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Norms and Enforcement: The Case Against Copyright Litigation

In the past few years, we have witnessed a historical shift in the enforcement of copyright law. While copyright enforcement against private copying traditionally centered on commercial intermediaries and piracy, content owners now also pursue infringement actions against consumers and private copiers directly. While consumers of pirated content have traditionally been captured indirectly through taxes or blanket licenses, they are now subjected to a mass litigation campaign.

Despite the wide media attention and spectacular headlines, litigation has produced only limited results in the present era of digital downloading and peer-to-peer (or "P2P") file swapping. Lawsuits against private copiers have not halted file-sharing activities. An ever-increasing number of unlicensed downloads are taking place in private homes all over the world. According to recent data, over twelve million people[1] are simultaneously sharing 1.08 billion music, movie, and software files on the Internet at any given moment.[2]

Why are individuals unresponsive to the increased costs of

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[1] Statistical data last updated on January 24, 2006. *See* P2P Info Centre, P2P Networks Statistics, http://p2p.info.pl/eng/users_general.php (last visited Jan. 31, 2006).

[2] *See* P2P Info Centre, P2P Networks Statistics, http://p2p.info.pl/eng/files_general.php (last visited Jan. 31, 2006).

downloading unlicensed music? One possible reason is that individuals simply believe that the chances of being caught are too remote because there are so many people downloading at any given moment in time. Downloading fell temporarily during the initial wave of lawsuits but increased again during subsequent rounds of lawsuits as file swappers updated their estimation of the chances of getting caught.[3]

Notwithstanding the limited deterrent effect of lawsuits on file sharing, record industry representatives, who often refer to lawsuits in terms of "educating" the public on copyright law,[4] have announced that they will continue to pursue litigation against individual file swappers. In this Article, we suggest that if litigation indeed serves purposes other than deterrence, legal sanctions are unlikely to alter the social meaning and legitimacy of peer-to-peer networks and file sharing. Because of a convinced belief among copyright users that file sharing should be legal, copyright enforcement is challenged by a social norm complication. Drawing on socio-psychological literature and new data from an empirical study, we posit that copyright litigation faces an impossibility theorem: lawsuits against file sharers cannot simultaneously achieve effective deterrence and promote procopyright norms.

Part I provides an overview of recent copyright litigation against copyright infringers on file-sharing networks. In Part II,

[3] For instance, the number of people on Kazaa's FastTrack network fell over the summer of 2003 but grew to 5.6 million simultaneous users in October 2003. John Borland, *RIAA Lawsuits Yield Mixed Results*, CNET NEWS.COM, Dec. 4, 2003, http://news.com.com/2100-1027-5113188.html. Other studies reported a twenty-seven percent increase from December 2002 to March 2003. Dawn Kawamoto, *Downloads Rise as File Traders Seek New Venues*, CNET NEWS.COM, Apr. 26, 2004, http://news.com.com/2100-1027_3-5199901.html. The number of self-reported downloaded music files increased to 23 million in April 2003, rising from 18 million between November and December 2002, according to a study released by the Pew Internet & American Life Project. *Id.* Studies report a move away from the most popular and most highly monitored file-sharing networks to low-profile platforms, such as iMesh, BitTorrent, and eMule. *Id.* "BigChampagne, which tracks Internet file sharing, says 8.3 million people were online at any one time in June using unauthorized services like Kazaa and eDonkey—up 19% from 6.8 million in June 2003." Jefferson Graham, *Online File Swapping Endures*, USA TODAY, July 11, 2004, at 1A.

[4] Consider in this regard the rhetorical strategy of record labels to equate file sharing with stealing in copyright warnings on CDs and movie trailers and to refer to file sharers as "Internet Thieves." *See, e.g.*, Press Release, Recording Indus. Assoc. of Am., Music Industry Targets 765 Internet Thieves in New Round of Lawsuits (July 28, 2005), *available at* http://www.riaa.com/news/newsletter/ 072805.asp.

we apply the rational choice paradigm to litigation of private copying and complement it with norm-based approaches.

Part III examines behavioral adjustments and social norms effects in a scenario study where students are subjected to varying modalities of copyright law enforcement. The aim of the study is to investigate the effect of copyright law enforcement on anticopyright norms among file swappers on peer-to-peer networks and to examine differences between experienced users of file-sharing technologies and individuals who have not (yet) engaged in file sharing.

The evidence from our study raises the hypothesis that deterrence and norms work at cross-purposes. Experienced users of peer-to-peer technology have internalized an anticopyright norm that cannot be unraveled through enforcement. Anticopyright norms of file swapppers are strengthened when the level of copyright enforcement increases, which results in more downloading whenever enforcement is temporarily suspended. Enforcement has an ambivalent effect on individuals who have no experience with file sharing. Severe sanctions do not have a counterproductive effect on copyright norms of such "non-file sharers," yet exposure to information on copyright enforcement against peer-to-peer software reinforces the belief or expectation that others are downloading.

Part IV reflects on the lessons learned from the study, in particular with regard to the policy choices that regulators, courts, and copyright-dependent industries face when approaching the widespread use of copyrighted material on file-sharing networks. These options, including criminal prosecutions of digital piracy, copyright education, self-help strategies, and collective licensing, are evaluated in light of the interaction of deterrence and anticopyright norms. We will argue that social norm backlash is particularly relevant for copyright law because circumvention technology and the so-called technological "arms race" between content holders and pirates inevitably create lapses in copyright enforcement. During these intervals of reduced enforcement, conduct is determined by norms.

Finally, Part V considers the recent decision by the Supreme Court in *MGM Studios, Inc. v. Grokster, Ltd.*, which held that producers of file-sharing applications can potentially be held ac-

countable for distributing software.[5] Because *Grokster* focuses on the commercial intent of P2P producers, it is doubtful that the decision will be an effective tool in reducing the availability of file-sharing technology. As digital technology becomes more decentralized, it is increasingly judgment-proof. File-sharing applications are produced in user-driven innovation environments that operate without centralized, residual claimants. Life cycles of software applications extend beyond the legal and financial status of their creators. This suggests that we have only seen the tip of the iceberg with regard to lawsuits against private copiers.

We use copyright enforcement as a case study for the interaction between law enforcement and norms in general. The literature on social norms suggests that when legal sanctions violate the subjective conception of behavior that is being punished, individuals respond differently when that enforcement coincides with preexisting notions of what is just or appropriate. Although some studies have investigated the conflict of deterrence and norms with regard to tax evasion,[6] the dynamics of social norms and law enforcement remain poorly understood. This Article addresses several gaps in the existing literature. While there is an abundance of theoretical attention to social norms, there is little empirical data on the interaction between norms and law enforcement.[7] Also, this Article supplements the limited literature on enforcement patterns in copyright law.[8]

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[5] MGM Studios, Inc. v. Grokster, Ltd. (*Grokster III*), 125 S. Ct. 2764 (2005).

[6] Several studies report an undermining effect of internalized norms against tax evasion on tax law deterrence. *See, e.g.*, John S. Caroll, *A Psychological Approach to Deterrence: The Evaluation of Crime Opportunities*, 36 J. PERSONALITY & SOC. PSYCHOL. 1512 (1978); Harold G. Grasmick & Donald E. Green, *Legal Punishment, Social Dissaproval and Internalization as Inhibitors of Illegal Behavior*, 71 J. CRIM. L. & CRIMINOLOGY 325 (1980); Kent W. Smith, *Integrating Three Perspectives on Noncompliance: A Sequential Decision Model*, 17 CRIM. JUST. & BEHAV. 350 (1990).

[7] The few available studies deal with the dynamics of social norms with regard to tax evasion. *E.g.*, James Alm, et al., *Changing the Social Norm of Tax Compliance by Voting*, 52 KYKLOS 141 (1999); Ana DeJuan, et al., *Voluntary Tax Compliant Behavior of Spanish Income Tax Payers*, 49 PUBL. FIN. 90 (1994); Michael Wenzel, *The Social Side of Sanctions: Personal and Social Norms as Moderators of Deterrence*, 28 L. & HUM. BEHAV. 547 (2004). A few concern criminal behavior. *E.g.*, SALLY S. SIMPSON, CORPORATE CRIME, LAW, AND SOCIAL CONTROL (2002); Ronet Bachman, et al., *The Rationality of Sexual Offending: Testing a Deterrence/Rational Choice Conception of Sexual Assault*, 26 L. & SOC'Y REV. 343 (1992).

[8] Tim Wu, *When Code Isn't Law*, 89 VA. L. REV. 679 (2003). "While many authors discuss the challenge of new technology for intellectual property laws, it is difficult to find academic work on actual patterns of enforcement." *Id.* at 713 n.106.

I

LITIGATION OF PRIVATE COPYING

Historically, commercial sellers of unlicensed content have always been targets at the forefront of copyright law enforcement.[9] The principle targets are commercial agents or "pirates" who sell bootlegs of live recordings and unlicensed software distributors who sell pirated versions of CDs and video games.[10] Similarly, in the digital era, legal claims were mainly directed at commercial intermediaries, such as for-profit Web stores or providers of novel Internet services, that reproduced music.[11] Despite a number of early legal successes against commercial intermediaries

[9] JESSICA LITMAN, DIGITAL COPYRIGHT 111 (2001) ("Our copyright laws have, until now, focused primarily on the relationships among those who write works of authorship and disseminate those works to the public."); Jane C. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV. 1466, 1488 (1995); Wu, *supra* note 8, at 713-14 ("Copyright owners have traditionally avoided targeting end users of copyrighted works. . . . One is pressed to find any example of copyright law being enforced against individuals for home copying (as opposed to commercial activity) prior to 1990.").

[10] *See, e.g.*, Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259 (9th Cir. 1996) (contributory liability imposed on defendant who operated a swap meet where many of the vendors sold counterfeit goods); Arista Records, Inc. v. Mp3Board, Inc., No. 00 Civ. 4660(SHS), 2002 Westlaw 1997918, at *6, (S.D.N.Y. Aug. 29, 2002) (record companies brought action against Internet site operator that provided links to pirated copies of copyrighted musical recordings); Nintendo of Am., Inc. v. Computer & Entm't, Inc., No. C96-0187, 1996 U.S. Dist. Westlaw 511619, at *4 (W.D. Wash. May 31, 1996) (defendant sold video game duplication devices for Nintendo game cartridges); Sega Enters., Ltd. v. MAPHIA, 857 F. Supp. 679 (N.D. Cal. 1994) (defendant made available unauthorized copies of Sega games on a fee-based Internet bulletin board). *See generally* Geraldine Szott Moohr, *The Crime of Copyright Infringement: An Inquiry Based on Morality, Harm, and Criminal Theory*, 83 B.U. L. REV. 731 (2003) (explaining the distinctions between commercial piracy and noncommercial personal infringement).

[11] For instance, record companies won a copyright suit against MP3.com, which allowed subscribers to play music that they owned, borrowed, or had previously purchased over the Internet. UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 350 (S.D.N.Y. 2000). The court did not uphold the defense's argument that the service of MP3.com merely allowed subscribers to "space shift" sound recordings that they owned without carrying around physical CDs because the service was neither transformative nor productive. *See id.* at 351. According to the court, the use of a different medium did not render the use transformative. *Id.*; *see also* Infinity Broad. Corp. v. Kirkwood, 150 F.3d 104, 108-09 (2d Cir. 1998) (rejecting the fair use defense by the operator of a service that retransmitted copyrighted radio broadcasts over telephone lines); L.A. News Serv. v. Reuters Television Int'l, Ltd., 149 F.3d 987, 994-95 (9th Cir. 1998) (rejecting the fair use defense by television news agencies that copied copyrighted news footage and retransmitted it to news organizations).

that "facilitated" online copyright infringements, most notably in the *Napster*[12] and *Aimster*[13] cases, the content industry was unable to preempt further copyright infringements on many other technological platforms. While incurring important losses in *RIAA v. Verizon*[14] and *MGM v. Grokster*,[15] the increasing scale of copyright infringements led the entertainment industry to redirect its focus and to target direct copyright offenders on peer-to-peer file-sharing applications.

In September 2003, the Recording Industry Association of America (RIAA) began sending subpoenas to Internet service providers, demanding the names of users who were allegedly downloading music on file-sharing networks. The lawsuits targeted individuals who stored large amounts of music files in publicly accessible folders on their computers. This first wave of cases came as a surprise to some, and despite negative reactions within and outside the file-sharing community, file-sharing activities declined sharply.[16] These cases settled, on average, for 1500 dollars.[17] Despite a few errors and public relations disasters,[18]

12 A&M Records, Inc. v. Napster, Inc. (*Napster II*), 239 F.3d 1004 (9th Cir. 2001). A preliminary injunction enjoined Napster from "engaging in, or facilitating others in the copying, downloading, uploading, transmitting, or distributing plaintiffs' copyrighted musical compositions and sound recordings, protected by either federal or state law, without express permission of the rights owner." A&M Records, Inc. v. Napster, Inc. (*Napster I*); 114 F. Supp. 2d 896, 927 (N.D. Cal. 2000). The Court of Appeals for the Ninth Circuit affirmed in part the district court's decision. *Napster II*, 239 F.3d at 1011, 1029 (finding contributory infringement because Napster facilitated its users' direct infringement despite its actual knowledge of the infringing materials on its system and finding against fair use because of the commercial losses to the digital market of legal downloads of music).

13 *In re* Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003).

14 Recording Indus. Ass'n of Am., Inc. (RIAA) v. Verizon Internet Servs., Inc., 351 F.3d 1229 (D.D.C. 2003). In *RIAA*, the Court of Appeals for the District of Columbia overturned a lower court ruling that required Verizon to reveal the identities of subscribers suspected of illegally exchanging copyrighted songs. Although materials actually hosted by an ISP (such as information stored on Verizon's servers) can be subpoenaed with form subpoenas, the court held that the provision does not apply to instances in which the ISP merely acts as a conduit for peer-to-peer exchanges, such as with e-mail and instant messages. *Id.* at 1237. As a result of this ruling, the RIAA must now go through the court system to learn the identities of alleged copyright infringers.

15 MGM Studios, Inc. v. Grokster, Ltd (*Grokster I*), 259 F. Supp. 2d 1029 (C.D. Cal. 2003). For a discussion of this decision and its aftermath, see *infra* Part V.

16 *See supra* note 3.

17 This average gradually increased to $3000. Paul Roberts, *RIAA Sues 532 'John Does'*, PC WORLD, August 18, 2005, *available at* http://www.pcworld.com/news/ article/0,aid,114387,00.asp.

