even if parties were willing to compromise, reaching these com-

---

375. *See* INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995).

376. The need to protect the public interest has been emphasized repeatedly in academic circles and the public debate. As the British Commission on Intellectual Property Rights explained:

> Too often the interests of the "producer" dominate in the evolution of IP policy, and that of the ultimate consumer is neither heard nor heeded. So policy tends to be determined more by the interests of the commercial users of the system, than by an impartial conception of the greater public good. In IPR discussions between developed and developing countries, a similar imbalance exists. The trade ministries of developed nations are mainly influenced by producer interests who see the benefit to them of stronger IP protection in their export markets, while the consumer nations, mainly the developing countries, are less able to identify and represent their own interests against those of the developed nations.

COMM'N ON INTELLECTUAL PROP. RIGHTS, *supra* note 133, at 7.

377. As the recent National Research Council study explained:

> The debate over intellectual property includes almost everyone, from authors and publishers, to consumers (e.g., the reading, listening, and viewing public), to libraries and educational institutions, to governmental and standards bodies. Each of the stakeholders has a variety of concerns . . . that are at times aligned with those of other stakeholders, and at other times opposed. An individual stakeholder may also play multiple roles with various concerns. At different times, a single individual may be an author, reader, consumer, teacher, or shareholder in publishing or entertainment companies; a member of an editorial board; or an officer of a scholarly society that relies on publishing for revenue. The dominant concern will depend on the part played at the moment.

DIGITAL DILEMMA, *supra* note 11, at 51.

promises would require a Herculean effort, not to mention the fact that many of these parties might leave the negotiation table unsatisfied.

Any structural change in the copyright statute would upset existing contractual relationships,[378] and Congress typically hesitates to rock the boat. When Congress deliberated on the proposal to enact the Digital Performance Right in Sound Recordings Act of 1995, it was reluctant to "upset[] the longstanding business and contractual relationships among record producers and performers, music composers and publishers and broadcasters."[379]

Moreover, as it would take a substantial amount of time for a statutory change to influence contracting behavior, such a change is unlikely to provide a quick fix to the unauthorized copying problem.[380] Even worse, as the DMCA illustrated well, changes to copyright law may have unintended consequences. A recent Congressional Budget Office study called for legislative caution, noting that changes to the copyright statute could "have ramifications that extend beyond the concerns of producers and consumers of copyrighted material to the well-being of related sectors of the economy" and could even "influence the nature and pace of future technological progress."[381]

G. Administrative Dispute Resolution Proceeding

Mark Lemley and Anthony Reese suggested that it may be possible to design a "quick, cheap dispute resolution system that enables copyright owners to get some limited relief against abusers of p2p systems and to deter others from such abuse."[382] The incentive for rights holders to opt into this administrative procedure and give up the right to sue file-sharers in court would be reduced enforcement costs.[383] Consumers would benefit from limiting the procedure to "clear cases" of high-volume uploaders and from a robust set of affirmative defenses for "arguable fair uses" such as making out-of-print works available to the public or space-shifting lawfully acquired files from CDs to other media.[384]

This proposal was largely inspired by the success of the Uniform Domain Name Dispute Resolution Policy ("UDRP").[385] Introduced in

---

378. *See* Loren, *supra* note 11, at 678.
379. S. REP. NO. 104–128, at 13 (1995), *reprinted in* 1995 U.S.C.C.A.N. 356, 360.
380. *See* Loren, *supra* note 11, at 678.
381. CONGRESSIONAL BUDGET OFFICE, *supra* note 366, at viii.
382. Lemley & Reese, *supra* note 74, at 1351–52.
383. *See id.*
384. *See id.*
385. Uniform Domain Name Dispute Resolution Policy (Aug. 26, 1999), *available at* http://www.icann.org/dndr/udrp/policy.htm.

October 1999, the UDRP set forth the terms and conditions for resolving disputes over the registration and use of domain names. Under the UDRP, all registrants must agree to participate in a mandatory administrative proceeding if a third party complains to a dispute resolution service provider. To prevail, the party bringing the case must prove that the registrant's domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights, that the person who registered the domain name has no rights to or legitimate interest in the domain name, and that registrant is using the domain name in bad faith.

Although there is general agreement that the UDRP has been cost-effective in resolving thousands of cases filed since the policy entered into force in December 1999, the policy has been heavily criticized for its procedural weaknesses.[386] Among the criticisms are the selection and composition of the dispute resolution panel, the failure to provide adequate time for a domain name registrant to reply to a complaint, the failure to ensure that the registrant has received actual notice of the complaint, and the registrant's limited access to courts for review when the dispute resolution panel decides against a party. To respond to these criticisms, the Lemley and Reese proposal includes such features as the selection of judges in a "fair and balanced® way," an administrative appeal process, and sanctions on frivolous or bad-faith claims made by copyright holders.[387]

Despite these adjustments, the dispute resolution proceeding may raise more concerns and challenges than the UDRP. While a UDRP proceeding may result in the transfer of ownership of the domain name to the prevailing trademark holder, it does not assign damages or take property from the losing domain name registrant. The new proceeding may, however, result in "an award of money damages or . . . [the removal of] infringing material or the infringer . . . from the network."[388] The denial of computer access to "repeat infringers," as proposed, will raise serious issues concerning human rights and the digital divide, even though such

386. For criticisms of the UDRP, see generally A. Michael Froomkin, *ICANN's "Uniform Dispute Resolution Policy"—Causes and (Partial) Cures*, 67 BROOK. L. REV. 605 (2002); Michael Geist, *Fair.Com?: An Examination of the Allegations of Systemic Unfairness in the ICANN UDRP*, 27 BROOK. J. INT'L L. 903 (2002). *See also* Laurence R. Helfer & Graeme B. Dinwoodie, *Designing Non-National Systems: The Case of the Uniform Domain Name Dispute Resolution Policy*, 43 WM. & MARY L. REV. 141 (2001); A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17 (2000); MILTON MUELLER, ROUGH JUSTICE: AN ANALYSIS OF ICANN'S UNIFORM DISPUTE RESOLUTION POLICY (2003), *available at* http://www.acm.org/usacm/IG/roughjustice.pdf (last visited Mar. 23, 2005).

387. Lemley & Reese, *supra* note 74, at 1412.

388. *Id.*

a denial would also serve as a strong deterrent to potential high-volume uploaders, as Professors Lemley and Reese anticipated.

Moreover, the public may still consider the new proceeding unfair. Today, the public considers the RIAA's litigation unfair, largely because the industry's lawsuits target only a small group of file-swappers even though a large number of people are swapping files. Although Lemley and Reese proposed limiting the proceeding to egregious offenders who uploaded more than fifty songs during a thirty-day period,[389] the system would overload if a large number of people continue to trade more than fifty songs a month. Trading as few as two songs a day to many different friends is fairly commonplace today, especially among teenagers and college students. In addition, those who just meet the administrative threshold of uploading fifty songs will face $12,500 in liability, while most of the RIAA's current lawsuits have been settled for only a few thousand dollars.

Nevertheless, Lemley and Reese believe the proposed system would be fairer to the alleged infringers if they were given enough notice and would be more beneficial to the copyright holders. As they explained:

> Such a system would permit low-cost enforcement of copyright law against direct infringers, reducing the need for content owners to sue facilitators. Relative to levies, a dispute resolution system would trade off some increase in cost for precision, targeting only those making illegal uses rather than all users of computers or p2p networks. It would be more fair than selective criminal or civil prosecution, because the burden of paying the penalty for infringement would fall more evenly on each wrongdoer, rather than imposing stark punishment on a few in order to serve society's interest in deterring the rest.[390]

H. Alternative Compensation

Some commentators have called for the abolition of copyright, which they consider obsolete and irrelevant in the digital world. In a widely circulated article in *Wired*,[391] John Perry Barlow likened the existing intellectual property model to an old freighter ill fitted to carry the "vaporous cargo" of digital content.[392] The old ship, he wrote, cannot

389. *Id.* at 1413.

390. *Id.* at 1352.

391. Barlow, *supra* note 11, at 84.

392. *Id.*; *cf.* Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281 (1970) (discussing how

"be patched, retrofitted, or expanded to contain digitized expressions any more than real estate law might be revised to cover the allocation of broadcasting spectrum."[393] As others have noted, online distribution has allowed artists to distribute music directly to consumers without any intermediary. Once digital content becomes unbundled, these commentators argue, artists may be better off in a copyright-less world, as the current system tends to reward popular works beyond their market value.[394] The manufacturing, marketing, and distribution costs are very high under the old brick-and-mortar business model, and the vast majority of artists do not receive any royalties from the sale of their music.[395]

Three alternative models have received substantial interest: patronage, ancillary service, and home production. Long before the copyright model was adopted, wealthy patrons from the monarchy, the nobility, and the church funded the creation of musical and cultural works.[396] Pa-

---

the economics of publishing may render copyright protection of published works unnecessary); Robert M. Hurt & Robert M. Schuchman, *The Economic Rationale of Copyright*, 56 AM. ECON. REV. PAPERS & PROCS. 42 (1966) (expressing skepticism about the economic rationale of copyright).

393. Barlow, *supra* note 11, at 84; *see also* Ku, supra note 11, at 294 (contending that "the economics of digital technology renders copyright both unnecessary and inefficient").

394. *See* Lunney, *supra* note 11, at 886.

395. As Professor Ku explained:

> Unbundling the incentives for the creation and dissemination of music exposes the myth that copyright plays much of a role in encouraging the creation of music. The relative importance of copyright to creators and distributors is most evident when one considers the fact that even with copyright protection, the vast majority of musical artists do not earn any income in the form of royalties from the sale of music. In fact, not only do musicians rarely earn royalties from the sale of CDs, they are often in debt to the recording industry for the costs of manufacturing, marketing, and distributing their music. Recording companies typically charge the artist for all the costs of production, marketing, promotion, and other expenses, including breakage—a holdover from when albums were made from vinyl. Even in today's digital world, in which the cost of digital distribution is nonexistent, some record labels have demanded that artists surrender even larger portions of their royalties for the cost of encoding the song to digital format, encryption, and digital delivery. As one report indicates, an artist must typically sell a million copies of a CD before she receives any royalties because record companies deduct the costs of production, marketing, promotion, and other expenses from the musician's royalties. Meanwhile, the same million copies will have earned the record company approximately $11 million in gross revenue and $4 million net. The income to most artists from performance and mechanical rights for songwriting and composing from the sale of music are similarly insignificant.

Ku, *supra* note 11, at 306–07.

396. *See generally* F.M. SCHERER, QUARTER NOTES AND BANK NOTES: THE ECONOMICS OF MUSIC COMPOSITION IN THE EIGHTEENTH AND NINETEENTH CENTURIES (2004) (examining the political, intellectual, and economic roots of the shift of music composers from the patronage system to a freelance market). See also Michael W. Carroll, *Whose Music Is It Any-*

tronage could take the form of directly commissioning musical compositions or indirectly subsidizing composers by employing them as, say, church organists or court music directors.[397] Although the eighteenth century was a period of transition away from the patronage model, with composers sometimes moonlighting as freelance artists,[398] "[i]t is reasonably well accepted that at the outset of the eighteenth century, most musicians creative enough to be composers were employed either by the nobility or by the church."[399] When they needed support to compose new works, they usually turned to patrons. In the case of Bach, "his compositions for and direction of the Collegium remained secondary to his salaried church and school duties."[400]

While the aristocratic patronage model no longer exists—at least not in the United States—we can still set up a reward system to provide authors with needed incentives. Indeed, many commentators have proposed the reinstitution of such a system.[401] A modern patronage model, however, has many drawbacks. Such a system would tend to reward the creation of works preferred by the social elites rather than the public.[402]

---

way? How We Came to View Musical Expression as a Form of Property, 72 U. CIN. L. REV. 1405 (2004), for a history of legal protection of musical works.

