Impose a Noncommercial Use Levy to Allow Free P2P File-Swapping and Remixing

Neil Weinstock Netanel*

Commentators and courts have universally hailed the Internet as an abundantly fertile field for self-expression and debate. But this acclamation masks sharp disagreement over whether certain Internet activity should be lauded or deplored. A prime example is the unlicensed use of copyright-protected material. The explosion of sharing and remixing popular songs and movies over Internet-based peer-to-peer networks like Napster and Morpheus has evoked sharply discordant reactions. Some commentators embrace that collection, exchange, and transformation of existing works as part and parcel of the individual autonomy, self-expression, and creative collaboration for which we celebrate the Internet. Others denounce those activities as the massive piracy of intellectual property. They fear that P2P file swapping poses a mortal threat to the copyright system that sustains authors, artists, and a multi-billion-dollar-a-year industry in the production and dissemination of creative expression.

The P2P controversy has degenerated into a steadily intensifying war of words and legal action. The copyright industries have successfully shut down a number of peer-to-peer networks – most famously, Napster -- and continue to bring lawsuits against others. They have also sought to compel telecommunications and consumer electronics companies to disable unlicensed P2P sharing of copyright-protected works.[1] The industries are now poised to target individuals who trade large numbers of files as well.[2] Yet, despite this three-pronged attack, unlicensed P2P file swapping continues apace. An estimated 5.16 billion audio files and well over 100 million video files were exchanged in 2001.[3]

---

* Arnold, White & Durkee Centennial Professor of Law, University of Texas School of Law. For their helpful comments, I want to thank Sarah Deutsch, Mark Nadel, and participants of two conferences at which I presented earlier versions of this essay: TPRC and Paying Artists, Protecting Innovation: New Alternatives for Resolving the Digital Copyright Debate, Washington College of Law, Oct. 21, 2002.

[1] See *infra* notes 22 - 35.

[2] The industry has both pressed for criminal prosecution of and is preparing for filing civil actions against P2P file swappers. *See* Declan McCullagh, *Music Body Presses Anti-piracy Case*, CNET News.com, August 20, 2002, http://news.com.com/2100-1023-954658.html (reporting that the Recording Industry Associaton of America has asked a federal judge for an order compelling Verizon Communications to reveal the name of a Verizon customer whom the RIAA accuses of illegally trading hundreds of songs); Declan McCullagh, *DOJ to Swappers: Law's Not on Your Side*, CNET News.com, August 20, 2002, http://news.com.com/2100-1023-954591.html (reporting statement by Department of Justice attorney that the Department is prepared to begin prosecuting individuals who engage in P2P file swapping, following Congressional and industry lobbying for such prosecutions); John Borland, *Record Labels Mull Suits Against File-Traders*, CNET News.com, July 3, 2002, http://news.com.com/2100-1023-941547.html?tag=rn (reporting industry deliberations regarding launching of civil suits against prolific file-swappers).

[3] Larry Dignan, *Study: Kazaa, Morpheus Rave On*, CNET News.com, August 14, 2002, http://news.com.com/2100-1023-949724.html (reporting results of Yankee Group study regarding audio files); *MPAA Snooping for Spies*, Wired News, July 22, 2002, http://www.wired.com/news/politics/0,1283,54024,00.html (reporting estimate of between 400,000 to 600,000 video files every day).

As is often the case with such conflicts, both sides of the P2P debate make some credible arguments. On one hand, we should rigorously applaud the online collecting, swapping, reworking, and remixing of music, films, TV programs, art, and stories. By engaging in such activities, people who might previously have been passive consumers now assert a more active, self-defining role in the enjoyment, use, and creation of cultural expression, and share their interest, creativity, and active enjoyment with others. As Larry Lessig crisply puts it: "This is the art through which free culture is built."[4] But at the same time, Internet users' widespread downloading of unlicensed audio, video, graphic, and text files could well supplant markets for copyright-protected expression. Digital technology makes it easy for Internet users' to distribute multiple perfect copies of a work throughout the world without compensating authors or other copyright holders. Such untrammeled P2P file swapping could eviscerate the economic incentive for creating many types of valuable works.