18 One such disaster was a lawsuit accusing an eighty-three-year-old woman who

the results encouraged the RIAA, and it followed up with a second wave of lawsuits. In October 2003, the RIAA initiated eighty additional lawsuits against individual peer-to-peer file sharers.[19] But the deterrent effect did not last. By March 2003, overall downloading began to rise again, and by the end of that same year, file sharing had exceeded the levels at which it had occurred prior to the start of the RIAA's litigation efforts.[20]

Overall, the RIAA made good on its promise to engage file swappers with a steady stream of lawsuits.[21] Since September 2003, the recording industry has issued over 3400 individual lawsuits against users of peer-to-peer file-sharing technology.[22] The industry has announced that it will continue this trend.[23] Most recently, the RIAA narrowed its focus by targeting geographical areas[24] and specific university networks.[25]

Meanwhile, the Motion Picture Association of America (MPAA) has joined the fray.[26] Because the amount of motion pictures being exchanged over peer-to-peer networks had increased dramatically in 2004, mainly due to increased broadband width and improved compression technologies,[27] the movie in-

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had died over a month earlier of making more than 700 songs available on the Internet. Andrew Orlowski, *RIAA Sues the Dead*, THE REGISTER, Feb. 5, 2005, *available at* http://www.theregister.co.uk/2005/02/05/riaa_sues_the_dead/. Or take the lawsuit against a twelve-year-old New York girl, Brianna LaHara, whose mother lived in a New York City Housing Authority apartment for low to moderate income levels. *See* John Borland, *RIAA Settles with 12-Year-Old Girl*, CNET NEWS.COM, Sept. 9, 2003, http://news.com.com/2102-1027_3-5073717.html?tag=st.util.print.

[19] *RIAA Launches Second Wave of File-Swapper Suits*, OUT-LAW NEWS, Oct. 31, 2003, http://www.out-law.com/page-4029.

[20] *See supra* note 3.

[21] *RIAA Blasts 754 New Lawsuits, Legal Assault Relentless*, DIGITAL MUSIC NEWS, Dec. 17, 2004, http://www.digitalmusicnews.com/yesterday/december2004#121704riaa.

[22] *File Sharing Goes to High Court*, WIRED NEWS, Dec. 10, 2004, http://www.wired.com/news/digiwood/0,1412,65995,00.html; *see also RIAA Launches Second Wave of File-Swapper Suits*, *supra* note 19.

[23] *See* Press Release, Recording Indus. Assoc. of Am., *supra* note 4.

[24] In South Carolina, subpoenas were issued against seven suspected music file swappers. *See RIAA Launches Strategic Strike, Sues Seven in South Carolina*, DIGITAL MUSIC NEWS, Apr. 6, 2005, http://www.digitalmusicnews.com/yesterday/april2005#040605riaa.

[25] It sued several users who used the i2hub high-speed university networks at universities including Columbia and Princeton to share music files. *Id.*

[26] *See, e.g.*, Press Release, Motion Picture Assoc. of Am. (MPAA), Motion Picture industry Takes Action Against Indiana Internet Thief (Jan. 27, 2006), *available at* http://www.mpaa.org/PresReleases.asp. This Web site contains numerous press releases regarding the MPAA's actions against file sharers.

[27] "[BitTorrent] is optimized to handle massive files with ease by compiling whole

dustry group could no longer sit back. In November 2004, the MPAA launched a first wave of lawsuits against individuals who had allegedly shared substantial numbers of movies.[28] By June 2005, the MPAA had initiated five rounds of lawsuits against individual file traders.[29]

At first sight, it seems that the litigation strategy is showing some results. Industry groups point to decreased downloading on targeted networks such as Kazaa[30] and the success of licensed music sites such as iTunes.[31] A close look at these studies, however, reveals a more complex picture of file-sharing activities and litigation awareness. First, these surveys have become more vulnerable to underreporting because of heightened awareness of copyright issues among respondents.[32] Second, studies of overall Web traffic indicate an overall increase in downloading.[33] For instance, according to data from peer-to-peer tracking firm BigChampagne, the number of average simultaneous file sharers increased by more than two million in 2004 to reach a simultane-

files from distributed bits. Those bits, also referred to as seed files, are assembled on-the-fly by BitTorrent, enabling a rapid transfer of files that would otherwise choke systems if files were swallowed whole." *BitTorrent Prolongs the Hollywood Headache*, DIGITAL MUSIC NEWS, Dec. 13, 2004, http://www.digitalmusicnews.com/yesterday/december2004#121304bittorrent.

[28] *Hollywood Sues Alleged File Swappers*, MSNBC, Nov. 16, 2004, http://www.msnbc.msn.com/id/6504024/.

[29] *See* Press Release, MPAA, Movie Studios vs. Internet Movie Thieves, Round Five! (June 2, 2005), *available at* http://www.mpaa.org/press_releases/2005_06_02b.doc.

[30] According to a recent study by comScore Media Metrix, unique visitors to the Kazaa Media Desktop have sunk seventy-one percent over the past year. *Kazaa Faces Serious User Decline, P2P Picture Cloudy*, DIGITAL MUSIC NEWS, Mar. 31, 2005, http://www.digitalmusicnews.com/yesterday/march2005#033005kazaa.

[31] *See* Tony Smith, *U.S. Legal Music Downloads Up 187%*, THE REGISTER, July 14, 2005, http://www.theregister.co.uk/2005/07/14/us_music_downloads/ (U.S. music downloaders paid for 158 million songs during the first six months of 2005—almost three times the number of songs acquired legally in 2004).

[32] Jon Bonné, *Big Drop Seen in Music Downloads*, MSNBC, Jan. 4, 2004, http://www.msnbc.msn.com/id/3860823/; Thomas Mennecke, *Pew Internet's File-Sharing and P2P Study*, SLYCK, Mar. 26, 2005, http://www.slyck.com/ news.php?story=721.

[33] Firms specializing in tracking peer-to-peer software, such as BigChampagne and BayTSP, claim that file sharing usage has remained steady over the past year. Bonné, *supra* note 32. Similarly, according to a wide survey of 50,000 Europeans recently published by Music Choice, downloading is booming in Europe. Fifty percent of the European respondents regularly download music from the Internet; France (eighty percent) and Norway (half of Norway's respondents download twenty tracks per month) lead the pack. Ninety percent of the respondents believe that CDs are too expensive. Press Release, Music Choice, Virtual Music Collections Increase as 90% of Europeans Claim CDs are too Expensive (Nov. 30, 2004), *available at* http://partners.musicchoice.co.uk/mediacentre/release.aspx?r=7.

ous usage figure that is approaching six million files.[34] This might be explained by the fact that users are switching to file-sharing platforms, mainly BitTorrent,[35] and alternative methods to obtain music files (e-mail, instant messaging, downloading from each others' MP3 players, etc.),[36] with overall file-sharing levels rising.

Although the mass litigation of private copying alters the historical balance of copyright law enforcement, it seems that record companies and music publishers have not managed to reverse the trend toward file sharing and copyright circumvention. Meanwhile, the entertainment industry shows no signs of abandoning its litigation strategy.[37] In the following Part, we draw on economic and socio-psychological literature to analyze the effects of lawsuits against private copiers. As will be argued, the interaction between deterrence- and norm-based variables provides insight into the ineffectiveness of copyright litigation and the unlikely promise of altering anticopyright norms through litigation. In Part III, we test these predictions in a new study.

II

Two Models of Copyright Infringement: Incentives Versus Intuition

Two different models explain why and when people obey the law. Under the instrumental economic approach, individuals refrain from unlawful behavior because the costs of the unlawful behavior are higher than the benefits, while in the normative conception, individuals are law abiding because they believe the law is just. We examine both propositions in light of copyright infringing behavior.

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[34] *Kazaa Faces Serious User Decline, P2P Picture Cloudy*, *supra* note 30.

[35] According to a recent study conducted by the tracking firm CacheLogic, the BitTorrent peer-to-peer service continues to grow, consuming about half of all file-sharing traffic volume at the close of 2004. *See Films "Fuel Online File-Sharing*," BBC News, July 15, 2004, *available at* http://news.bbc.co.uk/1/hi/technology/3890527.stm.

[36] Mennecke, *supra* note 32.

[37] The movie industry joined the fray in November 2004 when the MPAA filed a first round of lawsuits. *See* Katie Dean, *Movie Studios Sue File Traders*, Wired News, Nov. 17, 2004, http://www.wired.com/news/digiwood/0,1412,65730,00.html ("'I don't understand why (the MPAA) is doing this,' said Jason Schultz, an attorney with the Electronic Frontier Foundation. 'It doesn't make any sense. It hasn't worked for the RIAA.'").

A. Rational Copyright Infringers

According to the instrumental economic model, individuals comply with legal rules because they fear the consequences of failing to do so. Because the behavior of individuals is determined by the costs and benefits of their actions, law can serve as a deterrent since the formal sanction of the law and its likelihood are factors that increase the costs of unlawful behavior.[38]

Ideally, liability should be set equal to the damage suffered by the victim of the infringing act.[39] An individual contemplating file sharing on peer-to-peer networks will engage in such activities only when the expected benefits to him or her exceed the expected cost.

Once the appropriate level of punishment cost is set, one must approach a combination of severity and certainty of liability that will effectively impose that cost on the would-be copyright offender. For instance, an expected liability cost of $1000 can be imposed by combining a fine of $1000 with a probability of apprehension and conviction of 1. A fine of $10,000 can be combined with a probability of 0.1. Likewise, a remedy of $1,000,000 can be combined with a probability of 0.001, and so forth.[40]

Economic theory requires that the optimal penalty equals the social cost of copyright infringement divided by the probability that liability will be imposed. Suppose that the social cost from obtaining a popular song from someone's file-sharing directory is $10,000 (the album does not make a profit and record labels invest less in music, reducing the overall creation and dissipation of music of this genre). If, from a cost-benefit perspective, the optimal expenditure on apprehension and conviction results in a one percent probability of apprehension and conviction, the optimal liability for copyright infringement of this sort will be

[38] *See generally* George J. Stigler, *The Optimum Enforcement of Laws*, 78 J. POL. ECON. 526 (1970) (constructing a theory of rational law enforcement).

[39] *See generally* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW (5th ed. 1998) (explaining fundamental concepts of the economic approach to law).

[40] *Id.* at 244. If the costs of collecting remedies were zero regardless of the type of infringement or the size of the remedy, the most efficient combination would be a very low probability and a very low fine. This result occurs because the increase of the fine is costless, the costs of enforcement are reduced, and expected liability costs remain equal. This fundamental insight follows from the seminal work of Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968). *See generally* Isaac Erlich, *The Deterrent Effect of Criminal Law Enforcement*, 1 J. LEG. STUD. 259 (1972) (exploring analytical and empirical framework of deterrent effect of law enforcement).

$1,000,000.[41]

Such is the vintage cost-benefit approach to enforcing direct copyright infringements. A clear-cut welfare analysis, however, is complicated by several factors.

First, due to the broad scale of infringements and geographical and technical limitations, the rate of punishment for copyright offenses is very low. This is one of the main arguments that supported the tradition of enforcing private copying against commercial intermediaries.

Second, the *private costs* from copyright infringements are uncertain and heavily contested.[42] The record industry claims that damages are in the billions of dollars.[43] Skeptics argue that the decline in CD revenues results from changing consumer patterns (increased expenditures on consumer electronics, mobile phone technology, DVDs, etc.) as well as unlicensed downloading. Also, the total number of downloads on peer-to-peer networks are a poor proxy for lost sales because a large percentage of downloaded songs would not otherwise have been purchased by file sharers.[44]

Third, the *social costs* of downloading are even harder to measure. This complicates an economic analysis of peer-to-peer file sharing because setting efficient damage remedies requires an assessment of social damages. Social damages from copyright infringements are ambivalent. The costs of such infringement require an assessment of private damages (loss of income for artists and publishers) as well as an estimation of the dynamic costs of a reduction of investments in the production of cultural goods

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[41] This would require that enforcers spend an extra unit on discovery and prosecution as long as the marginal costs are lower than the marginal benefits derived from the enforcement activity.

[42] Some studies contest the claim that file sharing has a negative impact on the music industry. *See, e.g.*, FELIX OBERHOLZER & KOLEMAN STRUMPF, THE EFFECT OF FILE SHARING ON RECORD SALES: AN EMPIRICAL ANALYSIS (2004), *available at* http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf (finding that file sharing boosts record sales); Andy McCue, *Study: Falling CD Sales Can't Be Blamed on P2P*, CNET NEWS.COM, June 14, 2005, http://businessweek-cnet.com.com/Study+Falling+CD§ales©ant£e£lamed+on+P2P/2100-1027_3-5746291.html (discussing study that found that file sharing has no negative impact on CD sales).

[43] *See, e.g.*, *Third Party Research: Illegal File Sharing and Purchasing Habits*, INT'L FED. OF THE PHONOGRAPHIC INDUS., Nov. 15, 2005, http://www.ifpi.org/site-content/press/20051115a.html (citing Informa Media Group estimate of $2.1 billion in potential industry losses due to file sharing).

[44] *See* WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 46-47 (2003).

such as music. Here, the picture becomes murky. Because incentive effects are hard to measure, economic analysis has little definitive knowledge on this matter.[45] This is especially the case with intellectual creations because (1) many artists create from an endogenous desire rather than external motivations and (2) the financial incentives derived from copyright royalties are often insignificant compared to other sources of revenue for artists[46] such as live performances, derivative works, endorsements, and new Internet-based products.[47]

These issues are tremendously challenging research questions to social scientists but leave a public interest regulator awash in uncertainty. Why do current statutory copyright remedies fail to deter file swappers adequately? How does one assess the inconclusive evidence on private and social damages of peer-to-peer file sharing? Does economic theory provide support for increasing punishments of private copying (as recent legislation contemplates)?[48] Do lawsuits, even when not effective at deterring behavior, signal social values and influence the social meaning and preferences of individuals? There is an intuitive understanding that enforcing copyright law can be counterproductive in some circumstances. But what exactly are the limits to statutory remedies given the dangers of a fallout between the norms regarding private copying and copyright law?

As we argue below, these questions cannot be answered without taking into account the social-psychological processes involved in the enforcement of copyright law. Next, we discuss the effect of norms and psychological factors from a theoretical perspective. In Part III, we examine these issues in a scenario study.

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[45] For a discussion on the limits of economic theory's ability to provide decisive answers to social welfare issues with regard to intellectual property law, see George L. Priest, *What Economists Can Tell Lawyers About Intellectual Property: Comment on Cheung*, 8 RES. L. & ECON. 19, 21-24 (1986).

[46] Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 268 (2002) ("[I]n light of alternative methods for funding musicians, including statutory levies, denying the public access to music can no longer be justified as a necessary or desirable means for encouraging the creation of music.").

[47] *Id.* at 308-11. *See generally* JEFFREY BRABEC & TODD BRABEC, MUSIC, MONEY, AND SUCCESS (2d ed. 2000) (listing the available sources of income to artists).

[48] *See infra* Part V.