397. *See* SCHERER, *supra* note 396, at 54–56 (discussing the support for composers in the noble courts during the seventeenth and eighteenth centuries). Johann Sebastian Bach, for example, spent his entire adult life as an employee—"first as organist at churches in Arnstadt and Mühlhausen, then as organist and director of court music for the Duke of Weimar and prince of Köthen, and finally as cantor and director of music for the Thomasschule (School of St. Thomas) and four affiliated Leipzig churches." *Id.* at 3.

398. Handel and Mozart are among those composers who tried "to take advantage of the increased demand for public entertainment among the middle classes and break away into a freelance existence." Michael Hurd, *Patronage*, *in* THE OXFORD COMPANION TO MUSIC, 936 (Alison Latham ed., 2d ed. 2002).

399. SCHERER, *supra* note 396, at 1.

400. *Id.* at 3.

401. *See* Eckersley, *supra* note 11 (proposing a reward system based on virtual markets). *But see* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 80–83 (criticizing the creation of government rewards). Most of the existing discussions of the reward system in legal literature focus on patents. *See, e.g.*, Nancy Gallini & Suzanne Scotchmer, *Intellectual Property: When Is It the Best Incentive System?*, *in* INNOVATION POLICY AND THE ECONOMY 2 (Adam B. Jaffe et al. eds, 2002); Michael Abramowicz, *Perfecting Patent Prizes*, 56 VAND. L. REV. 115 (2003); Steve P. Calandrillo, *An Economic Analysis of Intellectual Property Rights in Information: Justifications and Problems of Exclusive Rights, Incentives to Generate Information, and the Alternative of a Government-run Reward System*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 301 (1998); Douglas Gary Lichtman, *Pricing Prozac: Why the Government Should Subsidize the Purchase of Patented Pharmaceuticals*, 11 HARV. J.L. & TECH. 123 (1997); Michael Polanvyi, *Patent Reform*, 11 REV. ECON. STUD. 61 (1944); Steven Shavell & Tanguy van Ypersele, *Rewards Versus Intellectual Property Rights*, 44 J.L. & ECON. 525 (2001).

402. As Marci Hamilton noted:

> If the class of creators were winnowed down to the rich and the government-sponsored, and the free market were thus to be replaced by a patronage system, the ability of art to speak to the American people would dwindle precipitously. Artistic

If government funding is involved, such a system may also run into significant opposition from politicians, who are rarely excited about raising taxes. Given the many more pressing concerns of public policy, such as funding Social Security and national security, it is unlikely that the public would support an adequate allocation of government tax revenues for creative activities.[403] An efficient compromise may be for the government to allocate resources only to those activities that the market is unlikely to reward or to use those resources to facilitate broader public access to information technology.[404]

Moreover, government funding of the arts may have the perverse effect of stifling freedom of expression—as we have learned from past experience. In 1999, when the Brooklyn Museum prepared to open an art exhibition featuring a depiction of the Virgin Mary shellacked in elephant dung, New York mayor Rudy Giuliani threatened to pull the museum's city funding.[405] A year earlier, the Supreme Court upheld a statute requiring the National Endowment for the Arts to consider "general standards of decency and respect for the diverse beliefs and values of the American public" before awarding grants for artistic projects.[406] As Neil Netanel noted, in our democratic society where free speech and free press are paramount values, "there remain substantial benefits to funding the creation and dissemination of many expressive works, and to funding them from sources other than state subsidy, corporate munificence, and party patronage."[407]

---

works would cater to elites; classical music might survive, but rock and country would encounter grave difficulties.

Marci Hamilton, *Why Suing College Students for Illegal Music Downloading Is the Right Thing to Do*, FINDLAW'S WRIT: LEGAL COMMENTARY (Aug. 5, 2003), *at* http://writ.news.findlaw.com/hamilton/20030805.html.

403. *See* FISHER, *supra* note 11, at 216–17 (2004) (conceding that his proposal "would likely be unpopular"); Netanel, *Noncommercial Use Levy*, *supra* note 11, at 81. *But see* Eckersley, *supra* note 11, at 109 (suggesting that "various interest groups will end up agreeing on a decent compromise").

404. *See* Netanel, *Noncommercial Use Levy*, *supra* note 11, at 82.

405. David Barstow, *Giuliani Ordered to Restore Funds for Art Museum*, N.Y. TIMES, Nov. 2, 1999, at A1; Ralph Blumenthal & Carol Vogel, *Museum Says Giuliani Knew of Show in July and Was Silent*, N.Y. TIMES, Oct. 5, 1999, at B1.

406. Nat'l Endowment for the Arts v. Finley, 524 U.S. 569, 569 (1998); *see also* Symposium, *Art, Distribution & the State: Perspectives on the National Endowment for the Arts*, 17 CARDOZO ARTS & ENT. L.J. 705 (1999). *See generally* Marci A. Hamilton, *Art Speech*, 49 VAND. L. REV. 73 (1996) (arguing that representative democracy demands means of challenging government and that art performs this function in a singular way).

407. Netanel, *Noncommercial Use Levy*, *supra* note 11, at 76; *see also* Neil Weinstock Netanel, *The Commercial Mass Media's Continuing Fourth Estate Role*, *in* THE COMMODIFICATION OF INFORMATION 317 (Niva Elkin-Koren & Neil Weinstock Netanel eds., 2002).

The second alternative is ancillary service. To supplant copyright royalties, artists can look to revenues from live concert performances, commercials, and movies. As the industry veteran Esther Dyson insightfully observed in *Wired*:

> Chief among the new rules is that "content is free." While not all content will be free, the new economic dynamic will operate as if it were. In the world of the Net, content (including software) will serve as advertising for services such as support, aggregation, filtering, assembly and integration of content modules, or training of customers in their use. Intellectual property that can be copied easily likely will be copied. It will be copied so easily and efficiently that much of it will be distributed free in order to attract attention or create desire for follow-up services that can be charged for.[408]

This is the model used by the band The Grateful Dead, who gave away their music by letting audiences tape their concert performances.[409] Likewise, artists in countries that have limited copyright protection have been supporting themselves by earning additional income through other professional ventures, such as movies, commercials, and endorsements. If musicians are half as entrepreneurial as the film director George Lucas, they may also earn secondary rights through merchandising or exploitation of their likenesses and onstage personas.[410] Indeed, as recent

---

408. Dyson, *supra* note 11, at 136; *see also id.* (noting that "[t]he creator who writes off the costs of developing content immediately—as if it were valueless—is always going to win over the creator who can't figure out how to cover those costs").

409. As The Grateful Dead's former lyricist John Perry Barlow wrote:

> [T]here is no question that the band I write [songs] for, the Grateful Dead, has increased its popularity enormously by giving them away. We have been letting people tape our concerts since the early seventies, but instead of reducing the demand for our product, we are now the largest concert draw in America, a fact that is at least in part attributable to the popularity generated by those tapes.
>
> True, I don't get any royalties on the millions of copies of my songs which have been extracted from concerts, but I see no reason to complain. The fact is, no one but the Grateful Dead can perform a Grateful Dead song, so if you want the experience and not its thin projection, you have to buy a ticket from us. In other words, our intellectual property protection derives from our being the only real-time source of it.

Barlow, *supra* note 11, at 84.

410. *See* Ku, *supra* note 11, at 309–10 (citing George Lucas to illustrate how "secondary markets can be more lucrative [for the artist] than the right to reproduce and distribute content"); *see also* Peter K. Yu, Note, *Fictional Persona Test: Copyright Preemption in Human Audiovisual Characters*, 20 CARDOZO L. REV. 355, 356–57 (1998) (describing merchandising as "a multi-billion dollar business"). As Raymond Ku pointed out:

> The vast majority of artists do not earn their income from the sale and distribution of music. Rather, they earn their income from the fame and publicity that go with the distribution of music. Ticket sales, T-shirt sales, and commercial endorsements

examples demonstrated, "file trading can spur demand for live public performances, broadcasts, webcasts, merchandising,"[411] commercial licenses and other musical products, including CDs and DVDs.[412]

Unfortunately, the ancillary service model favors those artists and musicians who can sell performances and products. Good-looking artists with limited musical talent may prosper at the expense of highly talented musicians with mediocre looks. In this era of blockbuster shows, the pop music audience may prefer perfection and entertainment to authenticity.[413] The ancillary service model may therefore overreward lip-synched performances, pre-recorded sound, and high-tech tricks that correct artists' vocal errors.

The third alternative model is home production. Digital technology and the Internet have enabled every artist and musician to become a composer, sound engineer, producer, publisher, and distributor (or even critic). They have also greatly improved the quality of the copyrighted work. By means of computer game engines, for example, users can now make their own feature machinima movies without having to buy costly equipment, rent spectacular locations, or hire glamorous actors.[414] They

---

> are all a function of an artist's popularity. By facilitating the distribution of music, [P2P networks] and the Internet in general can be useful tools for increasing an artist's ability to earn revenue as a result of fame. This is especially beneficial to new or non-mainstream artists who are otherwise unable to capture the public's attention through more traditional media.

Ku, *supra* note 11, at 311.

411. Netanel, *Noncommercial Use Levy*, *supra* note 11, at 49.

412. *See* DIGITAL DILEMMA, *supra* note 11, at 79; *cf.* OBERHOLZER & STRUMPF, *supra* note 15 (showing that file sharing has only had a limited effect on record sales).

413. When interviewed about Beyoncé's partial lip-synched performance in the 2003 MTV Video Music Awards, in which she began her performance by descending head first from the ceiling, an audience member responded, "Tell me, who can sing hanging on a harness upside-down? . . . I'd rather her not ruin my favorite song and just put on a good show." Chris Nelson, *Lip-Synching Gets Real*, N.Y. TIMES, Feb. 1, 2004, § 2, at 1. Interestingly, lip-synching began as a result of union regulations. As historian Marc Weingarten explained:

> No one could quite figure out what sort of royalties singers deserved for a live TV performance, so in the early days they just faked it. Later, the practice continued out of sheer expediency. On "American Bandstand" and most variety shows of the 1960's, vocals and instrumentals were all faked; Keith Moon, the drummer for the Who, famously registered his contempt for the custom by flubbing his part on the Smothers Brothers' show.

Id. (quoting MARC WEINGARTEN, STATION TO STATION: THE SECRET HISTORY OF ROCK 'N' ROLL ON TELEVISION (2000)).

414. *See* Matthew Mirapaul, *Computer Games as the Tools for Digital Filmmakers*, N.Y. TIMES, July 22, 2002, at E2. As *The New York Times* described:

> A digital Walt Disney who wants to make a machinima film will start with a game engine, the software that generates the virtual 3-D environment in which a game like Quake II is played. This is not unusual because some game developers

can also determine how they want to distribute the movies and whether to release them for free or under a creative commons license.