Commentators and policymakers have put forth a variety of proposals to address the P2P file swapping controversy. In this paper I build upon an idea that I think holds the most promise: allowing untrammeled noncommercial P2P file swapping in return for imposing a levy on P2P-related services and products. The levy, which I will term the "Noncommercial Use Levy," or "NUL," would be imposed on the sale of any consumer product or service the value of which, the Copyright Office determines, P2P file swapping substantially enhances. Likely candidates include Internet access, P2P software and services, computer hardware, consumer electronic devices (such as CD burners, MP3 players, and digital video recorders) used to copy, store, transmit, or perform downloaded files, and storage media (like blank CDs) used with those devices. In return for imposing the NUL, the law would provide for copyright immunity for individuals' noncommercial copying and distribution of over digital networks of certain types of copyright-protected content.[5] Individuals' noncommercial adaptations and modifications of such content would also be noninfringing as long as the derivative creator identifies the underlying work and indicates that it has been modified. The law would generally preclude digital content providers from employing technological Digital Rights Management (DRM) controls designed to block such noninfringing uses, but my proposal contemplates the application of DRM for other purposes.

The amount of the NUL would be determined (and periodically redetermined) by negotiations between suppliers of levied products and services, on one side, and associations representing holders of rights in different categories of works, on the other. In the absence of agreement, the negotiations would be subject to mandatory arbitration before a Copyright Office arbitration board. Levy proceeds would be distributed to copyright holders in proportion to the number of downloads and subsequent uses of their respective works and of user-modified version of their works, as measured by digital tracking and sampling technologies.

The NUL stands alongside two well-established mechanisms for allowing unhindered uses of copyright-protected material while still compensating copyright holders. These are: (1) levies on equipment and media used to make personal copies and

[4] LAWRENCE LESSIG, THE FUTURE OF IDEAS; THE FATE OF THE COMMONS IN A CONNECTED WORLD 9 (2001).

[5] I set forth what I mean by "noncommercial" and "certain types of copyright-protected content" in the text accompanying notes 114- 117 *infra.*

(2) compulsory licenses for distributors of copyright-protected material, such as those available to record companies for producing cover recordings and cable and satellite TV operators for transmitting off-air broadcasts. Like the equipment and media levies, the NUL would serve to allow noncommercial personal uses. But the NUL would allow noncommercial distribution and modification as well as personal copying. It would also be imposed on ISPs and other suppliers of services that enable users to receive and distribute content, not solely on the sale of products used for consumer copying. Like the compulsory licenses, the NUL allows unhindered content distribution. But the NUL enables distribution by individual P2P participants rather than the entities upon which the compulsory fee is imposed.

Copyright industries, authors, providers of P2P-related services and products, and consumers of P2P-related services and products would all have reason to support implementation of the NUL, even if the NUL would not be any of those parties' ideal choice for resolving the P2P controversy. To see why this is so, Part I presents some background to the P2P controversy and a snapshot of where the controversy stands today. Part II then counters the principal conceptual (or rhetorical) objection to the NUL: that the NUL, like statutory levies and compulsory licenses, is an anomalous and disfavored exception to the rule that creative expression is the copyright holder's "property."

Having demonstrated that the NUL fully comports with copyright's underlying premises, I argue in the remainder of this essay that the NUL has significant advantages over leading alternatives to resolving the P2P file-swapping conundrum. These alternatives include (1) "digital abandon" -- an absence of any legal requirement that copyright holders receive compensation for noncommercial uses, (2) "digital lock-up" -- content providers' proprietary control over content (through law and DRM), (3) current levies on equipment and media used to make personal copies, and (4) government subsidies to authors from general tax revenues. Part III highlights the shortcomings of digital abandon and digital lock-up. Part IV describes current personal copying levy regimes. Part V presents my NUL proposal in more detail. Part VI assesses my NUL proposal in light of commentators' principal criticisms of personal copying levy regimes. Part VII compares the NUL with proposals for government subsidies to authors.

By highlighting NUL advantages, I do not mean to say that the alternative regimes should have no place in our legal regime. I argue only that the NUL should occupy a central role in accommodating the interests of noncommercial sharers and creators with those who create in exchange for monetary reward. To that end, the NUL would supplement or accommodate, rather than entirely replace, the enumerated alternatives.