B. Law Enforcement and Norms Obstruction

Scholars increasingly integrate economic explanations of unlawful conduct with norm-based accounts of behavior.[49] Social psychologists provide evidence that legal obedience is "morality-based" and/or "legitimacy-based."[50] People's interaction with law thus depends largely on whether they believe that the law is "just" and/or produced by a legitimate regulator.[51] Recent literature in the fields of sociology, psychology, and economics reinforces the notion that the effectiveness of law enforcement is influenced by preexisting beliefs and norms as well as by the private costs and benefits of the behavior itself.[52] Empirical research on legitimacy reveals that norm-based factors are sometimes stronger determinants of behavior than formal sanctions.[53] These studies emphasize the importance of legitimacy to legal obedience above and beyond deterrence.[54]

The flipside of this coin is that people obey a law less when it is considered "unjust" or when a lawmaker is perceived as "illegitimate." Bringing together the deterrence- and norm-based models, this implies that even when it is irrational from a narrow cost-benefit perspective, certain unlawful behavior will occur simply because the underlying law conflicts with preexisting notions of what is just and legitimate. In fact, if an underlying law conflicts with a morality- or legitimacy-based intuition, violating an unjust

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[49] *See, e.g.*, Tracey L. Meares, *Norms, Legitimacy and Law Enforcement*, 79 OR. L. REV. 391 (2000).

[50] For instance, in the context of tax compliance, there is extensive literature on the assumption that "social motivations rather than mere selfishness . . . affect tax-paying behaviour, such as ethical concerns and social norms, perceptions of fairness and legitimacy." Michael Wenzel, *Motivation or Rationalisation? Causal Relations Between Ethics, Norms and Tax Compliance*, 26 J. ECON. PSYCHOL. 491, 492 (2005) (citing TOM R. TYLER, WHY PEOPLE OBEY THE LAW (1990)); *see* also John S. Carroll, *Compliance with the Law: A Decision-Making Approach to Taxpaying*, 11 LAW & HUM. BEHAV. 319, 319-35 (1987) (applying decision-making models to tax law); Simon James, et al., *Developing a Tax Compliance Strategy for Revenue Services*, 55 BULL. FOR INT'L FISCAL DOCUMENTATION 158-64 (2001).

[51] TYLER, *supra* note 50, at 3-4.

[52] *Id.* at 54-60. These studies have examined compliance with arbitration awards and business decisions. *See* Tracey L. Meares, *Signaling, Legitimacy, and Compliance: A Comment on Posner's Law and Social Norms and Criminal Law Policy*, 36 U. RICH. L. REV. 407, 410 & nn.27-28 (2002).

[53] A number of empirical studies find that norms and beliefs are a stronger determinant of compliance than deterrence. *See, e.g.*, Alm, et al., *supra* note 7; DeJuan, et al., *supra* note 7; Wenzel, *supra* note 7.

[54] For an overview, see Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. 1453 (2003).

or immoral law might increase utility. The overlap between rational choice- and norm-based accounts raises the hypothesis that norms and deterrence might work at cross-purposes.

An additional effect of norms might be at work in undercutting compliance with copyright law. Given that norms are hard to dislodge,[55] imposing laws that are perceived as unjust or illegitimate might strengthen the underlying opposition against those laws. Recent scholarship points to the problematic nature of vigorous legal condemnations of norms in these settings, noting that the interaction of law and social norms often strengthens the preexisting antisocial norm.[56] Perhaps such countervailing norm effects might explain file swappers' continued persistence in spite of increased enforcement efforts by content holders.

Several studies have documented the emergence of anticopyright culture and the strong norm component of downloading and file sharing.[57] Many users of peer-to-peer applications

[55] Dan M. Kahan, *Social Meaning and the Economic Analysis of Crime*, 27 J. LEGAL STUD. 609 (1998); Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683 (1999); Tracey L. Meares & Dan M. Kahan, *Law and (Norms of) Order in the Inner City*, 32 LAW & SOC'Y REV. 805 (1998).

[56] For a theoretical model, see Francesco Parisi & Georg Von Wangenheim, *Legislation and Countervailing Effects from Social Norms* (George Mason Univ. Sch. of Law, Law and Economics Working Paper Series No. 04-31, 2004), *available at* http://www.gmu.edu/departments/law/faculty/papers/docs/04-31.pdf (describing a cycle of opinion formation whereby public acts of disobedience and protest undermine the legitimacy of legislation, which leads to further opposition).

[57] Several studies have documented the emergence of anticopyright culture and the strong norm component of downloading and file sharing. *See, e.g.*, Daniel J. Gervais, *The Price of Social Norms: Toward a Liability Regime for File-Sharing*, 12 J. INTELL. PROP. L. 39 (2004); Lior Jacob Strahilevitz, *Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks*, 89 VA. L. REV. 505 (2003) (computer code may solve collective action problems). The definition of "social norm" is somewhat illusive. For the purpose at hand, we side with the notion that a social norm is a "social regularity"—a behavior that is in fact widely adopted in society because it is not merely what people do but also because it corresponds with a normative conception within society, or a subgroup thereof, of what people should do. *See* Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338 (1997). Where necessary, we will distinguish between personal norms (moral standards attributed to an individual) and social norms (standards attributed to a group or collective). *See* Michael Wenzel, *An Analysis of Norm Processes in Tax Compliance*, 25 J. ECON. PSYCHOL. 213 (2004). As we will see, however, the distinction between both categories loses some relevance because (1) generally, social norms are often internalized, and (2) in our results, perhaps through a self-serving bias, the social norm evaluation of respondents correlates with personal norms. Differences between personal and social norms, however, are highly relevant to policy recommendations. Recent literature provides insightful theoretical and empirical insights into the origins of social norms. *See infra* Part III.

operate from a metanorm that file-sharing technology is wealth maximizing and that copyright law is out of date or biased toward music publishers. In this view, file sharing is to "be embraced rather than feared"[58] because "technology makes it possible to make an unlimited number of perfect copies"[59] and distribute those copies to millions of users "at no cost to the content provider."[60]

The norms among young people ages thirteen to seventeen are strikingly anticopyright. Prior to the litigation of individual file sharers, only twenty percent of teenagers ages seventeen and under believed that it was "wrong" to download music files without permission from authors compared to forty-eight percent of the thirty-five to fifty-four age group and sixty-three percent for ages above fifty-five years (see Table 1). These results are confirmed by a Gallup Poll that indicates that eighty-three percent of teenagers ages thirteen to seventeen believe that sharing digital music is morally acceptable.[61]

Such anticopyright norms are in conflict with the conventional business model of copyright law, but these norms, of course, conform within a file-sharing subculture. Witness in this regard the ability of the file-sharing community to maintain a social norm of sharing files on peer-to-peer networks. The exclusive focus of lawsuits on shared files[62] indirectly targets this collective action rule among file sharers ("Please share your own files if you want to download files from others"). Despite the possible costs associated with sharing files and the incentive for free riding, many people deliberately leave files in a shared folder. None of the existing theories on social norms provide an explanation for this behavior. Because of the degree of anonymity and the lack of repeat interactions,[63] sharing songs online offers only very limited opportunities for indicating that one is worthy of trust[64] or

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[58] Ku, *supra* note 46, at 268.

[59] *Id.* at 264.

[60] *Id.* at 268.

[61] THE GALLUP POLL, DOWNLOADS ARE MUSIC TO TEEN EARS (June 24, 2003) (on file with author), *available at* http://www.poll.gallup.com.

[62] For technical reasons, the availability of files on file-sharing networks is easier to detect than the act of downloading.

[63] An alternate explanation is offered in Strahilevitz, *supra* note 57, at 568-69 (file-sharing software has features that technically impose file-sharing obligations and/or that create the perception that others are sharing).

[64] *See* ERIC A. POSNER, LAW AND SOCIAL NORMS (2000) (people provide signals

social esteem.[65]

Many users of file-sharing networks were unaware of copyright issues until the first wave of litigation. File sharing has enough in common with sharing CDs among friends and is different enough from selling pirated CDs that users of file-sharing technology might believe, as was the case in the initial years of Napster, that file sharing is not a priori illegal and that it may be justifiable to engage in file sharing until a court or statute explicitly states otherwise.[66] The media exposure on copyright litigation has changed this perception and informed users of the legal issues involved with file sharing. Yet the effect of litigation on the copyright perspectives of individual file sharers has been very modest. After the first wave of litigation, thirty-three percent of teenagers believed that it was wrong to download unlicensed reproductions of music (see Table 1). As to the legitimacy of litigating private copiers, a survey by E-Poll indicated that only 37.6% of all respondents agreed that the RIAA "should be filing lawsuits," while sixty-two percent disagreed. Also, sixty-five percent found a five-dollar price reduction the most appealing alternative to peer-to-peer file sharing.[67] A study from NPD shows a similar effect.[68]

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in social interactions that they are of a "good" type in order to increase future exchange possibilities).

[65] *See, e.g.*, McAdams, *supra* note 57, at 369 (individuals seek to gain esteem in social interactions); Symposium, *The Legal Construction of Norms*, 86 VA. L. REV. 1577 (2000) (same); Symposium, *Social Norms, Social Meaning, and the Economic Analysis of Law*, 27 J. LEGAL STUD. 537 (1998) (same).

[66] *See* Ben Depoorter, *The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law*, 9 VA. J.L. & TECH. 4, 34 (2004) (describing the sequence from innovation to litigation).

[67] *See Online Piracy: Have Lawsuits Had an Impact on Downloads?*, E-POLL, Nov. 4, 2003, *available at* http://www.prnewswire.com/cgi-bin/ stories.pl?ACCT=104&STORY=/www/story/11-04-2003/0002050963&EDATE. The survey was first conducted April 8-11, 2003, prior to the first lawsuits and again on October 7-10, 2003, after the last suits. The survey group consisted of 1075 and 1162 individuals all over thirteen years of age, respectively. Results for gender were equally weighed. *Id.*; *see also* Paul Bond, *Consumer Confusion*, THE HOLLYWOOD REPORTER.COM, Oct. 22, 2003, http://www.hollywoodreporter.com/thr/music/ feature_display.jsp?vnu_content_id=2007229; *Europeans Balk at CD Prices, More Downloading*, DIGITAL MUSIC NEWS, Dec. 7, 2004, http://www.digitalmusicnews.com/results?title=Music20%Choice; Press Release, *supra* note 33.

[68] A MusicLab survey by NPD reports that consumers' overall impressions of the recording industry were negatively affected by threats of litigation. Two-thirds of consumers who had recently shared files on P2P networks reported that the lawsuits caused them to have a "much more" or "somewhat more" negative opinion of record companies in general. Press Release, NPD Group, Consumers Delete Large

TABLE 1
EFFECT OF LITIGATION ON THE AMOUNT OF STUDENTS WHO BELIEVE THAT FILE SHARING IS ILLEGITIMATE[69]

	April 2003	October 2003
Ages 13-17	20%	33%
Ages 18-34	30%	39%
Ages 35-54	48%	55%
Ages 55+	63%	61%
Total	43%	47%

The precise effect of raising copyright awareness through litigation is ambiguous. Litigation informs copiers of the possible dangers of sharing files, but at the same time, lawsuits affect the normative outlook on copyright law. For the purpose of increasing copyright obedience, the interaction between litigation, norms, and deterrence is important. In the normative view, people disobey a law if they believe it is illegitimate, regardless of other costs and benefits of breaking that law. Norm effects might thus cancel out deterrence effects if anticopyright norms are bolstered at an equal rate.

In the next Part, we collect and discuss new evidence on the effect of litigation on the norms held by private copiers. We investigate the hypothesis that legal condemnations of norms may have the unintended effect of strengthening the targeted norm.[70] Although some studies have explored the interaction between deterrence and norms with regard to tax evasion,[71] the countervailing norm effect hypothesis awaits further examination.[72]

Numbers of Digital Music Files from PC Hard Drives, the NPD Group Reports (Nov. 5, 2003), *available at* http://www.npd.com/dynamic/releases/press_031105.htm.

[69] Bond, *supra* note 67.

[70] A legal condemnation of a norm might have the unintended effect of moving "equilibrium behavior . . . in the opposite direction from that intended by the law." *See* Parisi & von Wangenheim, *supra* note 56, at 1.

[71] *See* Wenzel, *supra* note 50.

[72] Some scholars have argued that improved enforcement may backfire and produce increased tax evasion, but these viewpoints are contested. For a review of empirical evidence on the proposition that enforcement may backfire, see generally Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. 1453, 1484-99 (2003). Lederman concludes:

> In sum, the speculation that sanctions for tax evasion will tend to undermine compliance does not seem to be supported by the evidence. In the experimental context, the availability of sanctions for failure to cooperate increases cooperation. In the tax compliance context, audits increase even compliance of those not threatened with audit.

III

A Study of Copyright Law Enforcement and Social Norms

A. Intentions

In this Part, we gather evidence on the interaction between norms and deterrence in a scenario study. We examine how norms influence behavior and the sensitivity of respondents to different degrees of copyright enforcement. We devote particular attention to differences between regular users of file-sharing technology and individuals who have never downloaded unlicensed music files. We relate these results to the burgeoning literature on the interplay between law, norms, and psychological processes.

B. Design of the Study

The subjects for our experiment consisted of 288 undergraduate students at Ghent University.[73] We asked all students to complete a written survey containing two different enforcement scenarios followed by a number of questions. Participants were told that the survey was part of a law school experiment on how people respond to copyright enforcement and that it would require about ten minutes of their time. No financial compensation was offered for participating in the experiment,[74] but students re-

Id. at 1499.

[73] The age of the students ranged from eighteen to thirty-six years old (mean (*M*) = 19.83, standard deviation (*Sd*) = 2.09). The participants of the study are fairly representative of the core target group in the P2P file-sharing controversy. According to a study by Ipsos-Reid, file sharers are predominantly in the twelve to twenty-four age group. *See* Robyn Greenspan, *Making Money on Free Music*, InternetNews.com, June 12, 2002, http://www.internetnews.com/stats/ article.php/1365161.

[74] Generally, research has demonstrated how individuals who volunteer to participate in experiments genuinely make an effort to perform even in the absence of monetary rewards. *See generally* Stephen M. Smith & Irwin P. Levin, *Need for Cognition and Choice Framing Effects*, 9 J. Behav. Decision Making 283 (1996). Moreover, Camerer and Hogarth found that financial incentives generally do not influence results. Colin F. Camerer & Robin M. Hogarth, *The Effects of Financial Incentives in Experiments: A Review and Capital-Labour-Production Framework*, 19 J. Risk & Uncertainty 19, 22-23 (1999). In addition, Dawes stated that research subjects are usually middle-class, achievement-oriented people who wish to perform to the best of their abilities. Robin M. Dawes, *The Purpose of Experiments: Ecological Validity Versus Comparing Hypotheses*, 19 Behav. & Brain Sci. 20, 20 (1996). Along similar lines, psychologists presume that subjects cooperate with instructions and are intrinsically motivated to perform well. Colin Camerer, *Individual Decision*

ceived participation credit for an introductory psychology course.

All subjects received the same written instructions on how to complete the survey.[75] The 700-seat auditorium provided anonymity although subjects completed the questionnaires in the presence of the experimenters. After reading each hypothetical enforcement scenario, students were requested to evaluate their agreement or disagreement with a number of statements relating to copyright enforcement, their own behavior, and the behavior of others. They indicated their agreement with the provided statements on a seven-point scale, assigning scores between two endpoints of (1) strong disagreement and (7) strong agreement (an answer of "1" meant the student strongly disagreed with the statement; "7" meant the student strongly agreed).