However, home production has serious limitations. While it may not be necessary to spend hundreds of millions of dollars to produce a good song or movie, homemade music and movies would not satisfy even the existing public demand. Moreover, a multimillion-dollar blockbuster does not necessarily lack artistic value; *The Lord of the Rings*, for example, not only enjoyed box office success but also garnered international critical acclaim.[415]

Although alternative models provide novel ways to address the unauthorized copying problem, commentators and copyright holders remain skeptical of these untested models and wary of overturning the existing copyright system with which our culture is closely intertwined. Until we have a better model to protect copyrights, the prevailing wisdom is to maintain the status quo. When Congress undertook a critical examination of the patent system, one of its experts, Fritz Machlup, famously remarked:

> If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.[416]

What Professor Machlup observed about the patent system seems to hold true for copyrights in the digital context: If we did not extend copyright protection to digital works, it would be irresponsible, on the basis of

---

have made parts of their software publicly accessible, allowing players to modify a game. For instance, one might put a terrorist's head on an opponent's body.

But machinima directors go a step further, discarding the game's out-of-the-box elements in favor of their own characters, scenery, story line and dialogue. What remains is the game's underlying animation technology, which is really a stage on which an alien Amberson or a cartoon cat person could cavort. More than one person can use the same virtual space simultaneously, each one guiding his character through a scene while speaking its lines. A designated cinematographer chooses camera angles, adjusts the lighting and records the action.

Id.

415. Sharon Waxman, *"Lord of the Rings" Dominates the Oscars*, N.Y. TIMES, Mar. 1, 2004, at E1 (reporting that the *Lord of the Rings* "has taken in a billion dollars at the box office" while taking the Oscars for best picture, best director, film editing, art direction, visual effects, makeup, sound mixing, costume design, best adapted screenplay, best original score, and best original song).

416. FRITZ MACHLUP, AN ECONOMIC REVIEW OF THE PATENT SYSTEM, STUDY NO. 15 OF THE SUBCOMM. ON PATENTS TRADEMARK AND COPYRIGHT OF THE S. COMM. ON THE JUDICIARY 80 (1958).

our present knowledge of its economic consequences, to recommend instituting one. But since we have already extended such protection, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.

I. The Argument for a Range of Solutions

Each of the models discussed above has its benefits and limitations, and each of them targets only part of the unauthorized copying problem. The best system for policymakers to adopt may therefore involve a combination of these proposals. For example, some European countries combine the compulsory licensing model with the alternative compensation model by setting aside a certain percentage of the levy funds for specified social and cultural purposes and for the nurturing of new authors.[417] Jessica Litman has combined three of the models in her proposal for "a music space that resembles the current digital information space in the ubiquity of music it contains and the ease with which music may be shared, and that we should devise a combination of blanket fees or levies designed to compensate the creators of the music we exchange."[418] As she explained:

> In order to achieve the breadth and diversity of music (and the community of consumers who enjoy it) that has evolved in the Internet information space, we will need to rely on consumer-to-consumer dissemination as well as licensed downloads or streams. If we as consumers want to pay for the music we exchange, we need some form of blanket fee or levy to enable us to do so. Because some creators and copyright owners find the idea of consumer-to-consumer dissemination unacceptable, I suggest that we devise a way to allow them to withhold their music from the system. To discourage them from electing that option, I believe we should optimize the legal infrastructure for sharing. I've drawn the details of that infrastructure with an eye toward recapturing some of the lost advantages of notice and indivisibility.[419]

While Professor Litman's proposal encourages copyright holders to participate in the system, it also allows them to choose what content to put in. In particular, the proposal includes an opt-out mechanism that allows copyright holders to utilize digital rights management to "exclude their works from the network and enable consumers to quickly and

417. *See* Lunney, *supra* note 11, at 915.
418. Litman, *Sharing and* Stealing, *supra* note 11, at 40.
419. *Id.* at 40–41.

painlessly ascertain that those works may not lawfully be shared."[420] Because the Copyright Act grants copyright holders the right to withhold their works from distribution in a manner they find inefficient, inexpedient, and unacceptable, it is important that any solution policymakers select, be it Litman's proposal or some other system, allow record companies to determine whether they want to participate or withhold their music from the system.[421]

There is no panacea for the unauthorized copying problem. To reduce the economic threat posed by P2P technologies, all stakeholders in the copyright system—industry, consumers, and policymakers—must understand the different models and think hard about how best to apply them in light of their needs, goals, and interests. They must also take into account the decentralized nature of P2P networks, the evolving technology, and the ever-changing market structure and conditions. Instead of offering one solution, policymakers should consider a range of solutions. As David Post put it passionately, "The invisible hand may have many deficiencies, but the one thing that it does best . . . is to place before members of the public a diverse set of offerings in response to the diverse needs and preferences of that public."[422]

A comprehensive solution to the unauthorized copying problem will include a set of solutions with a variety of characteristics. First, it will consist of a mix of measures to solve both short- and long-term problems. Some of the above proposals are well suited to address immediate concerns but are unlikely to change social norms in the digital copyright world. Nevertheless, these proposals are worthwhile because they will pave the way for measures that require more time, effort, and resources to take effect, such as public education and market development.

Second, as many of the proposals are interim fixes that are likely to become obsolete as technology evolves, the industry must be prepared to migrate from one regime to another, or even to adjust to living with many different regimes at the same time. As Lawrence Lessig cautioned in his book *Free Culture*:

> Policy makers should not make policy on the basis of technology in transition. They should make policy on the basis of where the technology is going. The question should not be, how should the law regulate sharing in this world? The question should be, what law will

420. *Id.* at 45.

421. *See id.* (noting the importance that the system "adopt[s] a legal architecture that encourages but does not compel copyright owners to make their works available for widespread sharing over digital networks").

422. David G. Post, *What Larry Doesn't Get: Code, Law, and Liberty in Cyberspace*, 52 STAN. L. REV. 1439, 1454 (2000) [hereinafter Post, *What Larry Doesn't Get*].

> we require when the network becomes the network it is clearly becoming? That network is one in which every machine with electricity is essentially on the Net; where everywhere you are—except maybe the desert or the Rockies—you can instantaneously be connected to the Internet. Imagine the Internet as ubiquitous as the best cell-phone service, where with the flip of a device, you are connected.
>
> . . . .
>
> . . . The "problem" with file sharing—to the extent there is a real problem—is one that will increasingly disappear as it becomes easier to connect to the Internet. It thus is an extraordinary mistake for policymakers today to be "solving" this problem in light of a technology that will be gone tomorrow. The question should not be how to regulate the Internet to eliminate file sharing. (The Net will evolve that problem away.) The question instead should be how to assure that artists get paid, during this transition between twentieth-century models for doing business and twenty-first-century technologies.[423]

As technologies advance, the threat to copyright holders from P2P technology is likely to diminish. Mobile-to-mobile ("M2M") technologies requiring only cellular telephones are already in place that will make file sharing more widely available to consumers, especially in less developed countries, where the cost of fixed-line telephone service is prohibitive. Moreover, technologies that allow individuals to transfer copyrighted works from one entertainment system to another are on the horizon. If policymakers focus on today's technologies, they will always be behind and can only play catch-up—a game which they cannot win, given the sluggish pace of the legislative process.

---

423. LAWRENCE LESSIG, FREE CULTURE 297–99 (2004); *see also* Gervais, *supra* note 300 (noting the need to find "solutions appropriate for all those involved in the creation, production, dissemination and use of copyrighted material" if P2P is here to stay). In an earlier article written in the early days of the Internet, Professor Lessig made a similar point, which Justice Souter found helpful in *Denver Area Educational Telecommunications Consortium, Inc. v. FCC*, 518 U.S. 727, 777 (1996) (Souter J., concurring) (quoting Lawrence Lessig, *The Path of Cyberlaw*, 104 YALE L.J. 1743, 1754 (1995)). As Professor Lessig wrote:

> [I]f we had to decide today, say, just what the First Amendment should mean in cyberspace, my sense is that we would get it fundamentally wrong. . . . A prudent Court would let these issues evolve, long into this revolution, until the nature of the beast became a bit more defined. If there is sanction to intervene, then it is simply to assure that the revolution continue, not to assure that every step conforms with the First Amendment as now understood.

Lessig, *The Path of Cyberlaw*, *supra*, at 1745, 1754.

The European Union has already learned this lesson of flexibility. Its Directive 2001/29/EC on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society takes into account the interim nature of legislative solutions and the possibility of multiple solutions. Article 5.2(b) specifies that the calculation of the amount of fair compensation must take into account both "the application [and] non-application of technological measures."[424] As Bernt Hugenholtz and his colleagues explained, "This provision suggests a gradual phasing-out of levies on digital media or equipment, as digital rights management systems enable content owners to control private copying, and set conditions of private use, at their discretion."[425]

Third, in crafting the solution, the industry must take into account the Internet's structural resistance to control and its immutable characteristics as a network. The architecture of the Internet can constrain illegal activities, but it can also make otherwise legal activities difficult, costly, or even impossible to conduct. For example, a proposal that imposes bandwidth levies based on usage volume will not necessarily reduce the cross-subsidization problem associated with collective licenses.[426] Instead, it may create distortionary effects that favor the consumption of low-bandwidth media, such as text files, over high-bandwidth media, such as music or movie files.[427] Such a proposal would also force those who share homemade movies with their friends to subsidize—at times heavily—those downloading copyrighted songs and videos.

Policymakers should also consider the changing social norms in the digital copyright world and create solutions that meet the changing needs of consumers to conduct activities in cyberspace that they used to conduct only in real space. Napster succeeded because it supplied a market solution to an emerging demand. As one may recall, Shawn Fanning was inspired to create Napster by his college roommate's frustration in searching for MP3s on the Web.[428] Napster responded to the market instead of chasing it.

---

424. EC Information Society Directive, *supra* note 278, art. 5.2(b).

425. HUGENHOLTZ ET AL., *supra* note 278, at ii.

426. See discussion *supra* Part III.A for a discussion of the cross-subsidization problem.

427. *See* Eckersley, *supra* note 11, at 107.

428. As one commentator explained:

> People wanted something like Napster—so Fanning did his best to come up with the goods. It is a rare example of supply matching demand in technology, which is why Napster simply cannot be ignored. Usually supply comes first and then its creators wonder why the general public isn't smart enough to understand its potential. Suppliers often whine that the public doesn't understand their product or service and "needs educating" but at the end of the day the public will buy only those things that improve the quality of their lives, or save them time or money.

Moreover, flexible solutions may allow entrepreneurs to develop products and services that directly and efficiently capture the value of content uses which, under present copyright law, consumers pay for only indirectly and inefficiently. In economic terms, such changes may help to overcome the problem of "indirect appropriability," which Stan Liebowitz nicely illustrated by the example of CD pricing in the days when car stereos played only cassette tapes:

> Assume that each and every purchaser of a compact disc makes a single audio-cassette copy to play in their automobile . . . [and] that this copying, although illegal, is unstoppable. . . . . Since each original CD will have a copy made from it, and since it is reasonable to infer that the consumers of originals place some value on the ability to make a copy, each consumer's willingness to pay for the original CD is higher than it would otherwise be. The copyright owner can capture some of this additional value by charging a higher price for the CD.[429]

There is ample evidence that if such a product or service is well designed to satisfy a growing demand, consumers are willing to pay a premium for it. Shortly before the dot-com crash, a few visionary (and, ironically, now defunct) companies offered exciting new services that were well tailored to emerging consumer needs. For example, musicmaker.com created custom-made CDs for users by letting them select tracks from different artists.[430] Hithive.com allowed customers to invite up to twenty-five friends to listen to selected recordings for a limited time while preventing users from distributing copies.[431] And Mojo Nation required users to contribute resources to the community to earn Mojo, the currency used in file-sharing transactions.[432] By doing so, the service induced accountability and responsibility while ridding the network of freeloaders.