I. BACKGROUND

The copyright industries have long insisted that they must be able to control the use of their works if they are to make their content inventories available over digital networks.[6] But the ubiquity and decentralized character of P2P file-swapping capability

[6] *See, e.g.*, The WIPO Copyright Treaties Implementation Act, Hearing on H.R. 2281 Before the Subcomm. on Telecommunications, Trade, and Consumer Protection, House Comm. on Commerce, 105th Cong. 43-45, 56 (1998) (statements of Hilary B. Rosen, President and CEO, Recording Industry Association of America and Steven J. Metalitz, on behalf of Motion Picture Association of America,) (asserting that

makes that control extraordinarily, if not prohibitively, costly. As a result, the P2P controversy is a story of the copyright industries' increasingly brazen – some say desperate -- attempts to shut down P2P file-swapping networks, disable P2P technology, and shift the costs of control onto third parties, including telecommunications companies, consumer electronics manufacturers, corporate employers, universities, new media entrepreneurs, and the taxpayers.

Copyright holders could, in theory, launch a mass campaign of lawsuits against file-swappers to stem the P2P tide. Courts have held that the P2P swapping of copyright-protected material infringes even if undertaken without monetary compensation.[7] But copyright holders have, at least until recently, regarded infringement actions against individual P2P file-swappers as both impractical and impolitic. P2P file swappers' sheer numbers and worldwide scope, coupled with the need to identify which Internet users are swapping files,[8] makes widespread enforcement prohibitively costly. Even targeted enforcement against individuals – often teenagers and college students -- engaged in large-scale noncommercial file swapping carries significant public relations and marketing risks.[9]

The copyright industries look to four principal sources to overcome these enforcement barriers. These are (1) "Digital Rights Management": technology designed to detect and impede unauthorized consumer file swapping, (2) shifting enforcement costs onto third parties: legal rules that require third parties -- new media enterprises, telecoms, consumer equipment manufacturers, employers, and universities – to assist in putting technological controls in place and preventing such unauthorized file swapping that escapes technology's grasp, (3) taxpayer-funded enforcement: Department of Justice prosecution of those who engage in and assist P2P file swapping, and (4) sabotage: using technological self-help to disable P2P networks.

---

copyright industries will not put their content online unless assured that it is secure from unlicensed copying).

[7] A&M Records v. Napster, Inc., 239 F.3d 1004, 1015 (9th Cir. 2001) (stating that personal uses are "commercial," and thus disfavored for fair use, whenever users "get for free something they would ordinarily have to buy").

[8] The anonymity of the Internet poses a barrier to discovering file-swappers' identity, but generally not an impermeable one. Digital tracking technology serves as a useful tool for identifying the Internet addresses of computers used for file swapping, which, combined with court-ordered discovery, can assist copyright holders in identifying individuals who are swapping files. If the individual maintains infringing material on his ISP's server (*e.g.*, if the material is on an ISP-hosted web site), the copyright holder may obtain a subpoena requiring the ISP to identify its subscriber. *See* 17 U.S.C. § 512(h). At issue is in current litigation is whether the copyright holder may also obtain a subpoena to require the ISP to identify a subscriber who maintains infringing material on his own computer or must rather seek to discover that information by filing a John Doe lawsuit. Recording Industry Ass'n of America v. Verizon Internet Services, Inc., Case No. 1:02MS00323, U.S. Dist. Ct., D.C., filed Sept. 11, 2002.

[9] Public opinion surveys suggest that the vast majority of Internet users and a slim majority of the American public at large believe that there is nothing morally wrong about downloading music for free from the Internet. *See* Lior Jacob Strahilevitz, *Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks*, 89 Virginia L. Rev. (forthcoming 2003) (summarizing polling data from various sources and presenting an insightful discussion of social norms as they affect P2P file swapping).

A. Digital Rights Management

Copyright industries have begun to deploy Digital Rights Management technology to detect and block unauthorized uses. Digital watermarks, fingerprints, and Internet spiders can help detect individual file swappers. Better yet, encryption can prevent unauthorized access and copying. If consumers are technologically unable to make and distribute unlicensed copies, copyright holders need not bring copyright infringement suits to control their content in the digital networks.