We created different versions of each basic enforcement scenario and divided the students into different groups that were subjected to different modalities of copyright enforcement. The severity and/or certainty of punishment for copyright infringements on P2P networks varied across groups in the following ranges: (1) high (1/5 or 20%) versus low (1/10,000 or 0.01%) certainty of punishment and (2) low (20 euros) versus high (20,000 euros) sanction for each downloaded song. In our analysis of the effect of different types of enforcement on individual file sharers and non-file sharers, we distinguished between different scenarios that varied the hypothetical probability of getting caught and the measure of punishment. The version of a scenario that any given subject received was determined randomly. We drew conclusions as to the effect of each variable by comparing the responses of subjects in the different groups.[76]

In analyzing the responses, we looked for systematic differences between students who admitted to downloading music on peer-to-peer networks and students who had never downloaded music. Throughout the study, we used the terms *present* and *potential* file sharers to distinguish between students who share files on peer-to-peer networks and students who have not yet been engaged in file sharing. This distinction is important, as we shall see below, because effective copyright enforcement might re-

Making, *in* THE HANDBOOK OF EXPERIMENTAL ECONOMICS 587, 599 (John H. Kagel & Alvin E. Roth eds., Princeton Univ. Press 1995); Smith & Levin, *supra*.

[75] *See infra* app. at pt. I.

[76] The random assignment of students to different enforcement scenarios ensured the essential similarity between the pool of subjects in the different groups.

quire a different approach to potential file sharers ("on the fence") versus individuals who are already engaged in file-sharing activities ("rotten apples").

C. Discussion

1. Lawsuits as Focal Points

When asked whether they believe that "most people will continue to take the risks involved with file sharing," students in the strong-armed enforcement group (i.e., those subjected to a hypothetical condition of high severity and high certainty of sanction) expected more downloading than students in the low enforcement group (i.e., low ranges of severity and certainty).[77]

a. Results

Interestingly, an interaction effect also occurred between present/potential file sharers and the severity of sanctions.[78] Students who do not engage in file sharing (or, more accurately, students who reported that they do not share files) had different expectations than file sharers. Regardless of the severity of the sanction, present file sharers remained stable in their expectation that others would continue to download.[79] Subjects without any file-sharing experience expected more file sharing when heavier sanctions were imposed (see Figure 1 below).[80] The x-axis in Figure 1 differentiates between heavy (right-hand side) and low (left-hand side) severity of punishment. The y-axis displays, in increasing order, the perception of whether others were downloading. While the expectation of present file sharers (black line) was no different when strong or moderate sanctions applied, potential file sharers (shaded line) expected more downloading when sanctions were higher.

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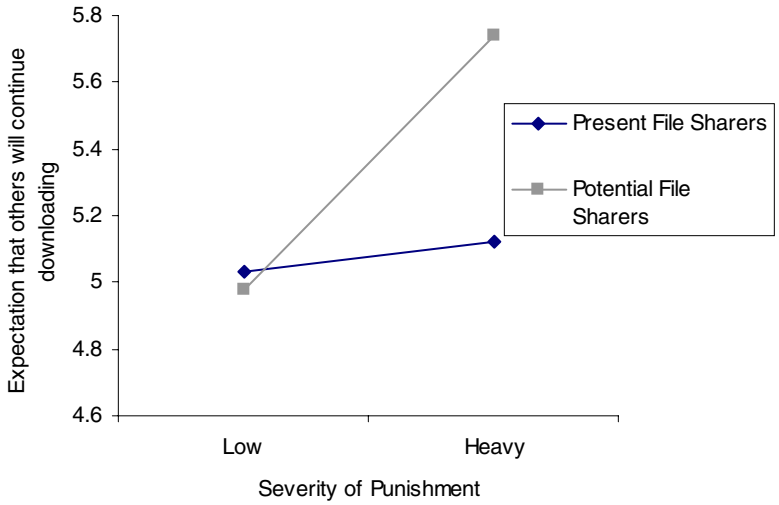
[77] Respondents who were subjected to a low probability of punishment expected less downloading (M = 4.51) than respondents who were subjected to a high probability of punishment (M = 5.8). Respondents who were subjected to severe hypothetical sanctions had lower expectations of general downloading activity (M = 4.95) relative to respondents who were subjected to more moderate sanctions (M = 4.51).

[78] $F(1287) = 3.90$, $p < .05$.

[79] $M = 5.03$ in the case of low severity of punishment and $M = 4.98$ in the case of high severity, respectively.

[80] $M = 5.12$ in the case of low severity of punishment and $M = 5.74$ in the case of high severity, respectively.

FIGURE 1
PERCEPTION OF DOWNLOADING ACTIVITIES: TYPE OF STUDENT AND SEVERITY OF PUNISHMENT



b. Discussion

These questions examined the perception of how others respond to varying degrees of copyright enforcement. The perceptions of *present* and *potential* users of file-sharing technology are important because they may serve as a proxy for the behavior of these groups. Increased law enforcement efforts have the most obvious effect of increasing the perceived expected liability costs. But the impact of law enforcement is more complicated. Public acts of law enforcement may have an impact on individuals' perception of the degree and frequency of civil disobedience. Social psychology literature has amply demonstrated that individuals are often influenced by their subjective perception of what others are doing.[81] Whenever such coordination is at play, the effect of different degrees of copyright enforcement (more private suits initiated by the record industry, higher settlement amounts, etc.) might affect people's perceptions of what others will do and, consequently, have an impact on their own decisions with regard to

[81] When law creates a focal point by expressing values that might tip norms to a new equilibrium, this process may "create or destroy a social norm." Robert D. Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585, 585 (1998). The idea of law as focal point that coordinates expectations among citizens is further explored in Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649 (2000).

file sharing.[82] For instance, in a recent study, Parisi and von Wagenheim situate the interaction between law and norms within a general opinion formation process.[83] Because, in many cases, "individuals do not have strong prior beliefs on whether any given law is fair or unfair[,] [o]bservation of other people's reaction to the law (e.g., support, compliance, protest or civil disobedience) conveys some information that may create, reinforce or modify their beliefs on the matter."[84] So when a new law is met with strong opposition and disobedience from individuals whose internal values are so different from the law that they are willing to incur the costs of protest, individual observers may infer that the law is not aligned with a common sense of justice. This might undermine the law's authority in the minds of the observing public and ultimately strengthen the social norms by persuading others that the new law is unjust. Similarly, in the context of copyright law, some are convinced that copyright law obstructs the opportunities offered by new technology.[85] File swapping and other public acts of "copyright disobedience" might thus have an impact on the perceived legitimacy of copyright enforcement.

In this regard, the results of the study do not bode well for copyright-dependent industries: students believe that enforcement will not stop their peers from file sharing. In general, students believe that others will continue to download regardless of the enforcement of copyright law. Not even in the severe punishment group (10,000 euros per downloaded CD) did the students in our study think that downloading would come to a halt. In fact, increased enforcement has a counterproductive effect on potential file sharers. When the punishment for copyright infringement is severe, potential file sharers believe that others will download more than when penalties are more moderate.

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[82] A recent experimental paper by Professors Bohnet and Cooter explores the relative impact of this coordination versus the framing effects of legal rules. *See* Iris Bohnet & Robert D. Cooter, *Expressive Law: Framing or Equilibrium Selection?* (Berkeley Program in Law & Econ., Working Paper Series No. 31, 2004) (experimental finding that sanctions affect behavior mostly by coordinating the beliefs of people).

[83] Parisi & von Wagenheim, *supra* note 56, at 8.

[84] *See id.* at 9.

[85] In the words of Justice Souter, "[T]he indications are that the ease of copying songs or movies using software like Grokster's and Napster's is fostering disdain for copyright protection." *Grokster III*, 125 S. Ct. 2764, 2775 (2005) (citing Wu, *supra* note 8, at 724-26).

2. Peer Group Identification

What are the effects of lawsuits on copynorms? Copyright enforcement and media coverage may direct individual beliefs toward copyright law or, on the contrary, generate sympathy for the targeted class of violators and lead to increased social support for P2P file sharing. In a second part of the study, we asked students to evaluate the current litigious nature of copyright enforcement against file sharers. We posed three related questions on this point by asking the students to identify whether they agreed with the following statements: (1) "I am of the opinion that the music industry is conducting an unjust, disproportionate policy"; (2) "[t]he policies of the music industry conflict with my sense of justice"; and (3) "[t]he policies of the music industry are an attack on my freedom to listen to music."[86] Again, we asked students whether these statements corresponded with their own sentiments.[87] The questions were put to two groups of students: a group of present file sharers and a group of potential file sharers. Each group was exposed to different probabilistic enforcement regimes.[88]

a. Results

Although all students in the study appeared averse to lawsuits against file sharers, people with file-sharing experience were more opposed to enforcement (M = 4.78) than potential file sharers (M = 4.09).[89]

In a regime of severe punishment, present file sharers reacted differently from non-file sharers.[90] The former were outspoken in their view that lawsuits are unjust and disproportionate (M = 5.08), whereas the latter were more neutral to the music industry's efforts to prevent file sharing (M = 3.61) (see Figure 2). In the low punishment condition, the evaluation of the music indus-

[86] The participants' responses to the three items were averaged to form a composite perception measure. The Cronbach Alpha, an intercorrelation measure, indicated that these three items fit very well together (á = .82).

[87] Each item was presented on a seven-point Likert scale. The endpoints were labelled as "1. Strongly disagree" and "7. Strongly agree." *See infra* app. at pt. 1.

[88] The independent variables were manipulated in the following manner: individual scripts varied between (1) high (1/5 or 20%) or low (1/10,000 or 0.001%) rates of certainty of punishment and (2) low (20) versus high (20,000) punishment for each downloaded song.

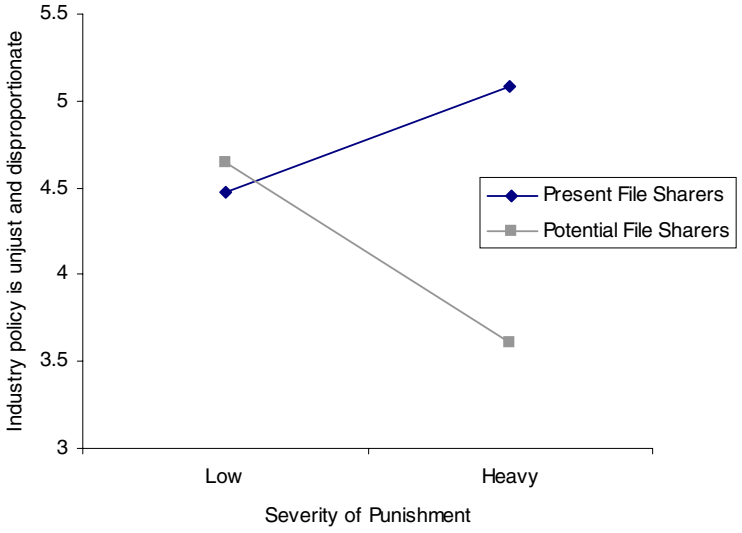
[89] The main effect for the type of user was $F(1287) = 11.20$, $p < .01$.

[90] The interaction effect between downloading and severity of punishment was $F(1287) = 14.48$, $p < .01$.

try was comparable for present and potential file sharers (M = 4.47 versus M = 4.65) (see Figure 2). The x-axis in Figure 2 differentiates between heavy (right-hand side) and low (left-hand side) severity of punishment. The y-axis displays, in increasing order, students' negative perspective on the music industry. While present file sharers (black line) were more anti-industry when enforcement efforts were increased, anti-industry viewpoints were moderated for potential users (shaded line on the right side of the x-axis).

FIGURE 2

EVALUATION OF ENFORCEMENT BY THE MUSIC INDUSTRY: TYPE OF STUDENT AND SEVERITY OF PUNISHMENT



b. Discussion

These results confirm the wide opposition and general ethical aversion to the application of copyright law to peer-to-peer networks. The difference between potential and present users of file-sharing technology can be attributed to various factors. First, file sharers simply have more to lose from the strict enforcement of copyright law. As a type of self-serving bias, file sharers might engage in self-interested norm adjustments ("I want to download music, so I think prohibiting peer-to-peer activities is unjust") and convince others to do so as well.[91]

[91] *See generally* Daniel S. Nagin & Greg Pogarsky, *An Experimental Investigation*

Second, a recent study on tax avoidance found that individuals "adjust their own beliefs so as to justify their behaviour as right and ethical. They then generalise these views to others, presumably to gain further social support."[92] Current research on the causality of norms and behavior affords insight into possible underlying psychological processes. According to the theory of cognitive dissonance, individuals tend to ignore or distort their perception of the world when they sense that something in the world is inconsistent with the cognitive frame through which they see the world. If that becomes impossible, people "amend [their] cognitive frame (i.e., the way we see and understand the world) to incorporate [this] new perception."[93] When file sharers notice that file sharing is pursued in courts, this might not correspond with their previously held view of the world. They might ignore copyright litigation for some time, but at a certain point, they will need to either accept that file sharing is illegal or to realign this new perception of reality (file sharing is being litigated) with a new cognitive frame ("Despite litigation, file sharing should be allowed"). Despite the obvious self-interested origin of such anticopyright norms, these normative beliefs may supervene on causal accounts so that "people assert that interests have nothing to do with their behavior in following various norms."[94]

As we will discuss further in Part V, such ex post rationalizations of self-interested, antisocial conduct have important policy implications[95] because to address such conduct effectively, one needs to differentiate between present and potential file sharers.

3. Sticky Norms

In a third part of the study, we examined the impact of differ-

of Deterrence: Cheating, Self-Serving Bias, and Impulsivity, 41 CRIMINOLOGY 167 (2003) (finding that participants in cheating experiment were more likely to cheat if they were prone to self-serving bias).

[92] In a pioneering study on tax aversion, Michael Wenzel observes bidirectional causality between self-interest and norms. He concludes that for taxpayers, antisocial conduct feeds back into personal and social norms. *See* Wenzel, *supra* note 50.

[93] Joshua D. Rosenberg, *The Psychology of Taxes: Why They Drive Us Crazy, and How We Can Make Them Sane*, 16 VA. TAX REV. 155, 201 n.113 (1996).

[94] Rusell Hardin, *Law and Social Norms in the Large*, 86 VA. L. REV. 1821, 1831 (2000) (describing limits to social norm explanations).