Today, the recording industry is trying very hard to reinvent itself. Consumers of music and videos now have many more choices than they did even a few years ago. Where once they had to purchase a complete platter of songs pre-selected by the record company, consumers can now order their music à la carte.[433] Eventually, however, they will demand

---

TREVOR MERRIDEN, IRRESISTIBLE FORCES: THE BUSINESS LEGACY OF NAPSTER & THE GROWTH OF THE UNDERGROUND INTERNET 170 (2001).

429. LIEBOWITZ, *supra* note 237, at 151 (footnote omitted).

430. *See* MERRIDEN, *supra* note 428, at 114.

431. *See id.*

432. *See id.* at 138–39 (describing Mojo Nation).

433. As Hillary Rosen, former chairman of the RIAA, noted:

"all you can eat"[434] or even welcome a potluck. Although the recording industry has shifted from the album model to the singles model, it has yet to fully embrace the licensing model by putting together reasonably priced, tailor-made subscription packages that meet the needs of its customers. Until the industry satisfies consumer needs, illegal online file trading—whether through existing P2P networks or the underground Darknet—is likely to continue.

IV. RETHINKING THE UNAUTHORIZED COPYING PROBLEM

The emergence of the Internet and new communications technologies spurred commentators to devise frameworks to regulate cyberspace and manage the expansion of intellectual property rights in the digital environment. For example, David Johnson and David Post articulated the necessity to allow Internet users to create new laws and institutions best suited to the users' needs and customs.[435] Lawrence Lessig emphasized the regulatory power of code and explained how the Internet's architecture can affect the enjoyment of our constitutional freedoms and fundamental rights in cyberspace.[436] James Boyle alerted us to the increasing privatization of the public domain, which he called the "second enclosure movement," and underscored the need for a new politics of intellectual property.[437]

Very few commentators, however, have come up with new ideas about how to reconceptualize the unauthorized copying problem. This Part presents three thought experiments that compare the ongoing P2P file-sharing wars to (1) a battle for self-preservation between humans and machines, (2) an imaginary World War III, and (3) the conquest of Generation Y. These experiments seek to remind readers that law can supply

---

> I used to say that the record business was like a soft-drink company that sold its products in nothing but 64-ounce bottles, because our product was principally the full-length album. Well, thanks to electronic distribution through multiple types of networks with varied business models, we now have the equivalent of cans and six-packs and fountain drinks. Consumers can buy digital music à la carte or sign up for subscription services offering unlimited downloads, and they can take their tunes with them wherever they go.

Hillary Rosen, *Why the Industry Loves Tech*, BUSINESS 2.0, May 2003, *quoted in* COMM. FOR ECON. DEV., *supra* note 236, at 70.

434. Shirky, *supra* note 319, at 33 (discussing the all-you-can-eat model).

435. *See* David R. Johnson & David G. Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996).

436. *See* LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE (1999) [hereinafter LESSIG, CODE].

437. *See* James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L.J. 87 (1997); *see also* Boyle, *The Second Enclosure Movement*, *supra* note 9, at 33.

only a partial solution to the unauthorized copying problem. Thus, policymakers also need to focus attention on market forces, technological architectures, and social norms if they are to create an effective solution. As Professor Lessig observed, each of these four factors constrains human action, and the interplay of these factors governs human behavior in cyberspace: "Norms constrain through the stigma that a community imposes; markets constrain through the price that they exact; architectures constrain through the physical burdens they impose; and law constrains through the punishment it threatens."[438]

In the P2P context, each of these constraints exerts its influence, and each of them plays an important role (see fig. 1). None of them alone determines human behavior, however. Sometimes the law is more important, while at other times the technological architecture takes control. Thus, it is vital that policymakers and commentators take a holistic view of the P2P file-sharing controversy and consider all four constraints together to develop solutions that go to the heart of the unauthorized copying problem.

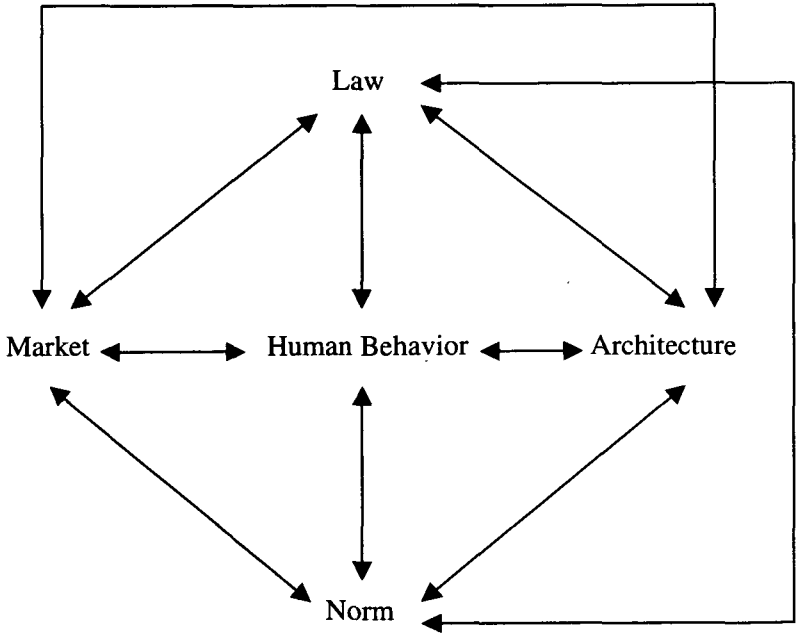

Fig. 1 Constraints on Behavior in Cyberspace

438. LESSIG, CODE, *supra* note 436, at 88.

A. The Battle Between Humans and Machines

The P2P file-sharing wars resemble a battle for self-preservation between humans and machines. Computers, digital technology, and file-sharing networks are disrupting the existing distribution model, threatening to permanently eliminate hundreds of thousands of jobs.[439] Through the Internet and P2P technologies, music can now be distributed directly from artists to consumers. Intermediaries are no longer needed, and factories, warehouses, delivery trucks, and record stores have become largely redundant.[440]

This dismal picture does not, however, reflect the entire landscape. True, humans are losing jobs to machines, but the digital revolution has created many new jobs for people. This is what Joseph Schumpeter described as "creative destruction,"[441] a revolutionary process through which the old economic structure is demolished at the same time as the foundations of a new structure are being built. As Professor Schumpeter declared in his seminal work *Capitalism, Socialism, and Democracy*:

> Capitalism . . . is by nature a form or method of economic change and not only never is but never can be stationary. And this evolutionary character of the capitalist process is not merely due to the fact that economic life goes on in a social and natural environment which changes and by its change alters the data of economic action; this fact is important and these changes (wars, revolutions and so on) often condition industrial change, but they are not its prime movers. Nor is this evolutionary character due to a quasi-automatic increase in population and capital or to the vagaries of monetary systems, of which exactly the same thing holds true. The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new con-

---

439. *See* Simon Beavis, *Record Firms Threaten Big Employers with Action to Combat Piracy*, INDEP. (London), Jan. 21, 2003, at 19 (reporting that the head of the International Federation of the Phonographic Industry (IFPI) had indicated that music piracy had threatened 600,000 jobs in the European music industry).

440. It is no surprise that Tower Records filed for bankruptcy in February 2004. *See* Janny Scott, *Big Music Retailer Is Seeking Bankruptcy Protection*, N.Y. TIMES, Feb. 10, 2004, at C1 (reporting Tower Records' filing for Chapter 11 bankruptcy protection).

441. JOSEPH SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 81 (Harper Collins 1975). As Professor Ku explained:

> [Creative destruction] "strikes not at the margins of the profits and the outputs of existing firms but at their foundations and their lives." In this process of creative destruction, digital technology and the Internet strike at the foundation of copyright and the industries built upon copyright by eliminating the need for firms to distribute copyrighted works and for exclusive property rights to support creation.

Ku, *supra* note 11, at 269 (quoting SCHUMPETER, *supra*, at 84).

> sumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates.[442]

A recent historical example of creative destruction at work in the entertainment industry concerns the videotape recorder. Testifying before a House subcommittee in 1982, Jack Valenti, then-president of the Motion Picture Association of America, predicted that videocassettes would spell the death of the movie industry. The videotape recorder, he declared, "is to the American film producer and the American public as the Boston Strangler is to the woman alone."[443] Valenti's widely cited prediction was famously incorrect. Videocassettes not only did not strangle the motion picture industry, but they transformed it by bringing new revenues and business opportunities.[444] Peer-to-peer networks may do likewise. Instead of strangling the entertainment industry and threatening the creation of copyrighted works, these networks may open new markets, create new niches and products, and attract new audiences.[445]

---

442. SCHUMPETER, *supra* note 441, at 82–83.

443. *Home Recording of Copyrighted Works: Hearings on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705 Before the Subcomm. on Courts, Civil Liberties, and the Admin. of Justice of the House Comm. on the Judiciary*, 97th Cong. 8 (1982) (testimony of Jack Valenti, President of the MPAA).

444. Copyright holders are always paranoid about the threat of new technologies:

> In 17th century England, the emergence of lending libraries was seen as the death knell of book stores; in the 20th century, photocopying was seen as the end of the publishing business, and videotape the end of the movie business .... Yet in each case, the new development produced a new market far larger than the impact it had on the existing market. Lending libraries gave inexpensive access to books that were too expensive to purchase, thereby helping to make literacy widespread and vastly increasing the sale of books. Similarly, the ability to photocopy makes the printed material in a library more valuable to consumers, while videotapes have significantly increased viewing of movies. But the original market in each case was also transformed, in some cases bringing a new cast of players and a new power structure.

DIGITAL DILEMMA, *supra* note 11, at 78–79.

445. As the recent National Research Council study explained:

> Some suggest that the ability to download music will increase sales by providing easy purchase and delivery 24 hours a day, opening up new marketing opportunities and new niches. For example, the low overhead of electronic distribution may allow artists themselves to distribute free promotional recordings of individual live performances, while record companies continue to focus on more polished works for mass release. Digital information may also help create a new form of product, as consumers' music collections become enormously more personalizable (e.g., the ability to create personalized albums that combine individual tracks from multiple performers).

Id. at 79.

Every time a new technology emerges, it is inevitable that some jobs will be lost. In the past few decades, hundreds of thousands of jobs disappeared in such old-fashioned industries as automobiles, coal, and rubber, and steel. The steel industry, for example, has faced serious competition from manufacturers in Europe, Asia, and South America.[446] Cost-saving technology and the acquisition of new blast furnaces have also reduced the demand for steelworkers. With less than an eighth of the original workforce, steel manufacturers can now produce almost as much steel as they did thirty years ago.[447] As a result, many of them have restructured their companies with massive layoffs, tearing apart families and communities and forcing workers to relocate to other job markets or acquire skills in a different trade.