But skilled programmers can readily design software and other devices to circumvent such measures. In fact, computer security experts maintain that no technological barrier can ultimately prevail over determined hackers who have physical access to the encrypted items, including, in this instance mass-marketed CDs and DVDs, personal computers, consumer electronic devices, and software embedded in those items.[10] Accordingly, the industries contend, if technological controls are to be broadly effective, the law must prohibit the dissemination of software and other devices capable of skirting DRM technology.

The copyright industries have thus far met a receptive ear in Congress. In 1998 Congress enacted the Digital Millennium Copyright Act, which, among other provisions, protects technological copying and access controls against circumvention.[11] The DMCA lays the groundwork for far-reaching copyright holder control over digital content. Armed with DRM technology and the right to prevent circumvention, content providers could require payment each time a user reads, views, or listens to a work online. In fact, they could often do so even with respect to works that are no longer protected by copyright.[12] As one commentator aptly puts it, the DMCA lays the legal foundation for a regime of "universal pay-per-use and de facto perpetual protection."[13]

B. Shifting Enforcement Costs to Third Parties

The copyright industries have invoked both the DMCA and traditional copyright law to hold new media enterprises liable for individuals' P2P file-swapping and other

---

[10] Paul Biddle, et. al., The Darknet and the Future of Content Distribution, (paper presented at 2002 ACM Workshop on Digital Rights Management, Nov. 18, 2002), at 15, http://crypto.stanford.edu/DRM2002/darknet5.doc (Microsoft computer security experts concluding that DRM, watermarking, and other technological copy control schemes are "doomed to failure"); Edward Felten; As Michael Miron, CEO of ContentGuard, a company developing a system to protect digital content from easy copying, aptly puts it: "There is no such thing as a hacker-proof technology. If you make such a claim, you're hanging a big target on your back." Quoted in Alex Daniels, *Digital Rights Put to Test*, WashingtonPost.com, June 4, 2002,http://www.washingtonpost.com/ac2/wp-dyn/A56664-2002Jun4.

[11] 17 U.S.C. § 1201. Technically, copyright holders can prevent the circumvention only of access controls, not copying controls. But they can prevent the provision of any technology, product, service, device, or component that is primarily designed to enable the circumvention of either type of control. As a result, most users will be unable to obtain the tools they need to circumvent even if the law does not forbid the circumvention itself.

[12] *See* David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. Pa. L. Rev. 673, 727-32 (2000) (presenting case studies showing how otherwise noninfringing activity would be subject to content provider control under the Act).

[13] *Id*. at 741.

personal uses of copyright-protected expression. Merely fortifying DRM controls with a prohibition against individuals' circumvention would have left copyright holders facing much the same enforcement costs and public relations risks as suing individual infringers under traditional copyright law. But the DMCA goes a significant step further: it targets suppliers, outlawing the provision of any service or manufacture and distribution of any device that is "primarily designed" to enable circumvention.[14] Copyright holders have used those provisions to sued online distributors of computer programs that enable users to circumvent the copy and access protection on music streaming and DVDs.[15]

The industries have also (thus far, quite successfully) pushed the bounds of vicarious and contributory liability under traditional copyright law to bring down P2P networks and other new media entrepreneurs facilitating personal uses of copyright-protected works. Record labels and, more recently, movie studios have sued providers of P2P network services, like Napster, and P2P file-trading software, like Morpheus, for users' allegedly infringing copying and distribution of copyright-protected works.[16] They sued MP3.com for enabling subscribers to access songs on subscriber-owned CDs via the Internet.[17] They have sued ReplayTV for selling a digital video recorder that enables consumers to skip commercials and share copies of TV programs with others.[18]

Copyright industry insistence on control has brought it into conflict with telecommunications and consumer electronics companies as well as with Internet users and new media entrepreneurs. The copyright and telecommunications industries negotiated a partial solution to their conflict. In effect, their agreement deputizes Internet Service Providers to enforce copyrights against ISP subscribers. The ISP safe harbor provisions of the DMCA,[19] which were drafted by copyright and telecommunications industry representatives, immunize an Internet Service Provider from liability for infringing material that an ISP subscriber places on an ISP server so long as the ISP removes that material upon receiving proper notice from the copyright holder.[20] A parallel provision immunizes Internet search engines from liability for linking to infringing material if the search engine removes the link upon receiving the copyright holder notice.[21]