[95] *See supra* Part IV. Wenzel argues that ethics and utility overlap: "[T]he rationalisation of tax evasion or compliance refers first and foremost to moral concerns, rather than social exchange considerations. As it seems, even the rational actor cannot live or act without concerns for ethics, even if they come after the fact." Wenzel, *supra* note 50, at 505.

ent modalities of copyright enforcement (i.e., higher rates of detection versus more severe punishment) on the (reported) norms of students.[96] To examine whether enforcement would realign norms with copyright law, we presented students with two related questions by asking them to identify whether they agreed with the following statements: (1) "These new developments are gradually making me realize that illegally downloading music is not ethical," and (2) "[these d]evelopments are causing me to adjust my norms regarding the illegal exchanges of music."[97] Again, students were asked to what extent they agreed with these statements.[98]

a. Results

Although none of the students reported a significant norm change, individuals without file-sharing experience indicated more strongly that enforcement patterns would adjust their normative stance toward copyright law ($M = 3.77$) than did respondents with file-sharing experience ($M = 3.23$).[99] An interesting difference surfaced with regard to the effect of punishment on the norms of individuals with and without file-sharing experience (see Figure 3).[100] When subjected to heavy sanctions, file sharers believed that their behavior was ethical ($M = 2.97$) more so than when they were subjected to more moderate sanctions ($M = 3.50$). By contrast, when individuals without file-sharing experience were subjected to strong sanctions, they agreed that downloading music was unethical and unjust ($M = 4.20$) more so than when they were subjected to more moderate sanctions ($M = 3.35$). In other words, steep penalties for file sharing have different effects on present and potential users: it emboldens the former into a justification of downloading while fostering procopyright sentiments in the latter. The x-axis in Figure 3 differentiates between heavy (right-hand side) and low (left-hand

[96] As before, the question was put to a group of users of peer-to-peer technology and a group of non-file sharers. Each group was presented with different enforcement regimes. Across enforcement regimes, individual scripts varied between (1) high (1/5 or 20%) or low (1/10,000 or 0.01%) rates of certainty of punishment and (2) low (20) versus high (20,000) punishment for each downloaded song.

[97] The Cronbach alpha for the 2 items was á = .78.

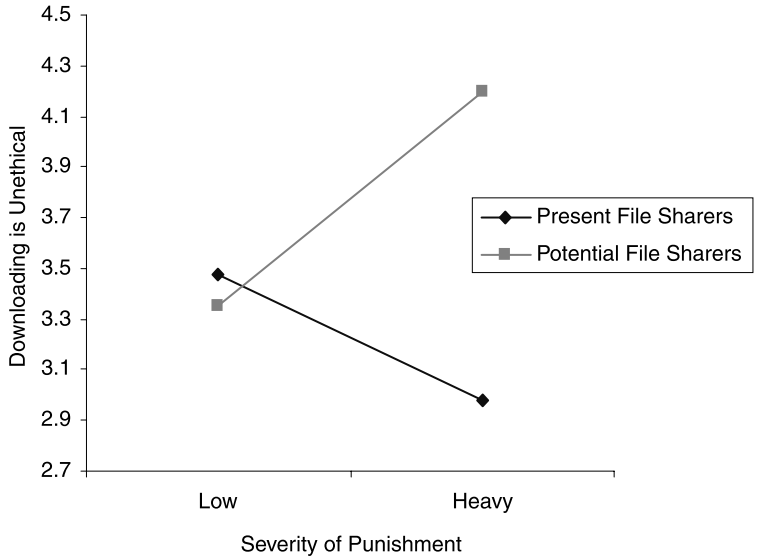
[98] Once again, each item was presented on a seven-point Likert scale. The endpoints were labelled as "1. Strongly disagree" and "7. Strongly agree." *See infra* app. at pt. 1.

[99] $F(1287) = 7.16$, $p < .01$.

[100] $F(1287) = 10.88$, $p < .01$.

side) severity of punishment. The y-axis displays, in increasing order, how much students were willing to adjust their viewpoints to copyright law. While present file sharers (black line) are not likely to adjust their norms to copyright law when enforcement efforts are increased, norm adjustments are stronger for potential users when enforcement is toughened.

FIGURE 3
SEVERITY VERSUS ETHICS OF DOWNLOADING



b. Discussion

Some scholars have suggested that law may have an expressive effect: expressing a legal condemnation has a symbolic quality that will induce a correspondent preference adaptation among individuals.[101] Our results provide no evidence of procopyright norm adaptation regarding present users, who seem firmly entrenched in their anticopyright perspective. On the contrary, file swappers, previously in a legal setting of large fines, resort to higher levels of file swapping. If anything, the legal condemna-

[101] The expressive function of the law captures the notion that a formal legal condemnation will induce compliance, irrespective of actual enforcement, because law (as an express collective commitment) may engender intrinsic motivations or cause people to conform since they believe that others will do so as well. *See, e.g.*, Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363 (2000); McAdams, *supra* note 81; Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021 (1996).

tion increases their anticopyright preferences. Indeed, in the context of tax evasion, some scholars have argued that improved enforcement may backfire and be counterproductive.[102] Our study provides new evidence on the possibility of a conflict between deterrence and norms, suggesting that, with regard to users of peer-to-peer technology, heavy-handed enforcement indeed backfires and increases anticopyright norms. As we will see below, this finding has specific relevance in the case of copyright law.

4. Norm Backlash

In a second part of the study, we informed students that enforcement against file sharing had now dropped to zero because of perfect anonymity afforded by new technology.[103] This scenario is realistic in the context of the ongoing arms race between content providers on one side and pirates and hackers on the other. In this technological race, copy protection and circumvention play catch-up.[104] At times where the hackers have the upper hand, the situation resembles that of the present scenario: file sharers do not fear enforcement because technology provides anonymity.[105] This emphasizes the importance of social norms in the context of copyright enforcement. Whenever technological advances in private copying have not yet been countered by content owners, either through technological self-help or judicial

102 *See* Lederman, *supra* note 54, at 1461-62 (arguing that most of the evidence of norms backlash is overstated).

103 The latest advancement in peer-to-peer technology is anonymous file sharing of this sort. For example, see the announcement of the latest version of Blubster 2.5, a peer-to-peer file-trading software tool that claims to protect user anonymity. *Video: Anonymous P2P File Trading*, CNET NEWS.COM, July 1, 2003, http://news.com.com/1606-2-740866.html.

104 On the interaction between self-help and law, see generally Douglas Lichtman, *How the Law Responds to Self-Help* (Univ. Chi. Law Sch., John M. Olin Law & Econ. Working Paper No. 232, 2004), *available at* http//www.law.uchicago.edu/Lawecon/WkngPprs_226-50/232-dgl-self-help.pdf (describing how legal rules encourage, harness, deter, and sometimes defer to self-help mechanisms).

105 Sony BMG is taking the lead with several new copy-protected CDs. Sony BMG plans to employ either the MediaMax solution from SunnComm or XCP from First4Internet. The strategy is a bit risky for the major label since consumers were annoyed at earlier protection attempts. But executives are reportedly now feeling more comfortable with current protection technologies that offer better playback and reliability across a wider range of devices. *See* Ed Christman, *Sony BMG Ramps Up CD Copy-Protection Plan*, IDOBI NETWORK, Feb. 26, 2005, *available at* http://idobi.com/news.wml?200502262.

evaluation,[106] norms are a strong determinant of conduct.

In order to get a measure of the effect of copyright enforcement in times when there is a lag in enforcement, we asked respondents whether, during this protected period, "[t]he enforcement policy of the music industry prior to the introduction of the new protective software influences the amount of music I will resume downloading."[107]

a. Results

First, none of the respondents indicated that prior enforcement strategies would fundamentally affect their behavior. All of the answers were in the 4 to 5 range on a scale in which 7 denoted strong agreement. Second, prior enforcement policies had different effects on present and potential file sharers.[108] The x-axis in Figure 4 differentiates between heavy (right-hand side) and low (left-hand side) severity of punishment. The y-axis displays, in increasing order, how the enforcement policy of the music industry prior to the introduction of the new protective software influences the amount of music students will download. Heavy punishment schedules in times of enforcement led file sharers (black line) to higher levels of downloading during enforcement lags ($M = 5.24$) relative to individuals without file-sharing experience (shaded line) ($M = 4.57$). The converse result emerged with regard to punishment in the lower range. Potential file sharers (shaded line) downloaded more during an enforcement downtime ($M = 5.26$) relative to present file sharers ($M = 4.54$). In other words, penalties for copyright offenses had opposite effects

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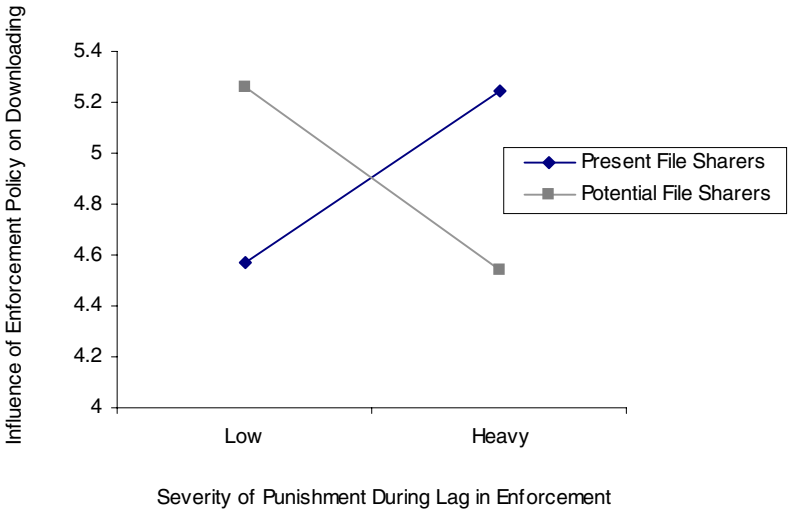
106 Such enforcement lags also follow from the fact that the socioeconomic effects of technological advances are not clear cut at the moment of inception or the first months of use. For instance, in the case of Napster, it took the record industry almost a year to realize the scale of the opportunity costs that the technology presented. *See* Depoorter, *supra* note 66. The unpredictability of technology is best illustrated by the comment of MPAA president Jack Valenti when video recorder technology was introduced: "I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone." *Home Recording of Copyrighted Works: Hearing on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, H.R. 5705 Before the Subcomm. on Courts, Civil Liberties and the Admininstration of Justice of the H. Comm. on the Judiciary*, 97th Cong. 8 (1982) (statement of Jack Valenti, President, Motion Picture Association of America, Inc.). VCR technology would eventually become a billion-dollar market to the entertainment industry. *See* KJB, *KJB's Backlash #5: The MPAA Owns You All*, IGN NEWS, Nov. 16, 2004, http://filmforce.ign.com/articles/566/566370p1.html.

107 *See infra* app. at pt. II.

108 $F(1287) = 5.14$, $p < .01$.

on those respondents without file-sharing experience and those with file-sharing experience.

FIGURE 4
SEVERITY AND INFLUENCE DURING ENFORCEMENT LAG



b. Discussion

What conclusions can be derived from this? As the results indicate, file swappers who were previously in a legal setting of stringent enforcement intend to download more music than file swappers previously subject to more moderate sanctions for downloading. The inevitable lags in enforcement thus present a cautionary note: exclusive reliance on punishment might be unfortunate given the backlash effect when enforcement is temporarily suspended.

The results also indicate a differentiated effect between present and potential file sharers. The counterproductive effect of heavy-handed copyright enforcement does not occur with regard to potential file sharers. When severe sanctions are imposed, nonusers of peer-to-peer technology report lower intentions of downloading during enforcement lags. Weak sanctions thus remove the inhibitions of potential file sharers but have a moderating effect on the downloading behavior of experienced file sharers.

5. Summary

In this Part, we gathered data on the effect of copyright enforcement on social norms. In doing so, we added some empirical evidence to the burgeoning theoretical literature on social norms. Our study leads us to a number of important conclusions.

Media attention of copyright lawsuits against private individuals does not lead file sharers to believe that their peers will stop downloading. For those inexperienced with file sharing, enforcement actually increases the perception that others are downloading music.[109]

Additionally, anticopyright norms of present users of peer-to-peer technology cannot be unraveled through enforcement. Irrespective of the level of punishment, there is no norm change toward procopyright viewpoints among experienced users of peer-to-peer technology. By contrast, the norms of students who have not yet been exposed to peer-to-peer software are more amenable to procopyright adjustments through enforcement.

Furthermore, there may be a backlash effect among users of file-sharing technology. When severe sanctions are imposed, present users of file-sharing technology will likely make up for lost time whenever enforcement efforts are hindered.

There are also different norm effects for present and potential peer-to-peer users. Pro-file-sharing norms of present users are relatively stable and are encouraged when enforcement is stepped up, which results in higher download activity levels when enforcement is temporarily suspended. Enforcement has an ambivalent effect on individuals who have not applied file-sharing technology. Severe sanctions do not have a counterproductive effect on their copyright norms, yet exposure to information on copyright enforcement against peer-to-peer software reinforces their perception that others are engaged in file sharing.

These differences are indicative of a tipping point: at a certain level of activity (file sharing), the evaluation of that behavior is internalized.[110] As a result, the norm becomes robust—also re-

[109] Enforcement may work as a cue that others are not complying with the rules, and this information may reduce overall compliance. *See* Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 J. LEGAL STUD. 1 (2000) (introducing a fine reduces compliance of late-arriving parents in day care centers).

[110] On the internalization of social norms, see Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms*, 86 VA. L. REV. 1577 (2000); Robert D. Cooter, *Three Effects of Social Norms on Law: Expression, Deterrence, and Internalization*, 79 OR. L. REV. 1 (2000).

ferred to as the "stickiness" of social norms—and presents a more ardent challenge to legal enforcement efforts.[111] An additional factor that might be at work here is what social psychologists describe as "group identification."[112] At a certain point, individuals identify themselves in relation to other individuals who are engaged in similar acts. This process of obtaining a group identity eventually affects normative conceptions of the group's activities and might trigger different reactions to enforcement. Perhaps, as users become more accustomed to using file-sharing technologies, they identify with the anticopyright subculture, internalizing the norms and ethics of the relevant community.[113]

Whatever the nature of the underlying processes that create these differentiated norm effects between present and potential file sharers, as a general conclusion, copyright enforcement would be well advised to apply differentiated strategies to various target groups. Experienced users are, in the language of recent social norms literature, more responsive to "gentle nudges" than to "hard shoves"; that is, pushing hard against the existing norms of these users backfires and emboldens the preexisting anticopyright norms that enforcement intends to combat.[114]

In the next Part, we draw some broader lessons from the results of the study, in particular with regard to the policy choices that regulators, courts, and copyright holders face when approaching the widespread use of copyrighted material on file-sharing networks.

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111 *See infra* note 112.

112 *See generally* David De Cremer, *Effect of Group Identification on the Use of Attributions*, 140(2) J. SOC. PSYCHOL. 267 (2000).

113 Social norms can impact behavior when internalized through a process of identification with the relevant social group. *See* Michael Wenzel, *An Analysis of Norm Processes in Tax Compliance*, 25 J. ECON. PSYCHOL. 213, 224 (2004). For instance, in the context of tax compliance, research demonstrates that "perceived social norms will causally affect tax compliance when taxpayers identify with the group to which the norms are attributed." Wenzel, *supra* note 50, at 495.

114 Dan M. Kahan, *Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem*, 67 U. CHI. L. REV. 607, 607-08 (2000) (proposing that moderate penalties for evasion may be more effective than severe condemnation in societies enjoying relatively compliant norms). In a different study on the norm sensitivities of regular and occasional users of P2P technology, we observed a similar effect. Severe sanctions generated a particularly strong backlash effect among regular users of P2P technology. *See* Ben Depoorter et al., *Gentle Nudges v. Hard Shoves in Copyright Law: An Empirical Study on the Conflict Between Norms and Enforcement* 7 (Ghent Ctr. for Advanced Studies in Law & Econ. Working Paper No. 6, 2005), *available at* http://ssrn.com/abstract=740184.