Indeed, history has revealed the need to change business models. At the turn of the twentieth century, the Dow Jones Industrial Average—"the great financial symbol of U.S. business and manufacturing"[448]—included Amalgamated Copper, American Sugar, Tennessee Coal & Iron, U.S. Rubber, and U.S. Steel.[449] Today, the index features such high-tech companies as 3M, Boeing, Hewlett-Packard, IBM, Intel, and Microsoft.[450]

Transition is never easy and always painful. Nevertheless, no matter how painful it is, there is no legal entitlement to an old business model or obsolete jobs. As the science fiction writer Robert Heinlein reminded us in his first short story *Life-Line*:

> There has grown up in the minds of certain groups in this country the notion that because a man or a corporation has made a profit out of

---

446. *See generally* PHILIPPE LEGRAIN, OPEN WORLD: THE TRUTH ABOUT GLOBALIZATION 26–31 (2004) (describing the woes of the United States steel industry). In March 2002, the Bush Administration imposed tariffs of up to thirty percent on steel imported from Europe, Asia, and South America to provide short-term relief to struggling American steel makers. David E. Sanger, *Bush Puts Tariffs of as Much as 30% on Steel Imports*, N.Y. TIMES, Mar. 6, 2002, at A1. A year later, the WTO Dispute Settlement Panel declared that the tariffs violated the WTO Agreement on Safeguards. United States—Definitive Safeguard Measures on Imports of Certain Steel Products—Final Reports of the Panel, WTO Docs. WT/DS248/R, WT/DS249/R, WT/DS251/R, WT/DS252/R, WT/DS253/R, WT/DS254/R, WT/DS258/R, WT/DS259/R (July 11, 2003), *available at* http://docsonline.wto.org/DDFDocuments/t/WT/DS/248R-00.doc (last visited Mar. 13, 2005). The Bush administration finally removed the tariffs in December 2003. Richard W. Stevenson & Elizabeth Becker, *After 21 Months, Bush Lifts Tariff on Steel Imports*, N.Y. TIMES, Dec. 5, 2003, at A1.

447. *See* LEGRAIN, *supra* note 446, at 29.

448. Bob Greene, *A Mouse Replaces Men of Steel*, CHI. TRIB., May 20, 1991, at 1C; *see also* J. Thomas McCarthy, *Intellectual Property—America's Overlooked Export*, 20 U. DAYTON L. REV. 809, 809–10 (1995) (discussing Greene's observation).

449. Dow Jones Industrial Average History 3, *at* http://www.djindexes.com/mdsidx/downloads/DJIA_Hist_Comp.pdf (last visited Mar. 13, 2005).

450. *Id.* at 14.

> the public for a number of years, the government and the courts are charged with the duty of guaranteeing such profit in the future, even in the face of changing circumstances and contrary public interest. This strange doctrine is not supported by statute nor common law. Neither individuals nor corporations have any right to come into court and ask that the clock of history be stopped, or turned back, for their private benefit.[451]

Today, P2P file-sharing technologies have facilitated a new distribution model. It is time that the entertainment industry recognize this change and take advantage of its potential. As Professor Schumpeter noted in his observation of the creative destruction process: "Every piece of business strategy acquires its true significance only against the background of process and within the situation created by it."[452] The key to success is not how a firm, or in this case an industry, protects its existing business model, but how it adapts that model to new conditions and technological environments.

When the old Napster first gained popularity several years ago, the entertainment industry could have adapted to the online distribution model. The industry missed its initial opportunities, but it is not too late to change. Intermediaries are not entirely redundant in the digital world.[453] Due to scarcity of time[454] and the capital-intensive nature of many of these services, intermediaries—especially trusted ones—have a renewed significance in the information age. For example, many users will not have time to slog through a morass of undifferentiated poetic

---

451. Robert A. Heinlein, Life-Line (1939), *quoted in* Alderman, *supra* note 81, at 131.

452. SCHUMPETER, *supra* note 441, at 83–84.

453. As Daniel Gervais put it: "Information no longer wants to be free; it wants to be found. In this scenario, there is a great role for intermediaries, but not for property." Gervais, *supra* note 300, at 56.

454. As Jack Balkin explained:

> All communications media produce too much information. So in that sense, all media have a problem of scarcity. But the scarcity is not a scarcity of bandwidth. It is a scarcity of audience. There is only so much time for individuals to assimilate information. And not only is there too much information, some of it is positively undesirable. As a result, all media give rise to filtering by their audience, or, more importantly, by people to whom the audience delegates the task of filtering.

J.M. Balkin, *Media Filters, the V-chip, and the Foundations of Broadcast Regulation*, 45 DUKE L.J. 1131, 1148 (1996); *see also* GOLDSTEIN, *supra* note 83, at 214 (stating that "time will be the scarcest resource in the digital future"); Dyson, *supra* note 11, at 6 (noting that "[i]n the end, the only unfungible, unreplicable value in the new economy will be people's presence, time, and attention"); Herbert A. Simon, *Designing Organizations for an Information-Rich World*, *in* COMPUTERS, COMMUNICATIONS, AND THE PUBLIC INTEREST 37, 40–41 (Martin Greenberger ed., 1971) (stating that "a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it").

musings, home movies, and garage band recordings. They will need intermediaries, such as entertainment companies, to screen works for them. Moreover, P2P networks do not affect every sector of the entertainment industry, and specialty music stores will remain successful despite rampant file sharing.

B. Imaginary World War III

The second thought experiment involves an imaginary nuclear attack on decentralized U.S. military bases during the Cold War. Although commentators have tied the development of the Internet, in particular its funding, to the need for maintaining communications between strategic military and political sites in the event of a nuclear war, many commentators have explained why the nuclear threat had nothing to do with the origin of the network.[455] Regardless of its origin, the Internet has a unique architecture: it is "rudderless, decentralized, and transna-

---

455. As the authoritative *A Brief History of the Internet* recounted:

> The first recorded description of the social interactions that could be enabled through networking was a series of memos written by J.C.R. Licklider of MIT in August 1962 discussing his "Galactic Network" concept. He envisioned a globally interconnected set of computers through which everyone could quickly access data and programs from any site. In spirit, the concept was very much like the Internet of today. Licklider was the first head of the computer research program at DARPA [Defense Advanced Research Projects Agency], starting in October 1962. While at DARPA he convinced his successors at DARPA, Ivan Sutherland, Bob Taylor, and MIT researcher Lawrence G. Roberts, of the importance of this networking concept.
>
> . . . .
>
> In late 1966 Roberts went to DARPA to develop the computer network concept and quickly put together his plan for the "ARPANET," publishing it in 1967. At the conference where he presented the paper, there was also a paper on a packet network concept from the UK by Donald Davies and Roger Scantlebury of NPL [National Physical Laboratory]. Scantlebury told Roberts about the NPL work as well as that of Paul Baran and others at RAND. The RAND group had written a paper on packet switching networks for secure voice in the military in 1964. It happened that the work at MIT (1961–1967), at RAND (1962–1965), and at NPL (1964–1967) had all proceeded in parallel without any of the researchers knowing about the other work.

Barry M. Leiner et al., *A Brief History of the Internet*, *at* http://www.isoc.org/internet/history/brief.shtml (last visited Mar. 14, 2005). For an interesting discussion of the origins of the Internet, see generally TIM BERNERS-LEE, WEAVING THE WEB: THE ORIGINAL DESIGN AND ULTIMATE DESTINY OF THE WORLD WIDE WEB BY ITS INVENTOR (1999); Katie HAFNER & MATTHEW LYON, WHERE WIZARDS STAY UP LATE: THE ORIGINS OF THE INTERNET (1996); JOHN NAUGHTON, A BRIEF HISTORY OF THE FUTURE: FROM RADIO DAYS TO INTERNET YEARS IN A LIFETIME (2000); Leiner et al., *supra*.

tional,"[456] and its packet-switching feature has made government regulation difficult.[457]

If the entertainment industry is to succeed, it must develop a new war strategy that takes into account the network's decentralized nature and other unique features. So far, the industry has explored the use of computer software to launch viral attacks on P2P networks. In July 2002, Representative Howard Berman introduced the Peer to Peer Piracy Prevention Act, which, if enacted, would have allowed movie and record companies to hack into personal computers and P2P networks when they suspected that infringing materials were being circulated.[458] The next year, at a Senate Judiciary Committee hearing,[459] Senator Orrin Hatch was reported to have made the shocking remark that "he favor[ed] developing new technology to remotely destroy the computers of people who illegally download music from the Internet."[460] While it is too early to

---

456. Neil Weinstock Netanel, *Cyberspace 2.0*, 79 TEX. L. REV. 447, 448 (2000) (reviewing LESSIG, CODE, *supra* note 436; ANDREW L. SHAPIRO, THE CONTROL REVOLUTION: HOW THE INTERNET IS PUTTING PEOPLE IN CHARGE AND CHANGING THE WORLD WE KNOW (1999)).

457. As Michael Froomkin explained:

> Three technologies underlie the Internet's resistance to control. First, the Internet is a *packet switching network*, which makes it difficult for anyone, even a government, to block or monitor information flows originating from large numbers of users. Second, users have access to powerful military-grade cryptography that can, if used properly, make messages unreadable to anyone but the intended recipient. Third, and resulting from the first two, users of the Internet have access to powerful anonymizing tools. Together, these three technologies mean that anonymous communication is within reach of anyone with access to a personal computer and a link to the Internet unless a government practices very strict access control, devotes vast resources to monitoring, or can persuade its population (whether by liability rules or criminal law) to avoid using these tools.

A. Michael Froomkin, *The Internet as a Source of Regulatory Arbitrage*, *in* BORDERS IN CYBERSPACE: INFORMATION POLICY AND THE GLOBAL INFORMATION INFRASTRUCTURE 129, 129–30 (Brian Kahin & Charles Nesson ed., 1997) (footnote omitted).

458. Peer to Peer Piracy Prevention Act, H.R. 5211, 107th Cong. (2002); *see also* Rep. Howard L. Berman, *The Truth About the Peer to Peer Piracy Prevention Act: Why Copyright Owner Self-Help Must Be Part of the P2P Piracy Solution*, FINDLAW'S WRIT: LEGAL COMMENTARY (Oct. 1, 2002), *at* http://writ.news.findlaw.com/commentary/20021001_berman.html (explaining the need for the legislation); Julie Hilden, *Going After Individuals for Copyright Violations: The New Bill That Would Grant Copyright Owners a "License to Hack" Peer-to-Peer Networks*, FINDLAW'S WRIT: LEGAL COMMENTARY (Aug. 20, 2002), *at* http://writ.news.findlaw.com/hilden/20020820.html (criticizing the legislation).

459. *The Dark Side of a Bright Idea: Could Personal and National Security Risks Compromise the Potential of P2P File-Sharing Networks?: Hearing Before the S. Comm. on the Judiciary*, 108th Cong. (2003). The hearing, which was held on June 17, 2003, focused on the risks posed by P2P networks to personal privacy and national security.

460. Ted Bridis, *Senator Favors Really Punishing Music Thieves*, CHI. TRIB., June 18, 2003, at 2C (reporting about Senator Hatch's remark). According to this newspaper report, Senator Hatch reasoned that damaging someone's computer "may be the only way you can

evaluate these abandoned strategies, commentators and civil liberties groups have already expressed concerns about their intrusion on privacy and constitutional rights.[461]

Such strategies may backfire on the entertainment industry, as most consumers of entertainment products are also creators and copyright holders. It is hard to imagine that entertainment companies would be very welcoming if their competitors and customers snooped on their networks looking for infringing materials. It is also unlikely that Congress would be able to enact a statute that protects major entertainment companies while discriminating against individual copyright holders and small media entrepreneurs.