As might be expected, the safe harbor provisions have led to the removal from the Internet of considerable material, both infringing and non-infringing. Copyright holders have not been shy about sending out DMCA "take down" notices.[22] And in numerous

[14] 17 U.S.C.§1201(a)(2), 1201(b).
[15] RealNetwords, Inc. v. Streambox, Inc., No. C99-2070P, 2000 U.S. Dist. LEXIS 1889 (W.D. Wash. 2000) (music streaming); Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001) (DVDs).
[16] A&M Records, Inc. v. Napster, Inc ., 239 F.3d 1004 (9th Cir. 2001); Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., U.S. Dist. Ct., C.D. Ca., Case No. CV 01-08541 SVW (PJWx).
[17] UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349 (S.D. N.Y. 2000).
[18] Paramount Pictures Corp. v. ReplayTV, Inc., U.S. Dist. Ct., C.D. Ca., Case No. CV 01-9358 FMC (EX).
[19] 17 U.S.C. § 512.
[20] 17 U.S.C. § 512(c).
[21] 17 U.S.C. § 512(d).
[22] For example, the Motion Picture Association of America states that it has sent out over 100,000 such notices since 2001. *MPAA Snooping for Spies*, Wired News, July 22, 2002, http://www.wired.com/news/politics/0,1283,54024,00.html. *See also* Motion for Leave to File and Brief *Amicus Curiae* of United States Internet Service Provider Association in Support of Respondent, Recording Industry Ass'n of America v. Verizon Internet Services, Inc., Case No. 1:02MS00323, U.S. Dist. Ct., D.C.,

instances, risk-adverse ISPs and Internet search engines have removed subscriber content in the face of dubious copyright infringement claims.[23] As Google lamely explained after cutting links to sites of a Church of Scientology critic in the face of a DMCA take down notice from the Church: "Had we not removed these URLs, we would be subject to a claim for copyright infringement, regardless of its merits."[24]

Yet even that generally acquiescent ISP (and search engine) response has failed to satisfy the copyright industry. A principal reason is that the DMCA safe harbor provisions are largely inapplicable to current P2P technology. Current technology does not require file swappers to upload content to web sites that reside on ISP servers and to which others are directed by search engine links. Rather, P2P software like Gnutella, Morpheus, and, for that matter, Napster enable Internet users to find and exchange files located on other users' hard drives. Users do transmit files *through* ISP networks. But the DMCA provides ISPs with complete immunity from liability for monetary damages and sharply limits the availability of injunctive relief where the ISP acts merely as a conduit for user transmissions.[25]

The copyright industries have begun aggressively to pursue a number of strategies to sidestep those limitations. In so doing, they have unhinged the delicate working compromise that had characterized copyright and telecommunications industry relations

---

filed Sept. 11, 2002, at 2 (noting: "Every day, members of US ISPA collectively receive dozens, if not hundreds, of notifications under § 512(c) alleging online copyright infringement.").

[23] *See, e.g.*, *MPAA Snooping for Spies*, Wired News, July 22, 2002, http://www.wired.com/news/politics/0,1283,54024,00.html (describing the lawsuit that the proprietor of Internetmovies.com website filed against the MPAA after the MPAA notified his ISP, apparently incorrectly, that he engaged in illegal file-swapping and the IPS disconnected his Internet service); Declan McCullagh, *Google Yanks Anti-Church Sites*, Wired News, March 21, 2002, http://www.wired.com/news/politics/0,1283,51233,00.html (describing Google's removal of URLs linking to sites of a Church of Scientology critics in response to a DMCA take down notice from the Church). A 1999 report on the first year of experience under the DMCA notice take down provisions, co-authored by counsel for Adobe Systems and Yahoo! and presented to the World Intellectual Property Organization, found that (1) ISPs generally comply with take down notices within 24 hours, (2) most of the web sites that are subject to the notices are noncommercial, and (3) some five percent of take notices are sham claims used to silence or harrass critics. Batur Oktay & Greg Wrenn, A Look Back at the Notice-Takedown Provisions of the U.S. Digital Millennium Copyright Act One Year After Enactment, WIPO Doc. OSP/LIA/2, at 12, 17 (Dec. 1, 1999), www.wipo.org/eng/meetings/1999/osp/pdf/osp_lia2.pdf.