IV

LESSONS FROM COPYRIGHT LAW SOCIAL NORMS

A. From Copyright to Criminal Law

Copyright enforcement is increasingly moving toward criminal prosecutions of digital piracy.[115] At both the state and federal levels, legislative proposals are shifting copyright enforcement into the realm of criminal law.[116] Several recent legislative proposals have sought to increase the involvement of the Justice Department in punishing users of peer-to-peer networks.[117] For instance, the proposed Protecting Intellectual Rights Against Theft and Expropriation Act of 2004 (PIRATE Act) would empower the Justice Department to initiate private lawsuits against file sharers.[118] In January 2005, a bill was introduced in the Cali-

[115] "[T]he past ten to twenty years have shown that both the Executive and the Legislative branches appear agreeable to increasing the level of detection and prosecution of copyright infringement." I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WM. & MARY BILL RTS. J. 305, 323 (2002) (discussing the trend of criminalization of noncommercial copyright infringements). Currently, U.S. copyright law classifies the following copyright infringements as criminal offenses:

> (1) In general.—Any person who willfully infringes a copyright shall be punished as provided under section 2319 of title 18, if the infringement was committed—
>
> (A) for purposes of commercial advantage or private financial gain;
>
> (B) by the reproduction or distribution, including by electronic means, during any 180-day period, of 1 or more copies or phonorecords of 1 or more copyrighted works, which have a total retail value of more than $1,000;
>
> . . . .
>
> (2) Evidence.—For purposes of this subsection, evidence of reproduction or distribution of a copyrighted work, by itself, shall not be sufficient to establish willful infringement of a copyright.

17 U.S.C.A. § 506(a) (West 2005).

[116] The first step in the direction of direct copyright criminalization was initiated in the second half of the 1990s when the No Electronic Theft (NET) Act equated certain types of copyright infringement with physical-space theft. *See* No Electronic Theft (NET) Act, Pub. L. No. 105-147, 111 Stat. 2678 (1997). For a discussion of this trend, see Eric Goldman, *A Road to No Warez: The No Electronic Theft Act and Criminal Copyright Infringement*, 82 OR. L. REV. 369 (2003).

[117] Xeni Jardin, *Congress Moves to Criminalize P2P*, WIRED NEWS, Mar. 26, 2004, http://www.wired.com/news/digiwood/0,1412,62830,00.html.

[118] Protecting Intellectual Rights Against Theft and Expropriation (PIRATE) Act of 2004, S. 2237, 108th Cong. § 2(a) (2004) (as passed by Senate, June 25, 2004). The bill was introduced by Senators Orrin Hatch (R-UT) and Patrick Leahy (D-VT). As one commentator notes, Senator Hatch believes "operators of P2P networks are running a conspiracy in which they lure children and young people with free music, movies and pornography. With these 'human shields,' the P2P companies are trying to blackmail the entertainment industries into accepting their networks as a distribution channel and source of revenue." Jardin, *supra* note 117. Furthermore, both

fornia legislature that sought to criminalize selling, advertising, and distributing peer-to-peer file-sharing software.[119] The bill aimed to make it a crime to sell file-sharing software without taking reasonable care to prevent copyright infringement and pornography swapping.[120] Similarly, on the federal level, the Inducing Infringement of Copyrights Act of 2004 (Induce Act) would have enabled copyright holders to sue the creators of peer-to-peer applications also on criminal grounds.[121] The Induce Act has been stalled, but some of the criminal elements involving movie piracy were retained in the Family Entertainment and Copyright Act of 2005.[122]

From the standpoint of an economic analysis of enforcement, copyright infringements share some (but not all) properties with criminal offenses: copyright infringements are often intentional, involve coercive transfers of property rights in settings where transaction costs are low,[123] and suffer from low rates of apprehension. Also, copyright infringements involve judgment-proof issues when copyright infringers are students who cannot afford to pay deterrence-based statutory judgments.

One approach to address issues of underdeterrence or judgment-proof offenders is to resort to more punitive approaches. For instance, low probabilities of punishment can be amended by raising copyright statutory remedies further beyond private harm. Imposing nonpecuniary costs, such as incarceration, resolves the judgment-proof issue in cases of insolvency. Several

Senator Hatch and the entertainment industry see P2P networks as "lur[ing] young Internet users into a lifetime of lawbreaking." Eric Bangeman, *Federal P2P Legislation in the Works*, ARSTECHNICA, Mar. 29, 2004, http://arstechnica.com/ news/posts/ 1080594054.html.

119 S.B. 96, 2005 Leg., Reg. Sess. (Cal. 2005).

120 *California Senator Goes After P2P*, RED HERRING, Jan. 18, 2005 (on file with author), http://www.redherring.com.

121 S. 2560, 108th Cong. § 2 (2004).

122 Family Entertainment and Copyright Act of 2005, S. 167, 109th Cong. § 102 (2005); H.R. 357, 109th Cong. § 102 (2005). For instance, section 167 penalizes those who camcord motion pictures in movie theaters and creates civil and criminal penalties for those who willfully distribute pre-release works. Also, section 103 creates a criminal penalty for the willful distribution of works being prepared for commercial distribution.

123 In most instances, the costs for obtaining licenses are low. This applies in particular when licensees can obtain a license from a copyright collective or copyright clearance center. *See* Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293 (1996) (analyzing the role of collective rights organizations in reducing transaction costs in copyright law).

current proposals would take copyright law in this direction.[124]

Given, however, that present statutory penalties for direct infringements are already quite steep, continuing to raise copyright statutory penalties upward, either in monetary or nonpecuniary terms, will likely increase the fallout between copynorms in action and copyright law in the books. As documented in Part III, the pursuit of copyright enforcement, from a narrow-deterrence perspective, is counterproductive on the norm level. Strong-armed enforcement tactics induce strong anticopyright aversion. Instead, as we discuss next, insights from social psychology suggest that enforcement patterns should differentiate on the basis of the norm sensitivity of the infringer.

B. From Copyright to Education

1. On the Fence

In cooperation with the entertainment industry, several private organizations[125] are currently taking the copyright norms debate into high schools and middle schools.[126] The Peers2Peers Web site provides insight into the social meaning of copyright as it is projected onto teenagers:

> Members of the recording industry and recording artists will be working with Peers2Peers to help kids and teens understand how serious a problem this is. They will also be trying to show how everyone is hurt when kids don't respect the laws. And how many other kids and teens are hurt when their parents lose their jobs because of the huge losses experienced by the recording industry. Kids often forget that most of the people employed in the recording industry aren't as rich and famous as Madonna. And they need their weekly paychecks to feed their families. They also don't realize the long-term effects of stealing music. The music industry can't continue to survive this way, and won't be around to offer them jobs when they grow up or help promote new artists in the same way they have.[127]

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[124] *See supra* Part IV.A.

[125] Wiredsafety.org advertises its services as "creating good cybercitizens" with the aid of "[l]ive Marvel super hero character appearances." Flyer from Presentation of Parry Aftab, Executive Director, Wiredsafety.org, at the FTC Public Workshop on Peer-to-Peer File-Sharing: Consumer Protection and Competition Issues (Dec. 15-16, 2004), http://www.ftc.gov/bcp/workshops/ filesharing/presentations/ aftab.pdf.

[126] *See* PEERS2PEERS, HOW CAN KIDS AND TEENS HELP EACH OTHER DO WHAT'S RIGHT?, http://www.peers2peers.org/pages/3/index.htm (last visited Feb. 4, 2006).

[127] *Id.*

How realistic is it to rely on educational campaigns to persuade teenagers of proindustry copyright views? The results of this study indicate that copyright norms of students who have not yet been exposed to peer-to-peer software are still amenable to procopyright views. In contrast, anticopyright positions among experienced users of peer-to-peer technology are relatively fixed. Furthermore, in a different study, we observed that the tipping point between flexible copyright positions and entrenched anticopyright viewpoints kick in quite fast.[128] Given the quick intake of anticopyright norms and the "stickiness" of social norms, as illustrated in Part III, the entertainment industry is wise to bring the copyright case to the youngest segments of the population.

2. Rotten Apples?

In many ways, today's legal bouts can be viewed as a struggle to influence the social meaning of downloading and the sharing of copyrighted work. The legal battles over the appropriateness of downloading and file-sharing technologies might take aim at redirecting the norms and values regarding file sharing on peer-to-peer networks.

Can litigation help shape the perception of file sharing and peer-to-peer networks? How likely is it that lawsuits lead the general audience to equate file sharing with theft? Will file sharers be shamed in a social context? The conditions of such transformations remain poorly understood. Some scholars believe that norms sometimes trace law, altering the preferences for the rules contained therein.[129]

But can we place the burden of enforcing digital copyright law on the shoulders of a presumed expressive effect of the law and its enforcement? There is cause for healthy skepticism of a preference-shaping effect of copyright law enforcement.

First, as we observed in Part III, the perceived unjust/illegitimate nature of copyright enforcement reduces the likelihood that copyright litigation will alter people's preference for behaving according to that law. In fact, enforcement against peer-to-peer

[128] For the discussion of this empirical evidence, see *supra* Part III. Also, in another study, we examined the different norm effects between frequent and occasional downloaders. Depoorter et al., *supra* note 114, at 5 (arguing that after downloading fifty songs, the evaluation of downloading is internalized).

[129] *See, e.g.*, Cooter, *supra* note 81.

users leads to increased copyright aversion among regular users of peer-to-peer technology.

Second, the nature of copyright infringements reduces the potential for the expressive effect of the law to enhance private enforcement of those laws among private individuals. Unlike smoking and talking on cell phones on trains, individual copyright law infringements mostly lack a public component. The fact that most peer-to-peer copyright violations occur inside private homes preempts reliance on the individual conferral of social sanctions as envisaged by the expressive theories of the law. As opposed to littering on the street, copyright-abiding citizens have few opportunities to "shame" file swappers in daily interactions. To the contrary, certain attributes of file-sharing software, such as the display of file-sharing statistics and the number of users that are online, increase the perception that others are also engaged in file sharing.[130] This might lead to an increase in file sharing because, as socio-psychological evidence reveals, the apparent behavior of others may influence the social meaning and behavior of neutral observers.[131]

C. From Copyright to Self-Help

Because of the costs of litigating copyright infringement, content holders often turn to self-help alternatives. Investments in advanced technology are part of content producers' strategy to retain some of the control that seems to be slipping in the era of digital reproduction of audio and visual entertainment. Advancements in automated rights management technology, encryption software, and "tethered" technology[132] provide copyright owners with the tools to regulate access and to enjoin unauthorized individual use of content. When effective, digital rights management technology enables "information providers to enforce standard copyright claims mechanically, without resort to the threat of litigation."[133] Such technology moves copyright

[130] Strahilevitz, *supra* note 57, at 551.

[131] For a review, see Jeffrey J. Rachlinski, *The "New" Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters*, 85 CORNELL L. REV. 739 (2000).

[132] "Tethered" technology allows copyright holders to time the exact number of playbacks of a digital audio or audiovisual good by a consumer and to bar further access after the contractually provided amount of uses. Such measures can be understood as self-help rights of injunction.

[133] Daniel J. Gervais, *Towards a New Core International Copyright Norm: The Reverse Three-Step Test*, 9 MARQ. INTELL. PROP. L. REV. 1, 9 n.29 (2005). Of course, no enforcement mechanism is truly perfect. The circumvention of DVD

remedies from liability protection, where one pays compensation after the infringement, to a system of property rule protection, where the technology effectively acts as an ex ante injunction.

The use of technology for the private enforcement of copyrights is not without controversy. Some argue that self-help extends copyright protection beyond constitutionally provided limits.[134] According to others, the literal enforcement of copyright law through technology will align copyright law with the broader restrictions of use as they apply to patent law.[135] Because successful self-help procedures establish a more strict enforcement pattern than the lenient system of imperfect enforcement of copyright law to which consumers have grown accustomed,[136] consumers often negatively perceive self-help measures. One notable example is the system of region-specific codes on DVD technology that prevents arbitrage between commercial pirates across markets but, in doing so, also makes it impossible for unknowing consumers to play DVDs at home they have bought, for instance, during an overseas trip to Europe.

For content holders as well as consumers, copy protection is a double-edged sword. In the hands of content holders, circum-

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Content Scrambling systems, Real Networks' streaming protection measures, Adobe's eBook Reader, and the security code of the Xbox game console confirms that whenever a technological protection of intellectual property is created, some specialist will always be able to compromise this technology.

134 *See, e.g.*, Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. 511, 513 (1997) (arguing that standardized, uniformly enforceable contracts will regulate and diminish copyright user rights); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 285 (1996) (arguing that technology raises high fences that amount to unprecedented copyright control); David A. Rice, *Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering*, 53 U. PITT. L. REV. 543, 608 (1992) (software license terms amount to "extra-statutory super-copyright"); Pamela Samuelson, *The Copyright Grab*, WIRED, Jan. 4, 1996, *available at* http://www.wired.com/wired/archive/ 4.01/white.paper_pr.html (arguing that technology gives rightholders much stronger protection than the rights held under the traditional copyright regime). *But see* Tom W. Bell, *Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine*, 76 N.C. L. REV. 557, 614-18 (1998) (arguing that those who rely on methods subject to preemption have the opportunity to exit from copyright into contract law).

135 *See* Roger D. Blair & Thomas F. Cotter, *An Economic Analysis of Seller and User Liability in Intellectual Property Law*, 68 U. CIN. L. REV. 1, 37-45 (1999).

136 Compare the enforcement of copyright law against individual offenders with the traditional regime in which commercial piracy was the focus. *See* Anna Wilde Mathews & Bruce Orwall, *Industry to Sue People Abetting Net Song Swaps*, WALL ST. J., July 3, 2002, at B1. These types of suits are now manageable in the digital era because footprints are left behind.

vention technology can be part of a strategy to direct copyright toward a more strict, literal enforcement of copyright law. In the hands of sophisticated programmers, so-called "hackers," the very technology that enables strong enforcement reduces the costs of the illegitimate transfer of content. A proper understanding of this dual nature of technology gives a different overall perspective on the implications of content holders' recourse to technological self-help. Whenever intellectual property is placed in a technological lock, specialists will always be able to pick the lock;[137] i.e., the same technology that allows the creation of digital protection can be used to break that technology. The end result is thus an "arms race" between content providers and circumvention. Overall, the duplicative investments in protection, the subsequent increase in consumer prices, and the technologically restricted uses of copyright goods reinforce the perception that copyright holders overreach. Self-help thus adds to the highly polarized copyright landscape that fosters today's widespread anticopyright law environment.