Commentators are fond of quoting Stewart Brand's hacker motto "Information wants to be free," but they often ignore the very next line from his book *The Media Lab*, "Information also wants to be expensive."[462] As Brand explains:

> Information wants to be free because it has become so cheap to distribute, copy, and recombine—too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, "intellectual property," and the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better.[463]

Recently, the entertainment industry has turned to spoofing to fight the unauthorized copying problem.[464] By uploading decoy files onto the networks, the industry hopes to undermine the spirit of cooperation among users and create "a norm of free-riding"[465] that prompts users to blame each other for spoofed files and wasted downloading time.[466] The

---

teach somebody about copyrights." *Id.*; *see also* Dwight Silverman, *Senator's "Extreme" Cure for Piracy Is Unconstitutional*, HOUS. CHRON., June 21, 2003, Business Sec., at 1. The senator's prepared statement for the hearing is available at http://judiciary.senate.gov/member_statement.cfm?id=623&wit_id=51 (last visited March 3, 2005).

461. *See* Sonia K. Katyal, *A War on CD Piracy, a War on Our Rights*, L.A. TIMES, June 27, 2003, at B17.

462. STEWART BRAND, THE MEDIA LAB: INVENTING THE FUTURE AT MIT 202 (1987), *quoted in* Ian R. Kerr et al., *Technical Protection Measures: Tilting at Copyright's Windmill*, 34 OTTAWA L. REV. 7, 38 (2002).

463. *Id.*

464. *See* discussion *supra* Part III.D.

465. Strahilovitz, *supra* note 12, at 509.

466. *See id.* at 509–10. As Strahilevitz explained, P2P technologies are "charismatic codes" that have made the file-sharing community appear to individual users to be "far more cooperative than it really is." *Id.* at 508–09. "The architecture of the networks is such that although many users on the networks do not share, the networks create an appearance that sharing is the norm." *Id.* at 551.

industry hopes that the spoofed files will induce file-sharers to stop cooperating and instead undertake noncooperative behavior that makes P2P networks undesirable.[467]

In addition, the industry has explored ways to contain the network and halt the interchange of copyrighted contents by erecting fences, roadblocks, and speed bumps. No matter how much information wants to be free, it "does not flow in a vacuum, but in political space that is already occupied."[468] Legal regimes, norms, and rules therefore can determine what sorts of communities will thrive in cyberspace, how information will spread from one individual to another, and who can participate in the New Economy.

Code is law.[469] It defines the contours of the space in which individuals act and sets the conditions for human behavior. By regulating

---

467. *See id.* at 591. As Professor Strahilevitz explained:

> Given the open-source nature of the Gnutella applications for file-swapping, the record labels are free to create "patches" (or updates) to existing versions of Gnutella. The recording industry might find it worthwhile to develop and distribute software patches that expose users to the many free-riders on Gnutella and magnify the actions of those free-riders. For example, the program might prominently identify free-riders and those sharing very few files in response to search queries. Alternatively, the patch might prominently gather and display real time updates concerning the number of free-riders on the network and the median number of files being shared. Similarly, the record labels or their allies might release a Kazaa patch that either magnifies the extent of the free-riding on Kazaa, defaults users into free-riding, or, as the Kazaa Lite application has already done, allows free-riders to download files more efficiently than most file-sharers. In order to convince file-swappers to download these patches, the creators of these patches would need to create desirable improvements that enhance the experience of using these applications, and bundle these improvements with the un-charismatic code elements. If such patches were widely disseminated, the recording industry might effectively combat the distortion created by charismatic code. By providing file-swappers with a more realistic assessment of their peers or strengthening the appeal of free-riding, the recording industry might well prompt file-swappers to imitate the free-riding behavior that is still somewhat common on these networks.

Id. at 592.

468. ROBERT O. KEOHANE & JOSEPH S. NYE, POWER AND INTERDEPENDENCE 217 (3d ed. 2001).

469. *See generally* LESSIG, CODE, *supra* note 436; Tim Wu, *When Code Isn't Law*, 89 VA. L. REV. 679 (2003). For articles advocating the self-governance of cyberspace, see, for example, Johnson & Post, *supra* note 435; David G. Post, *Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace*, 1995 J. ONLINE L., *at* http://www.wm.edu/law/publications/jol/articles/post.shtml; I. Trotter Hardy, *The Proper Legal Regime for "Cyberspace,"* 55 U. PITT. L. REV. 993 (1994); Henry H. Perritt, Jr., *Cyberspace Self-Government: Town Hall Democracy or Rediscovered Royalism?*, 12 BERKELEY TECH. L.J. 413 (1997); Edward J. Valauskas, *Lex Networkia: Understanding the Internet Community*, 1 FIRST MONDAY (Oct. 7, 1996), *at* http://www.firstmonday.dk/issues/issue4/valauskas/index.html. *But see* Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV.

codes, governments therefore can regulate human behavior.[470] Nevertheless, some codes, like open source codes, are less regulable,[471] and thieves, pirates, and Robin Hoods thrive underground. Some governments may choose to sacrifice regulability for markets and growing economic prosperity,[472] while others may decide to forgo protection from some circumvention by picking the easy route of regulating network end points, rather than network architecture.[473]

1199 (1998) (disputing the need to distinguish between cyberspace and real-space transactions and advocating the need to ground cyberspace transactions in real-space laws).

470. As Professor Lessig explained in *Code and Other Laws of Cyberspace*:

> The software and hardware that make cyberspace what it is constitute a set of constraints on how you can behave. The substance of these constraints may vary, but they are experienced as conditions on your access to cyberspace. In some places (online services such as AOL, for instance) you must enter a password before you gain access; in other places you can enter whether identified or not. In some places the transactions you engage in produce traces that link the transactions (the "mouse droppings") back to you; in other places this link is achieved only if you want it to be. In some places you can choose to speak a language that only the recipient can hear (through encryption); in other places encryption is not an option. The code or software or architecture or protocols set these features; they are features selected by code writers; they constrain some behavior by making other behavior possible, or impossible. The code embeds certain values or makes certain values impossible. In this sense, it too is regulation, just as the architectures of real-space codes are regulations.

LESSIG, CODE, *supra* note 436, at 89.

471. *See id.* at 107 (noting that open source code is less regulable than closed source code).

472. In response to Professor Lessig's call for government intervention to preserve individual liberty and other foundational values in cyberspace, Professor Post argued that fundamental values in cyberspace can best be protected by the market. As he explained:

> Fundamental values are indeed at stake in the construction of cyberspace, but those values can best be protected by allowing the widest possible scope for uncoordinated and uncoerced individual choice among different values and among different embodiments of those values. We don't need "a plan" but a multitude of plans from among which individuals can choose, and "the market," and not action by the global collective, is most likely to bring that plenitude to us.
>
> . . . .
>
> . . . [I]f there are many different architectures, then there *is* choice about whether to obey these controls. If there are multiple architectures from which to choose, it is no longer correct to say that "nothing requires" booksellers to provide users the ability to browse for free; the market for bookstores, the existence of competing bookstores, and consumers' desire to browse do so. It is hardly nothing; these are the very same things that "require[]" the real-space booksellers that Lessig mentions to allow you to browse for free. And if there are diverse architectures of privacy, of identity, and of content protection laid before the public, why is it so obvious that we will end up choosing the one(s) that deny us those things that Lessig (and I) think are so important?

Post, *What Larry Doesn't Get*, *supra* note 422, at 1440, 1453–54.

473. *See* Michael Geist, *Cyberlaw 2.0*, 44 B.C. L. REV. 323, 348 (2003).

Since the emergence of the Internet, the Chinese government has tried hard to impose its information control policy on cyberspace.[474] Unfortunately, that policy was originally designed for traditional mass media and may be obsolete in the digital world. Thus, although Chinese authorities have repeatedly cracked down on cybercafes, handed out heavy jail sentences to online dissidents, implemented new restrictive laws and regulations, and censored political and nationalistic Web sites, access to Internet content remains relatively unrestricted in the country to all but jailed dissidents.[475]

Indeed, the Chinese authorities' heavy-handed tactics have backfired by heightening the cautiousness and sophistication of Chinese netizens. Antimonitoring technologies have proliferated, and Chinese users increasingly rely on proxy servers, offshore and mirror Web sites, and encrypted P2P systems to evade government detection, monitoring, and control. If the Chinese government is struggling to regulate the online behavior of its citizens, it is unlikely that the entertainment industry alone will achieve any better success.

Commentators may disagree whether the Cold War had anything to do with the origin of the Internet. It is not too far-fetched, however, to suggest that had a nuclear attack been launched, the Internet's decentralized architecture would have enabled the network to survive. If the entertainment industry is to wage war on P2P file sharing, it must devise a strategy that enables large-scale simultaneous attacks on multiple targets. Because of the Internet's decentralized architecture, anything less would simply be ineffective.

---

474. For a discussion of efforts by Chinese authorities to regulate the Internet, see generally Nina Hachigian, *China's Cyber-Strategy*, FOREIGN AFF., Mar./Apr. 2001, at 118; Jack Linchuan Qiu, *Virtual Censorship in China: Keeping the Gate Between the Cyberspaces*, 4 INT'L J. COMM. L. & POL'Y 1 (Winter 1999/2000), *at* http://www.ijclp.org/4_2000/pdf/ijclp_webdoc_1_4_2000.pdf; Jiang-yu Wang, *The Internet and E-Commerce in China: Regulations, Judicial Views, and Government Policies*, COMPUTER & INTERNET LAW., Jan. 2001, at 12; Peter K. Yu, *Barriers to Foreign Investment in the Chinese Internet Industry*, GIGALAW.COM (Mar. 2001), *at* http://www.gigalaw.com/articles/2001/yu-2001-03.html (discussing the regulation of the Internet industry in China; SHANTHI KALATHIL & TAYLOR C. BOAS, THE INTERNET AND STATE CONTROL IN AUTHORITARIAN REGIMES: CHINA, CUBA, AND THE COUNTERREVOLUTION (Carnegie Endowment for Int'l Peace Info. Revolution and World Pol. Project, Working Paper No. 21 2001), *available at* http://www.ceip.org/files/pdf/21KalathilBoas.pdf.

475. *See* Leonard R. Sussman, *The Internet in Flux*, *in* FREEDOM HOUSE, HOW FREE?: THE WEB & THE PRESS: THE ANNUAL SURVEY OF PRESS FREEDOM 4 (2001), *available at* http://www.freedomhouse.org/pfs2001/pfs2001.pdf.

C. The Conquest of Generation Y

The final thought experiment concerns Generation Y, a group of teenagers who neither understand copyright law nor see the benefits of complying with it. As I discussed elsewhere, there is a widening divide between copyright holders, who are eager to protect their interests, and the users of copyrighted works, who do not understand their stakes in the copyright system.[476] As a result, copyright piracy is rampant, and illegal file sharing has become the norm.