D. From Copyright to Taxes

Several commentators have suggested that copyright law should abandon exclusion rights in favor of a collective licensing system that allows users to engage fully in private copying. Consumers would be required to pay a blanket license fee to compensate copyright holders for their losses in revenue.[138]

[137] The most embarrassing illustration of this is the failure of the Secure Digital Music Initiative (SDMI). The recording industry was hopeful that it would secure protection for its future releases with a new watermark technology that placed a code onto a file that was supposed to be impossible to remove without damaging the quality of the sound or image. When the SDMI opened a hacking contest, challenging the public to break the digital watermarks, Professor Felten and a team of computer experts cracked several of these watermarks. When Felten wanted to present his findings at a conference, the SMDI and the RIAA threatened to sue for copyright law violation. Felten's free speech lawsuit was dismissed in the Federal Circuit. *See* John Schwartz, *2 Copyright Cases Decided in Favor of Entertainment Industry*, N.Y. TIMES, Nov. 29, 2001, at C4.

[138] WILLIAM W. FISHER III, PROMISES TO KEEP: TECHNOLOGY, LAW, AND THE FUTURE OF ENTERTAINMENT ch. 6 (2004), *available at* http://cyber.law.harvard.edu/people/tfisher/PTKChapter6.pdf (proposing a governmentally administered system that rewards copyright holders for commercial and noncommercial uses); Ku, *supra* note 46, at 312-16 (proposing statutory levies on Internet service subscriptions and sales of computer, audio, and video equipment); Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1 (2004) (describing a voluntary collective licensing scheme that combines blanket fees or levies and an opt-out mechanism for copyright holders); Lydia Pallas Loren, *Untangling the Web of Music Copyrights*, 53

Consumers would thus purchase a "license to file share" or gain "copyright immunity" by paying a levy on peer-to-peer goods and services instead of directly buying licensed content from copyright holders. For content holders, these proposals are equivalent to compulsory licensing; for consumers, these proposals offer a system that closely resembles a copyright tax. In several proposals, a central administration would impose a copyright blanket levy on technology that enhances peer-to-peer file sharing.[139] Revenues could then be channeled to content holders proportionally to the amount of times their product had been downloaded.

A tax- or levy-based system takes the angle out of the proprietary copyright model by forcing content holders to relinquish some control over copyrighted content, such as pricing decisions and veto rights. For consumers, collective licensing closely mimics the conditions and modalities of file sharing: music is available on an "all-you-can-eat" basis.

There are many possible objections to such collective licensing proposals. For instance, because of the lack of price discrimination, low-level users cross-subsidize high-level users since levies would be based on the average download levels of all consumers. Levies also tend to include non-copyright-related uses because of a lack of discriminatory accuracy. Today, for instance, copyright levies on blank CDs and CD-writers suffer from such overinclusiveness because they do not differentiate between fair uses, non-copyright-involving uses, and unlicensed uses.

Nevertheless, many commentators agree that a legislative outcome along the lines of a copyright tax or levy for file sharing is

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CASE W. RES. L. REV. 673, 678 (2003) (proposing a single "right to 'commercially exploit'" copyrighted expressions); Glynn S. Lunney, Jr., *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 852-53 (2001) (arguing for a levy-based approach in comparison to encryption-based approaches); Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 4 (2003) (providing a blueprint for the establishment of a "noncommercial use levy").

[139] *See, e.g.*, FISHER, *supra* note 138 (describing how a governmentally administered system rewards copyright holders for both commercial and noncommercial uses on the basis of a tracking system for the transmissions of digital copies of the work); Ku, *supra* note 46, at 313 (describing how the government would collect and distribute the proceeds to artists based on aggregate Internet use); Netanel, *supra* note 138, at 43-58 (describing how the noncommercial use levy is imposed on the sale of any consumer product or service whose value is substantially enhanced by P2P file sharing, such as Internet access, P2P software and services, CD burners, MP3 players, and digital video recorders).

inevitable. Throughout the history of copyright law, government-mediated collective licensing arrangements have resolved difficult copyright issues involving new media and technologies.[140]

Although we have not evaluated the responses of students to a blanket tax, it is likely that such an initiative would induce less copyright aversion than the current litigation campaign against file swappers. As Justice Souter suggested in *Grokster*, the disdain for copyright protection might originate in a sentiment that copyright enforcement obstructs the great advantages afforded by new technology.[141] For this reason, content holders' favored solution to copyright disobedience (to permit only legal downloads, particularly on a per-song basis) mimics poorly the cognitive frame of file sharers. According to many students, the current propriety-exclusion approach to legal downloads fails to capture the opportunities for a wider cultural exchange among peers.[142]

Because the attractiveness of new technology lies, in part, in the complementary consumption of music, all-inclusive licenses replicate more closely today's environment of general accessibility to music. Inclusion also has the advantage of avoiding copyright deadweight losses from duopoly pricing and holdouts.[143] Naturally, compulsory licensing poses many challenges (overinclusiveness, cross-subsidization, reduced control for copyright holders), but it is clear that a tax-based approach is the most appeasing solution from the social norm perspective.

A crucial aspect of the effect of legal rules on social norms is the gap between the legal rule and the social norm held by most individuals. If the law proscribes something that is widely perceived as unfair, the law may encounter more resistance and

140 The history of compulsory licensing in U.S. copyright law is extensive. First introduced to extend copyright protection to player piano rolls, it was also applied to protect "mechanical reproductions" of nondramatic musical works, satellite retransmissions of television programming, the distribution of sound recordings via digital transmission, the transmission of sound recordings by webcasters, and the development of new media technologies, such as in the Audio Home Recordings Act of 1992, 17 U.S.C. §§ 1001-1010 (2000). For an overview, see Peter K. Yu, *P2P and the Future of Private Copying*, 76 U. COLO. L. REV. 653, 705-08 (2005).

141 *Grokster III*, 125 S. Ct. 2764, 2775 (2005).

142 Such statements can be found across campuses in the United States. *See* John Schwartz, *Trying to Keep Young Internet Users from a Life of Piracy*, N.Y. TIMES, Dec. 25, 2001, at C1.

143 Ben Depoorter & Francesco Parisi, *Fair Use and Copyright Protection: A Price Theory Explanation*, 21 INT'L REV. L. & ECON. 453, 461 (2001).

open opposition. In documenting the counterproductive norm effects, our findings thus add to the comparative appeal of a levy-based resolution to file sharing. Social norm complications accentuate the advantages of aligning copyright law more closely with copyright norms.

V

BACK TO COMMERCIAL INTERMEDIARIES AND *MGM STUDIOS, INC. V. GROKSTER, LTD.*

In June 2005, the United States Supreme Court held that peer-to-peer software producers can be held accountable for copyright violations.[144] This came as a gust of fresh air to copyright-dependent industries that had previously failed in their earlier lower court attempts to demonstrate that certain producers of decentralized file-sharing technology should be held accountable for their involvement in copyright infringements.[145]

Has the Supreme Court provided relief to content-dependent industries? Perhaps music publishers will be able to avoid the social norm obstacles involved with litigating private users and revert back to an exclusive focus on commercial intermediaries in private copying? There are several reasons why the focus on commercial piracy limits the impact of the Supreme Court's decision in *Grokster* on the availability of file-sharing applications. We first provide a brief overview of the *Grokster* case.

A. Grokster *Revisited*

Both the trial and appellate courts refused to apply the *Napster* precedent[146] to decentralized file-sharing services in *Grokster*. In the circuit court's view, liability for contributory infringement "accrues where a defendant has actual—not merely constructive—knowledge of the infringement at a time during which the defendant materially contributes to that infringement."[147] Specifically, liability implies "actual knowledge of infringement *at a time when* [file-sharing services] can use that

144 *Grokster III*, 125 S. Ct. at 2774 (holding that there was clear evidence of express promotion, marketing, and intent to promote infringements by Grokster and StreamCast Networks).

145 *Grokster II*, 380 F.3d 1154 (9th Cir. 2004); *Grokster I*, 259 F. Supp. 2d 1029 (C.D. Cal. 2003); *see infra* notes 146-150 and accompanying text.

146 *See Napster II*, 239 F.3d 1004 (9th Cir. 2001).

147 *Grokster I*, 259 F. Supp. 2d at 1036 (citing *Napster II*, 239 F.3d at 1020-22), *aff'd*, *Grokster II*, 380 F.3d 1154.

knowledge to stop the particular infringement."[148] Contrary to Napster, the court found that neither Grokster nor StreamCast materially contributed to copyright infringements. While Napster provided the "site and facilities" that enabled direct infringements (hosting a central list of the files on each user's computer, etc.),[149] Grokster provided no such service.[150]

The Supreme Court reversed the circuit court ruling, holding that peer-to-peer software producers can be held accountable for copyright violations if they invoke copyright-infringing uses and take active steps to that end.[151] Mindful of the beneficial uses of peer-to-peer technology and hesitant to hamper innovation in new communication technologies,[152] the Court declined to redefine or quantify "substantive" noninfringing uses to exclude peer-to-peer technology, but it instead adopted the inducement theory from patent law.[153] Commercial agents can be held accountable for copyright infringements when they distribute their products "with the object of promoting its use to infringe copyright as shown by clear expression or other affirmative steps taken to foster infringement."[154]

Although the exact impact of this landmark decision will be unveiled in the lower courts, it appears that contributory liability for peer-to-peer technology will depend on what comprises evidence of, in the Court's language, "active steps . . . taken with the purpose of bringing about infringing acts."[155] From the majority opinion, it appears that the focus rests with advertisements and business models that aim to derive commercial profits from copyright-infringing uses of the technology (peer-to-peer services).

As several commentators agree, however, there is little reason to assume that the *Grokster* precedent will fundamentally alter

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148 *Id.* at 1037 (emphasis added).

149 *Napster II*, 239 F.3d at 1022.

150 *See Grokster I*, 259 F. Supp. 2d at 1038 (quoting Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259, 264 (9th Cir. 1996)). "[T]he defendant did not have to directly promote the infringing products to be held liable, it was enough that the defendant provided 'the site and facilities for known infringing activity.'" *Id.* (quoting *Fonovisa*, 76 F.3d at 264).

151 *Grokster III*, 125 S. Ct. 2764, 2782 (2005).

152 *Id.* at 2775, 2778, 2780.

153 *Id.* at 2779 (citing Kalem Co. v. Harper Bros., 222 U.S. 55, 62-63 (1991); Henry v. A. B. Dick Co., 224 U.S. 1, 48-49 (1917); Thomson-Houston Elec. Co. v. Kelsey Elec. Ry. Specialty Co., 75 F. 1005, 1007-08 (2d Cir. 1896); Rumford Chem. Works v. Hecker, 20 F. Cas. 1342, 1346 (C.C.D.N.J. 1876) (No. 12,133)).

154 *Id.* 125 S. Ct. at 2770.

155 *Id.* at 2781.

the balance of peer-to-peer activities and shift the balance of copyright litigation back to commercial intermediaries.[156] There are several reasons why the Court's focus on commercial intermediaries in *Grokster* limits the likely impact of the decision on file sharing.

B. Life Cycles of Digital Technology

Technological advancements have reduced the role of intermediaries in digital copyright infringements. For the purpose of establishing vicarious liability, the technological difference between Napster and more advanced file-sharing technologies lies with Napster's central registry, which allows users to identify MP3 files for downloads,[157] whereas peer-to-peer file-sharing programs such as Grokster operate independently on each user's computer.[158] While Napster indexed the files contained on each user's computer and every search request had to pass along Napster servers,[159] Grokster user activities (connecting to the network and searching, selecting, and downloading files) occurred

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[156] Arik Hesseldahl, *The Post-Grokster Era Begins*, FORBES.COM, June 27, 2005, http://www.forbes.com/technology/2005/06/27/grokster-copyright-file-sharing-cx_ah_0627grokster2.html; Jeff Howe, *The Uproar Over Downloads*, WIRED MAGAZINE, Aug. 2005, *available at* http://www.wired.com/wired/ archive/13.08/ start.html?pg=11; *Grokster Decision: The Experts React*, CNNMONEY, June 27, 2005 (on file with author).

[157] Napster operated with a:

> [P]roprietary centralized indexing software architecture in which a collective index of available files was maintained on servers it owned and operated. A user who was seeking to obtain a digital copy of a recording would transmit a search request to the Napster server, the software would conduct a text search of the centralized index for matching files, and the search results would be transmitted to the requesting user. If the results showed that another Napster user was logged on to the Napster server and offering to share the requested recording, the requesting user could then connect directly with the offering user and download the music file.

Grokster II, 380 F.3d 1154, 1159 (9th Cir. 2004) (citing *Napster II*, 239 F.3d 1004, 1011–12 (9th Cir. 2001); *Napster I*, 114 F. Supp. 2d 896, 905–08 (N.D. Cal. 2000)).

[158] Currently, there are three different methods of indexing that most peer-to-peer file-sharing programs use: "(1) a centralized indexing system, maintaining a list of avail-able [sic] files on one or more centralized servers; (2) a completely decentralized indexing system, in which each computer maintains a list of files available on that computer only; and (3) a 'supernode' system, in which a select number of computers act as indexing servers." *Id.* at 1158-59. For an in-depth description of peer-to-peer networks, see PEER TO PEER COMPUTING: THE EVOLUTION OF A DISRUPTIVE TECHNOLOGY 1-113 (Ramesh Subramanian & Brian D. Goodman eds., 2005). For a concise introduction to peer-to-peer networks, see Yochai Benkler, *Coase's Penguin, or, Linux and the Nature of the Firm*, 112 YALE L.J. 369, 396-400 (2002).

[159] *See Napster II*, 239 F.3d at 1012.

(and still do occur) with no material involvement of the original software producers.[160]

The increased decentralization of technology has severe implications on the effectiveness of intermediary liability. In the words of the court of appeals: "If either Defendant closed their doors and deactivated all computers within their control, users of their products could continue sharing files with little or no interruption."[161] If lower courts apply the Supreme Court's holding and convict Grokster and StreamCast for copyright infringements, the products will remain functional despite the bankruptcy of the producers. In the digital realm, the technological life cycle of products thus extends beyond the legal life of the technology. In this sense, products lead an existence of their own. This creates problems of accountability unless producers can be deterred from creating such products in the first place. The effectiveness or desirability of such ex ante measures, however, is doubtful. Most obviously, the (negative or positive) social value of new inventions cannot be predicted beforehand.[162]

C. Circumventing Creativity

Technological innovation is particularly apt at evading and defeating the purposes of legislation and precedent. Whenever legislation or precedent provides specific language that includes new technology in the copyright statute, technological innovators develop novel applications that exploit the gaps between technological possibilities and the self-described boundaries of law. Such interaction between law and technology can perhaps best be compared to the adaptation of creative tax consultants to the Internal Revenue Service.[163] For instance, when peer-to-peer

160 "Defendants distribute and support software, the users of which can and do choose to employ it for both lawful and unlawful ends. Grokster and StreamCast are not significantly different from companies that sell home video recorders or copy machines, both of which can be and are used to infringe copyrights." *Grokster I*, 259 F. Supp. 2d 1029, 1043 (C.D. Cal. 2003).

161 *Id.* at 1041.

162 It is unduly hard to predict inventions in advance or to estimate the value of inventions with some degree of success. *See* Robert Merges, *Intellectual Property Rights and Bargaining Breakdown: The Case of Blocking Patents*, 62 TENN. L. REV. 75, 86 n.41 (1994). "The computer was regarded by its inventors as a purely scientific device . . . ." *Id.* (citing NATHAN ROSENBERG, EXPLORING THE BLACK BOX: TECHNOLOGY, ECONOMICS AND HISTORY 220 (1994)).

163 A similar understanding of the dynamic nature of innovation can be found in Professor Wu's description of the relation between code and law: "The programmer is not unlike the tax lawyer, exploiting differences between stated goals of the law,

products seemed defeated after *Napster*, file-sharing activities turned to newly developed, decentralized but functionally equivalent peer-to-peer platforms. The creativity of software developers ensures the steady supply of alternatives that circumvent outlawed technologies.[164] Today, we are witnessing a shift from high profile peer-to-peer networks to alternative, decentralized means of file swapping, ranging from novel peer-to-peer networks to technological advances such as "M2M" applications.[165] Because of the dynamics of innovative processes, copyright enforcement is a continuous, adaptive struggle that provides highly imperfect copyright protection.

D. Production Function of Peer-to-Peer Applications

Another pervasive accountability problem is that many software applications, unlike hardware products, are the result of noncommercial endeavors by assorted individuals. When *Grokster* appeared before the Supreme Court,[166] many were concerned with the possibility that file-sharing applications would be excluded from a fair use defense (as this defense was defined in *Sony Corp. of America v. Universal Studios* (*Sony Betamax*)[167] for technologies with substantial noninfringing uses).[168] Such fears, however, were overstated from the beginning. The analogy between *Sony Betamax* and *Grokster* falls short because of the differing nature of the technologies at issue. In contrast to hardware applications (such as VCRs), many successful software-based applications do not involve significant fixed investments such as traditional marketing or distribution. Because the main capital resource is human capital, the programming talent of one

and its legal or practical limits. He targets specific weaknesses in legal regimes . . . ." Wu, *supra* note 8, at 682.

164 Such technological warfare (the so-called "arms race") leads to an endless series of court battles. *See supra* Part IV.C.

165 "The term M2M represents a number of different types of communication: machine-to-machine, machine-to-man, man-to-machine, machine-to-mobile, and mobile-to-machine; it involves the process of giving machines, devices, and appliances the ability to share information with backoffice information systems and the people who use them." *See M2M Magazine Information*, M2M MAGAZINE, http://www.m2mmag.com/about/ (last visited Feb. 10, 2006).

166 Oral arguments in *Grokster III* were held on March 29, 2005. Transcript of Oral Argument, *Grokster III*, 125 S. Ct. 2764 (2005), *available at* http://www.sims.berkeley.edu/academics/courses/is296a-2/s05/pdf/GroksterOA.pdf.

167 464 U.S. 417 (1984).

168 In *Sony Betamax*, the Supreme Court protected time shifting of television recordings as fair use. *Id.* at 456.

individual can be sufficient to bring such technology to life.[169] As the enormous success of Napster illustrated, word of mouth and the free flow of information in cyberspace can be sufficient to launch a novel application. Moreover, the open source nature of much software further reduces the role of creators of peer-to-peer applications as intermediaries that can be held accountable by law.[170] Peer production is based on social motivations, reputation, and informal relationships. In these user-driven innovation environments,[171] the absence of a central, hierarchical residual claimant complicates the case for liability on commercial intermediaries.

E. Full Circle with Circumvention Protection

In sum, new technology increasingly provides decentralized, consumer-to-consumer dissemination of copyrighted content. This evolution decreases the role of commercial intermediaries. The extent and quantity of these decentralized, consumer-to-consumer exchanges has led the entertainment industry to take aim at direct infringers and individual users of peer-to-peer file-sharing programs. Even in the wake of the Supreme Court decision in *Grokster*, the decentralized, quasi-anonymous production and distribution of peer-to-peer technology makes it unlikely that legal measures can block such technology from appearing on the computers of private individuals.

If Congress were to enact a new law that rendered file-sharing applications illegal, this would have a similar effect to the prohibition of circumvention technology in the Digital Millennium Copyright Act (DMCA).[172] Just as the DMCA's prohibition on the use and production of circumvention technology did not put an end to this technology, a prohibition on file-sharing technol-

[169] See, for instance, how college dropout Shawn Fanning created Napster, Karl Taro Greenfeld, *Meet the Napster*, CNN.COM, Sept. 25, 2000, *available at* http://www.cnn.com/ALLPOLITICS/time/2000/10/02/napster.html, or how the first decentralized network, Gnutella, came together as a collaborative effort of independent open-source programmers, Janelle Brown, *The Gnutella Paradox*, SALON.COM, Sept. 29, 2000, http://salon.com/tech/feature/2000/09/29/ gnutella_paradox/index.html.

[170] For instance, the open-source technology revolution introduces a new, less centralized perspective on the theory of the firm. *See* Benkler, *supra* note 158, at 403.

[171] Eric von Hippel, *Innovation by User Communities: Learning from Open-Source Software*, 42 SLOAN MGMT. REV. 82 (2001), *available at* http://sloanreview.mit.edu/smr/issue/2001/summer/8.

[172] 17 U.S.C. §§ 1201-1205 (2000).

ogy is not likely to wipe out peer-to-peer applications. As the district court noted in *Grokster*, decentralized software is of such a nature that, for instance with regard to the Grokster and StreamCast technologies, closing the offices of those companies would hardly affect the operation of their networks.[173] If post-*Grokste*r copyright enforcement then turns to users of the illegal technology instead of producers, we will have come full circle to the litigation of private copiers: they can now be accused on an additional ground (the *use of illegal technology*) on top of any direct copyright infringement itself. This effectively would bring us back to the issue of litigating individual copyright infringers and the accompanying social norm complications.[174]

CONCLUSION

The conflict between litigation and social norms sets the stage for today's highly polarized copyright law debate.[175] As Justice Souter indicated in *Grokster*, "the ease of copying songs or movies using software . . . is fostering disdain for copyright protection."[176] Because new technology offers unprecedented opportunities for cultural exchange, many individuals share a belief that file swapping should be legal.

Drawing on socio-psychological literature and new data, we examined the impact of copyright litigation and the interaction between copyright norms and enforcement. The precise effect of raising copyright awareness through litigation is ambiguous. Litigation informs individuals of the possible dangers of sharing files, but at the same time, lawsuits increase the perception that others are downloading music. If enforcement is to be effective, it needs to differentiate between experienced users of file-sharing applications and individuals who have not yet engaged in file

173 Even if Grokster and StreamCast "closed their doors and deactivated all computers within their control, users of their products could continue sharing files with little or no interruption." *Grokster I*, 259 F. Supp. 2d 1029, 1041 (C.D. Cal. 2003).

174 *See supra* Part III.

175 Copyright scholars refer to the current climate with terms such as the "copyright war," the "copyright divide," or similar variants thereof. *See, e.g.*, Jessica Litman, *War Stories*, 20 CARDOZO ARTS & ENT. L.J. 337 (2002) (arguing that current copyright law is not adequate to deal with individual copyright infringements); Peter K. Yu, *The Copyright Divide*, 25 CARDOZO L. REV. 331 (2003) (arguing that copyright stakeholders are alientating nonstakeholders with strong-armed tactics); Peter K. Yu, *The Escalating Copyright Wars*, 32 HOFSTRA L. REV. 907 (2004) (providing a critical discussion of the various strategies used in the entertainment industry's attempt to combat digital pircacy).

176 *Grokster III*, 125 S. Ct. 2764, 2775 (2005).

sharing. Students who are inexperienced with peer-to-peer networks are more amenable to procopyright viewpoints because they have not yet adopted a strong aversion to copyright enforcement.

Policymakers should take note of the pervasiveness of the anticopyright norms of experienced file sharers when considering recent proposals to criminalize noncommercial copyright infringements.[177] As illustrated in Part III, anticopyright norms of present users of peer-to-peer technology cannot be unraveled through enforcement. In a regime of severe sanctions, users of file-sharing technology become more anticopyright and resort to more downloading whenever enforcement is temporarily suspended. Such norm effects are particularly relevant in the context of copyright law because technological changes and copyright-circumvention technology inevitably create lapses in copyright enforcement.

The inability of litigation to deter file sharing has increased the reliance on self-help and investments in encryption technology and other digital rights management tools, adding to the escalating social costs of the technological arms race between content producers and hackers. Self-help measures further engender the impression that content owners are unduly extending copyright capture beyond constitutional limits.[178] As a result, any legislative consensus becomes a hard-fought battle. By the time authors, consumer advocacy groups, producers of consumer electronics, and publishers sit together, the atmosphere is tense and opinions widely differ.[179] The lack of a consensus on the In-

[177] *See supra* Part IV.A.

[178] *See, e.g.*, Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089 (1998) (validating electronic private ordering but arguing that Article 2B of the Uniform Commercial Code shifts the burden of initiating litigation to the licensee, who in many cases will be poorly equipped to bear it, and should be invalidated via principles of preemption and freedom of speech); Niva Elkin-Koren, *Copyrights in Cyberspace—Rights Without Laws?*, 73 CHI.—KENT. L. REV. 1155 (1998) (discussing that online technology allows copyright holders to create new exclusive rights in information goods); Michael J. Madison, *Legal-Ware: Contract and Copyright in the Digital Age*, 67 FORDHAM L. REV. 1025 (1998) (stating that content holders tend to create formal private property rights that exceed the public rights provided by the Copyright Act). For a critique on the first, see David. E. Friedman, *In Defense of Private Orderings: Comments on Julie Cohen's "Copyright and the Jurisprudence of Self-Help"*, 13 BERKELEY TECH. L.J. 1151 (1998) (arguing that freedom of contract and the technologies of digital monitoring and self-enforcement allow producers to better create legally adequate contracts in a mass market context).

[179] After hosting a recent one-day symposium with various representatives of

duce Act,[180] which attempts to resolve some of the legal issues surrounding digital music exchanges, illustrates the difficulty that Congress will face as it attempts to resolve an oft-postponed matter that has increasingly polarized the constituencies involved.[181] Copyright has a long history of regulatory compromise that removes control of access in such polarized settings. In emphasizing the limits of enforcement through litigation of commercial intermediaries and direct infringers, this Article provides further support to the recent proposal to introduce collective licensing schemes to address massive copyright noncompliance.[182]

these constituencies, Adam Thierer, the Cato Institute's Director of Telecommunications Studies, commented that "both sides seemed as far apart as ever" and that "there are just some copyright issues where compromise proves impossible" no matter "how long you lock everyone in a room and tell them to try to strike a deal." Michael Grebb, *Toe-to-Toe Over Peer-to-Peer*, WIRED NEWS, Oct. 21, 2004, http://www.wired.com/news/politics/0,1283,65414,00.html.

[180] Despite preliminary approvals by the House and Senate on several proposals, no antipiracy law was enacted before the congressional recess in fall 2004. The lack of political consensus is widely attributed to extensive lobbying on both sides. *See* Jon Healey, *Bills to Thwart Piracy Falter*, L.A. TIMES, Dec. 9, 2004, at C1.

[181] *See* sources cited *supra* note 10. This is not a new phenomenon. Other occurrences of hard-fought legislative battles over the copyright law approach to new technology include the tension in Congress over the impact of piano rolls on sheet music and the impact of recording technology on music. For an overview, see I. Trotter Hardy, *Project Looking Forward: Sketching the Future of Copyright in a Networked World* (1998), *available at* http://www.copyright.gov/reports/thardy.pdf.

[182] *See supra* Part V.

APPENDIX

TRY TO IMAGINE WHAT YOU WOULD DO IN THE FOLLOWING SITUATION. YOUR INDIVIDUAL RESPONSES WILL BE ANONYMOUS.

PART I[183]

Have you ever downloaded music from the Internet using file-sharing technology?

YES NO

If so, how many songs have you downloaded?

_____ songs

Many individuals download music from the Internet. By using software programs such as Napster, Soulseek, and Kazaa, individuals share music files online. One could say that file sharing facilitates cultural exchange. On the other hand, the music industry's revenues might reduce substantially due to file sharing. Certainly, if artists and record labels were to receive money for each song shared on the Internet, their revenues would be higher. For this reason, the music industry has filed a number of lawsuits, demanding monetary compensation from individuals suspected of illegal downloading.

To date, by monitoring traffic on the Internet, the music industry has succeeded in identifying and initiating lawsuits against only a small minority of suspected file sharers. The chances of getting caught for file sharing will increase, however, because of new technological developments and safety measures. Currently, only 1 out of every 100,000 (0.001%) file sharers is known to the industry. With the new technology, the chances of getting caught will increase strongly (*slightly*) to 1 in 5 (20%) (*1 in 10,000 (0.01%)*).

The music industry's current policy is to seek compensatory damages from suspected downloaders. According to Antibiz—an American organization that supports the free distribution of music—the music industry demands sizable amounts from individuals for each "proven" downloaded file. The music industry has announced that it will continue this policy because it deters people from file sharing. The industry currently demands 20 (*2000*) euros per downloaded music file or song. Imagine that

[183] The text of the alternative scenario for Part 1 of our study is in italics.

the chances of getting caught for each downloaded song increases to 20% (*0.01%*) and that if you are caught, you will have to pay 20 (*2000*) euros for each downloaded song or file. Given these developments, will you still download music in the future?

Circle **1** if you strongly disagree.
Circle **2** if you do not agree.
Circle **3** if you disagree but only slightly.
Circle **4** if you do not agree nor disagree.
Circle **5** if you agree but only slightly.
Circle **6** if you agree.
Circle **7** if you strongly agree.

	Strongly disagree						Strongly agree
Most people will continue to take the risks involved with file sharing	1	2	3	4	5	6	7
These new developments are gradually making me realize that illegally downloading music is not ethical	1	2	3	4	5	6	7
I am of the opinion that the music industry is conducting an unjust, disproportionate policy	1	2	3	4	5	6	7
The policies of the music industry conflict with my sense of justice	1	2	3	4	5	6	7
The policies of the music industry are an attack on my freedom to listen to music	1	2	3	4	5	6	7
Developments are causing me to adjust my norms regarding the illegal exchanges of music	1	2	3	4	5	6	7

PART II

Currently, a number of young computer experts are developing new file-sharing technology that cannot be traced. Due to this technology, it will be very hard for the music industry to detect and identify individuals who share music. In other words, the likelihood of getting caught will be reduced to 0.001% (1 in 100,000 file sharers). This new program will be introduced at the start of 2006. What will you do in this "new situation" when the likelihood of getting caught is reduced to 0.001% and the music industry continues its current policy of pursuing file sharing?

Circle **1** if you strongly disagree.
Circle **2** if you do not agree.
Circle **3** if you disagree but only slightly.
Circle **4** if you do not agree nor disagree.
Circle **5** if you agree but only slightly.
Circle **6** if you agree.
Circle **7** if you strongly agree.

	Strongly disagree						Strongly agree
The enforcement policy of the music industry prior to the introduction of the new protective software influences the amount of music I will resume downloading	1	2	3	4	5	6	7

Thank you for your cooperation!