Children and teenagers cannot be expected to understand the economic plight of artists and songwriters. Before the advent of the Internet, their indifference did not matter to the recording industry, because their only connection to music products was retail purchases and consumption. Today, however, this attitude has become a problem for copyright holders, as the Internet has given kids ample opportunity to make high-quality reproductions of music, thus allowing them to acquire and distribute music free of charge. As they grow older and start working full-time, their perspective on copyright may change. They may come to empathize with artists and songwriters as they experience the pain of not getting paid for a hard day's work. As the rapper Eminem said candidly in his usual provocative style:

> Whoever put my s—t on the Internet, I want to meet that motherf—ker and beat the s—t out of him, because I picture this scrawny little d[—]khead going 'I got Eminem's new CD! I got Eminem's new CD! I'm going to put it on the Internet.' I think that anybody who tries to make excuses for that s—t is a f—king bitch. I'm sorry; when I worked 9 to 5, I expected to get a f—king paycheck every week. It's the same with music; if I'm putting my f—king heart and all my time into music, I expect to get rewarded for that. I work hard . . . and anybody can just throw a computer up and download my s—t for free. . . . If you can afford a computer, you can afford to pay $16 for my CD.[477]

Eminem seems not to have realized how the market actually works—*kids* may pay for CDs, but *parents* pay for the computer, which the kids use for free. Nonetheless, his comparison of recording efforts to working a nine-to-five job is something file-sharers can relate to when they grow up. In fact, file-sharers may see piracy differently after they see their musician friends struggle to stay out of the poorhouse because they are not receiving royalties or because they fail to earn recording

476. *See generally* Yu, *The Copyright Divide*, *supra* note 6.

477. ALDERMAN, *supra* note 81, at 114 (quoting Eminem as printed in *Wall of Sound*).

contracts as a result of rampant online file trading. Young aspiring musicians who themselves share files over the Internet may even learn their lessons from first-hand experience.

The industry can approach this lost generation of music users in two ways. First, it can disregard them and move on to Generation Z. Today's schoolchildren and college teenagers are unlikely to learn appropriate online conduct from their parents and teachers, who did not grow up in a digital environment—except for a small group of scientists, technophiles, and early computer enthusiasts. Indeed, many of these adults have limited computer literacy and use the Internet primarily for e-mail and online shopping. Even if they made a successful transition to the digital age, the nuances of the application of copyright law to online content are foreign to them. They are therefore ill equipped to teach children which Internet activities are legal and which ones are not, let alone to serve as role models.

Jessica Litman vividly illustrated this problem by describing an incident in her son's third-grade class.[478] The teacher asked the class to conduct online research on the alpine tundra. At the end of the period, she rewarded the students by giving each of them a CD containing the class's favorite songs, all downloaded from the Internet. Obviously, the teacher did not understand the difference between using online materials and reproducing copies of music. The teacher's action was troubling from the standpoint of copyright education: teachers are major role models for students, and actions such as this third-grade teacher's are likely to have more of an impact on the children than the many formal copyright pledges that school officials require students (and sometimes their parents) to sign.

Young file-sharers can also substantially affect each other's behavior through peer pressure and what social psychologists call *pluralistic ignorance*.[479] As Robert MacCoun explained, in ambiguous social situations,

---

478. Litman, *Sharing and Stealing*, *supra* note 11, at 23–25. *But see* Laura M. Holson, *Studios Moving to Block Piracy of Films Online*, N.Y. TIMES, Sept. 25, 2003, at A1 (discussing the role-playing activity "Starving Artist," in which "groups of students are encouraged to come up with an idea for a musical act, write lyrics and design a CD cover only to be told by a volunteer teacher their work can be downloaded free").

479. David Luban described in general how pluralistic ignorance affects human behavior:

> Evidently, we respond to situations by checking to see how other people respond, and their response in large measure determines how we perceive the situation and therefore how we ourselves will respond. And of course the phenomenon is reciprocal: as we watch the other, the other watches us. We reinforce each other, in wrong beliefs as well as accurate ones (a phenomenon psychologists call *pluralistic ignorance*). The shaping and reciprocal reinforcement of perception by seeing how others perceive the same thing constitutes the basic phenomenon of socially influ-

> we look to other people to help us define what's appropriate in a given situation. And we often infer from the fact that no one else is acting alarmed that there's nothing alarming going on . . . [as in the 1970s] when marijuana use became so prevalent that people acted as though it had been *de facto* legalized.[480]

Although students from Generation Y may privately believe it is wrong to trade copyrighted songs or movies on the Internet, they may pretend to support file swapping in public out of fear that they will be stigmatized for acting or speaking contrary to the norm they perceive their community to endorse. Such a pretense is dangerous, as it may lead young people to conform their private preferences to the misperceived public norm.

In light of these factors, it may be wise for the entertainment industry to recognize that it is time to give up on Generation Y and stop wasting its resources on changing that generation's online copying behavior. No doubt, it is painful for the industry to skip a generation of potential customers. However, it is more painful to see its profits falling every year without any practical strategy in sight to stem the downslide. Widespread prosecution of individual file-sharers who downloaded copyrighted materials in their private homes for noncommercial use has only succeeded in alienating consumers and is unlikely to win legislative support for the industry.[481] As the RIAA's recent lawsuits have shown, under the existing regime, "courts would need to punish the few infringers chosen for prosecution to an extent radically disproportionate to the wrong they committed. At some point . . . the level of punishment required to deter private copying generally will simply become unjust."[482]

> enced cognition, or, for short, *social cognition*. Pedestrians stepping around the body of a homeless man collapsed in the street may simply be taking their cues from each other; the evidence suggests that they would stop to help if they were alone. Our moral compass may point true north when we are by ourselves, but place us next to a few dozen other compasses pointing East, and our needle will fall into alignment with theirs—and, in doing so, influence the needles of others' compasses.

David Luban, *Integrity: Its Causes and Cures*, 72 FORDHAM L. REV. 279, 284 (2003); *see also* Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339, 356–58 (2000) (discussing pluralistic ignorance and the "Emperor's New Clothes" phenomenon).

480. MERRIDEN, *supra* note 428, at 25 (quoting Professor Robert MacCoun).

481. *See* Harmon, *Verizon Challenges Music Industry's Subpoenas*, *supra* note 67 (reporting that Senator Coleman had scheduled a congressional hearing to address "privacy issues as well as the broader effect of technology on copyright enforcement"); *see also* Robert E. Litan, *Law and Policy in the Age of the Internet*, 50 DUKE L.J. 1045, 1070 (2001) (noting that "it is highly doubtful that Americans would tolerate for very long, if at all, the police raiding homes and arresting teenagers for copying music or movies"); Strahilevitz, *supra* note 12, at 545 (noting that "it is widely believed that the public could not stomach widespread prosecutions of individual computer users who had illicitly downloaded copyrighted content").

482. Lunney, *supra* note 11, at 851–52.

Moreover, as access to the Internet continues to expand to the rest of the world, Generation Y in the United States may come to make up for only a tiny portion of the entire file-sharing population.[483] Forecasts indicate that Americans—all generations combined—will comprise only a quarter of the world's Internet population by 2005, down from thirty-six percent in 2001,[484] and that Chinese will overtake English as the most widely used language on the Internet by 2007.[485] Given the fact that the future P2P file-sharing wars are likely to be transnational, Generation Y in the United States will have only a small impact on their outcome.

A more effective solution would be to educate Generation Y (and perhaps their parents as well) and transform them into copyright-abiding netizens. As they understand copyright better, they are likely to serve as role models for the next generation, who in turn will internalize those values and live by them as adults. As Justice Thurgood Marshall noted, "Education is not the teaching of the three R's. Education is the teaching of the overall citizenship, to learn to live together with fellow citizens, and above all to learn to obey the law."[486] Through education, children in Generation Z should become better citizens in the digital copyright world.

Today, the public still has many misconceptions about copyright law. Consider the treatment of copyrighted music, for example. Some Internet users believe they can download and listen to a copyrighted song without violating its copyright if they sample it and keep it for less than twenty-four hours.[487] Some maintain that it is legal to post copyrighted songs for downloading on a foreign Web site because U.S. copyright laws do not extend to countries abroad.[488] Some assume that all the songs posted on the Internet and P2P networks are in the public domain and thus free for others to download or copy.[489] Some believe that artists and copyright holders do not receive any royalties when radio plays

---

483. Thanks to my colleague, Adam Candeub, for pointing this out.

484. Michael Pastore, *Global Internet Population Moves Away from US*, CYBERATLAS, *at* http://cyberatlas.internet.com/big_picture/geographics/article/0,,5911_558061,00.html (Jan. 11, 2001), *cited in* Justin Hughes, *Of World Music and Sovereign States, Professors and the Formation of Legal Norms*, 35 LOY. U. CHI. L.J. 155, 165 (2003).

485. Frances Williams, *Chinese to Become Most-Used Language on Web*, FIN. TIMES, Dec. 7, 2001 at 12. The Author is, however, skeptical of this forecast because of the ever-widening digital divide in China and the many problems the country has encountered in the wake of its accession to the WTO. For a discussion of these problems, see sources collected *supra* note 192.

486. LESSIG, CODE, *supra* note 436, at 92–93 n.32 (quoting Thurgood Marshall's oral argument in Cooper v. Aaron, 358 U.S. 1 (1958)).

487. DIGITAL DILEMMA, *supra* note 11, at 124.

488. *Id.*

489. *Id.*

their music.[490] Some claim that they attain a measure of protection by ripping, mixing, and burning songs and posting them online.[491] Most interesting of all, there is a prevailing attitude that it is alright, or even legitimate, to trade copyrighted music because the recording industry has been making bad music for years to rip customers off.[492]

In recent years, the entertainment industry has become increasingly active in educating the consuming public. For example, the recording and motion picture industries have set up several Web sites to stem the illegal distribution of copyrighted music and movies.[493] "Entertainment groups have sent thousands of letters to colleges and corporations, alerting them to infringements," while celebrity musicians, like Dixie Chicks and Missy Elliott, have appeared on MTV and BET to relay artists' concerns.[494] During the 2004 Annual GRAMMY Awards Ceremony, the Recording Academy even unveiled a major public education campaign,

---

490. *See* MERRIDEN, *supra* note 428, at 71 (quoting an interviewee as saying that "[n]obody claims to lose money when their [sic] music is played on the radio").

491. From time to time, one would read on Internet Web sites about requests that users not copy photos the site owner scanned or songs the owner ripped.

492. As one interviewee maintained: "The record companies have been ripping customers off with huge profits for years, is it no wonder people resort to using Napster. The record companies are worried as they won't be able [sic] finance their extortionate lifestyles." MERRIDEN, *supra* note 428, at 63. Jazz artist Herbie Hancock, however, contended that Napster was not the answer to the industry's bad deal with artists and consumers:

> So far, [Napster]'s even worse than the labels. On the way to making millions for its owners and investors, Napster has yet to give anything to artists other than the chance to spread their music, for free, and whether they like it or not. Its supporters hide behind claims that labels misuse artists and consumers, as if that entitled them to take everything they want absolutely free. *Excuse me, but* just because record executives give artists a bad deal doesn't mean that everyone else can then go and do worse.

Herbie Hancock, *Preface* to ALDERMAN, *supra* note 81, at xviii.

493. *See* DIGITAL DILEMMA, *supra* note 11, at 308 n.3.

494. *Entertainment Industry Widens War*, USA TODAY, Feb. 13, 2003, at 9D. As Neil Netanel recounted:

> Copyright industries have also threatened to hold employers liable for employees' P2P file swapping in the workplace. The Motion Picture Association of America, Recording Industry Association of America, National Music Publishers' Association and Songwriters Guild have sent a letter to 1,000 large corporations expressing alarm that "piracy of music, movies, and other creative works is taking place at a surprisingly large number of companies." The letter then states that such use of a company's digital network subjects the company to "significant legal liability under the Federal copyright law" and ominously warns that the entertainment industries plan to "aggressively enforce [their] rights in cases of copyright infringement." The copyright industry missive follows a similar letter sent to more than 2,300 university presidents demanding that they prevent students' P2P file swapping.

Netanel, *Noncommercial Use Levy*, *supra* note 11, at 16 (footnotes omitted).

including a new Web site, whatsthedownload.com,[495] print and radio public service announcements, grassroots initiatives, and retail activities.[496]

In addition, the recording industry and universities have been actively encouraging students to switch to legal and legitimate music subscription services. A case in point is the recent arrangements that major colleges and universities made with music downloading services, like MusicNet, Napster, and Rhapsody, to provide students with unlimited access to licensed music streams.[497] By doing so, the industry hopes that students will develop habits that they will continue to follow after they graduate. As Napster's former president Michael Bebel proclaimed, "'This deal encourages a new generation to try a legitimate service, enjoy and adopt it, and later when they have more time and money, continue it.'"[498]

Despite the industry's active involvement, its educational campaign has been ineffective. A respect for copyright "is not an inherent or natural part of the cultural infrastructure"; it can only be developed through a slow learning process.[499] To be effective, an educational program must

---

495. The Web site is available at http://www.whatsthedownload.com. As the Press Release described:

> *WhatsTheDownload.com* fills the crucial need for consumer information about the impact of illegal downloading. The site provides an overview of the issues, quotes from music-makers and artists offering personal perspectives on file-swapping, a message board where consumers can connect with one another and discuss downloading, a news and information section, and an opt-in eNewsletter called "The Download" that keeps consumers up-to-date on various file-swapping news. Additionally, the site includes in-depth information about copyright laws and a comprehensive listing of legitimate online music retailers.

Press Release, Recording Academy®, "What's the Download℠" Consumer Education Campaign Addressing the Value of Paying for Music Unveiled at 46th Annual Grammy® Awards (Feb. 8, 2004), *available at* http://www.whatsthedownload.com/word_docs/Whats_The_Download_Launch_Press_Release.doc.

496. *See id.*

497. *See* Borland, *College P2P Use on the Decline?*, *supra* note 239 (citing a report of the Joint Committee of the Higher Education and Entertainment Communities that more than twenty colleges and universities have "signed up for deeply discounted access to music services" such as MusicNet, Napster, and RealNetworks' Rhapsody); Graham, *Students Score Music Perks*, *supra* note 239 (reporting about arrangements universities and colleges made with the record industry for their students).

498. Borland, *Napster to Give Students Music*, *supra* note 92 (quoting Michael Bebel, former president of Napster).

499. *See* Bartow, *supra* note 310, at 23; *see also* Sheldon W. Halpern, *Copyright Law in the Digital Age:* Malum in se *and* Malum Prohibitum, 4 MARQ. INTELL. PROP. L. REV. 1, 11 (2000) (suggesting that copyright law might not have a normative role). As Professor Halpern elaborated:

> Individual determinations of moral and ethical conduct require a moral and ethical context. The problem for intellectual property law in general, and the law of copy-

emphasize the core goals of copyright law, the difficult balance between control and dissemination, and the need for copyrighted materials to become a part of our shared intellectual heritage.[500] The program must also include both the exclusive rights of copyright holders and the limits on those rights, such as the idea-expression dichotomy, the fair use privilege, the first sale doctrine, and other statutory exemptions. By being clear, balanced, and comprehensive, the program will convey to the public a message that copyright law is fair and equitable. Through the creation of social and peer pressure, the message will also dissuade consumers from engaging in unauthorized file trading.[501]

In the next few years, public education efforts will continue to face many serious challenges. First, copyright law is complex; it involves a delicate balance between exclusive control and public access to information. An oversimplified educational message "will obscure the genuine and legitimate debate about how far copyright law extends."[502] David Lange asserted that it is "fundamentally wrong to insist that children internalize the proprietary and moral values of the copyright system."[503] The converse is also true. It would be unsatisfactory to focus solely on the public domain and our shared cultural heritage. Congress, courts, and commentators have spent a great deal of time and resources in the past two centuries trying to balance the interests of authors, copyright holders, and the consuming public. It is unlikely that schools and teachers will do a better and more efficient job in striking this balance.

> right in particular, is the lack of such an underlying clear context. The nature of American copyright law makes it difficult, if not impossible to find or to construct an unambiguous moral compass.

Sheldon W. Halpern, *The Digital Threat to the Normative Role of Copyright Law*, 62 OHIO ST. L.J. 569, 572 (2001).

500. *See* DIGITAL DILEMMA, *supra* note 11, at 216.

501. *See id.* at 305.

502. *Id.* at 309.

503. David Lange, *Reimagining the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 463, 471. As Professor Lange explained:

> It is wrong to challenge school children with responsibility for copyright. Wrong for copyright to intrude into private lives. Wrong to measure creativity by the standards of copyright. Wrong to lay impediments (moral, intellectual, legal) before exercises of the imagination, whether great or small. Wrong, in short, to rob us of this vital aspect of our citizenship: the right to think as we please and to speak as we think.
>
> We must learn to reimagine the public domain. We must learn to ask questions from within the province of that new status, a status like citizenship, measured by creativity and the imagination, and invoked by an exercise of either.

Id. at 482–83.

Second, the law on the books is very different from the one that is actually carried out.[504] Like speeding and jaywalking laws, most people treat copyright law as if it did not exist. That does not mean, however, that drivers pay no attention to their speed or that pedestrians crossing a street pay no attention to traffic. The fact that people do not obey existing law does not mean that they will obey no law whatsoever. Often, they refuse to obey because they find the law silly or expect a more sensible one.[505] In those scenarios, they are likely to substitute the law on the books with a different norm or misperceive that the norm reflects the law. As Professor Strahilevitz noted in the file-sharing context:

> Although the file-swapping networks encourage unlawful copyright infringement, the networks by no means cede the moral high ground. In the parlance of the file-swapping networks, those who infringe copyrights employ the language of reciprocity. "Freeloaders" are not those who download copyrighted content without paying for it, but those who download content without uploading content to other users.[506]

Finally, it may be irresponsible and inexpedient for policymakers to divert public funds for copyright education in times of budget cuts and economic stagnation. Even worse, some might consider such efforts inappropriate subsidies to the entertainment industry. For example, students and critics have voiced their disappointment over the Penn State–Napster deal for misusing educational fees to subsidize entertainment—or, worse, "to prop up flagging record company revenue."[507]

CONCLUSION

Today, P2P networks pose a serious challenge to the entertainment industry, and copyright battles have become increasingly difficult to

---

504. *See* DIGITAL DILEMMA, *supra* note 11, at 305; *see also* Roscoe Pound, *Law in Books and Law in Action*, 44 AM. L. REV. 12 (1910).

505. *See* Shirky, *supra* note 319, at 34 (noting that "the civil disobedience against the 55 MPH speed limit did not mean that drivers were committed to having no speed limit whatsoever; they simply wanted a higher one").

506. Strahilevitz, *supra* note 12, at 556.

507. Borland, *Napster to Give Students Music*, *supra* note 92. As one student noted:

> The money I pay could go to much better things such as rebuilding the network or better lab equipment. . . . Almost every single student I have talked to is outraged that their money is going to a program that they don't even want . . . (and that) their money is being sent to the music industry without their consent.

John Borland, *Penn State Students Blast Napster Deal*, CNET NEWS.COM (Nov. 6, 2003), *at* http://news.com.com/2100-1027-5103918.html.

fight. To remedy the situation, commentators have proposed many different solutions, ranging from abolishing the copyright system to imposing private levies on P2P goods and services. Each of these proposals has its benefits and limitations, and each of them deals with only part of the unauthorized copying problem.

The law cannot provide a complete solution. Market forces, technological architectures, and social norms also play very important roles in crafting a comprehensive solution to the unauthorized copying problem. Regardless of which set of proposals—from those discussed in this Article or from others yet to be imagined—policymakers ultimately adopt, this solution must meet the needs of consumers while taking into account the Internet's structural resistance to control, its immutable characteristics as a network, and the changing social norms in the digital copyright world.

Reducing copyright piracy is not easy, and the debate on private copying is likely to continue, expand, and escalate. It is time to start from first principles and rethink some of the fundamental questions about our copyright system: Will the current system make sense when consumers can store their entire music collections, or even DVD collections, in small, cheap, portable playback devices? Should Congress shorten the duration of the copyright term and switch to a format- or medium-based system in light of the increasingly short shelf-life of hardware and copyrighted products? Do entertainment companies have the needed rights to experiment with or switch to new business models? Should society rethink the industry structure and transform the role of intermediaries in light of our ability to distribute copyrighted works online? These questions have no easy answers, and the debate can only become more intriguing.

The P2P file-sharing controversy has existed for years. If one has to find, in retrospect, a single word to account for it, that word is likely to be nostalgia.[508] The hacker community and cyber libertarians long for

508. Jane Ginsburg used a different word—"greed." Jane C. Ginsburg, *How Copyright Got a Bad Name for Itself*, 26 COLUM.-VLA J.L. & ARTS 61, 61 (2002). As she explained:

> I have a theory about how copyright got a bad name for itself, and I can summarize it in one word: Greed.
>
> Corporate greed and consumer greed. Copyright owners, generally perceived to be large, impersonal and unlovable corporations (the human creators and interpreters—authors and performers—albeit often initial copyright owners, tend to vanish from polemical view), have eyed enhanced prospects for global earnings in an increasingly international copyright market. Accordingly, they have urged and obtained ever more protective legislation, that extends the term of copyright and interferes with the development and dissemination of consumer-friendly copying technologies.

the good old days when information was free, the network was open, and the online marketplace was not commercialized. Similarly, the recording industry wants to return to those good old days when it was worth more than $14 billion, growing at an annual rate of more than six percent.

Those days are gone, however. They belonged to the past century, the past millennium. Turning back the clock is impossible. Even if it *were* possible, it might not be a good idea. Instead of looking back, both sides should start planning for the future, keeping in mind the needs and interests of authors and artists. As the Electronic Frontier Foundation put it succinctly in its recent white paper:

> The current battles surrounding peer-to-peer file sharing are a losing proposition for everyone. The record labels continue to face lackluster sales, while the tens of millions of American file sharers—American music fans—are made to feel like criminals. Every day the collateral damage mounts—privacy at risk, innovation stymied, economic growth suppressed, and a few unlucky individuals singled out for legal action by the recording industry. And the litigation campaign against music fans has not put a penny into the pockets of artists.[509]

It is time for both sides to work together to develop a constructive, forward-looking solution. It is also time to rethink the P2P file-sharing controversy and the future of private copying. Music is part of our culture and heritage, and it would be sorely missed if it were extinguished.

> Greed, of course, runs both ways. Consumers, for their part, have exhibited an increasing rapacity in acquiring and "sharing" unauthorized copies of music, and more recently, motion pictures. Copyright owners' attempts to tame technology notwithstanding, such developments as compression formats, high speed lines, and peer to peer networks, particularly popular on college campuses, recast Annie Oakley's anthem from "Anything you can do, I can do better," to "Anything you can steal, I can steal more of." At least some of the general public senses as illegitimate any law, or more particularly, any enforcement that gets in the way of what people can do with their own equipment in their own homes (or dorm rooms). Worse, they would decry this enforcement as a threat to the Constitutional goal of promotion of the Progress of Science, and thus a threat to the public interest.

Id. at 61–62 (footnote omitted).

509. EFF WHITE PAPER, *supra* note 11, at 1.