[24] Quoted from Google letter to the Church critic in McCullagh, *id*. This generally acquiescent ISP and search engine response is quite predictable. As scholars have noted, ISPs and their subscribers have asymmetric incentives. ISPs do not fully share the benefits its subscribers derive from placing material, whether infringing or noninfringing on the network. As a result, imposing liability on ISPs for subscribers' infringing material induces ISPs to overdeter, purging any material that a copyright holder claims is infringing. Assaf Hamdani, *Who's Liable for Cyberwrongs?*, 87 Cornell L. Rev. 901 (2002); Neal Kumar Katyal, *Criminal Law in Cyberspace*, 149 U. Pa. L. Rev. 1003, 1096-1110 (2001) (discussing problem of asymmetric incentives in imposing liability on ISPs for their subscribers' criminal conduct generally).

[25] 17 U.S.C. § 512(a). In order to benefit from the safe harbor, the conduit provider must accommodate standard DRM measures and must implement a policy of terminating the account of repeat infringers in "appropriate circumstances," but is not required to seek to identify those infringers. 17 U.S.C. § 512(i)(1). So long as the ISP does so, the copyright holder's sole recourse against an ISP conduit provider is to seek an injunction requiring the ISP to terminate the current account of the infringing subscriber or, where the infringing material resides on an online location outside the United States, to block access to that site. 17 U.S.C. § 512(j)(1)(B).

since enactment of the DMCA.[26] A group of record labels recently sued the four companies that control the Internet network backbone, seeking an order enjoining the companies from allowing their routing systems to be used to access a China-based web site for downloading unlicensed music recordings.[27] The recording industry has also sought to economize on its own litigation and discovery costs by compelling Verizon Communications to reveal the name of a Verizon subscriber the industry accuses of trading hundreds of music files.[28]

In their efforts to shift enforcement costs onto third parties, the copyright industries have also sought to elide DCMA limitations on the third-party liability of suppliers of devices that can be use to circumvent DRM controls. The DMCA device provisions forbid only devices "primarily designed" to enable circumvention. As the Act expressly provides, it does not require general purpose consumer electronics products, like personal computers, televisions, and DVD players, to incorporate DRM compliant technology that would prevent consumers from copying protected content.[29]

But copyright industries are now pressing consumer electronics manufacturers to make their products DRM compliant.[30] Consumer electronics manufacturers have resisted copyright industry efforts to adopt uniform DRM technical standards. Although the manufacturers espouse a commitment to protecting intellectual property, they oppose the functional degrading of device capability, drag on innovation, and risk of government official interference that technology mandates would entail.[31] Consumer electronics manufacturers also benefit from the increased sales that P2P file sharing engenders, and have even promoted their products as tools to "rip, mix and burn."[32]

The copyright and consumer electronics industries remain at loggerheads. Copyright industry-backed legislation pending before Congress would require consumer electronics equipment, including personal computers and television sets, to meet DRM

---

[26] *See* John Borland, *ISPs Gird for Copyright Fights*, CNET News.com, Sept. 9, 2002, http://news.com.com/2100-1023-957023.html.

[27] Arista Records, Inc., et. al., v. AT & T Broadband Corp., et. al., Civil Action No. 02 CV 6554 (KMW), S.D. N.Y., filed August 16, 2002. The record companies withdrew their complaint after the offending web site mysteriously went offline. Anick Jesdanun, *Record Companies Drop Lawsuit*, Washingtonpost.com, August 21, 2002, http://www.washingtonpost.com/wp-dyn/articles/A46326-2002Aug21.html.

[28] *See* Recording Industry Ass'n of America v. Verizon Internet Services, Inc., Case No. 1:02MS00323, U.S. Dist. Ct., D.C., filed Sept. 11, 2002. At issue is whether the RIAA may obtain a subpoena to require the Verizon to identify its subscriber or must rather seek to discover that information by filing a John Doe lawsuit. Declan McCullagh, *Music Body Presses Anti-piracy Case*, CNET News.com, August 21, 2002, http://news.com.com/2100-1023-954658.html (describing RIAA request and Verizon opposition).

[29] *See* 17 U.S.C. § 1201(c)(3). There is an exception. The DMCA does require that analog video cassette recorders incorporate specified DRM compliant technology. *See* 17 U.S.C. § 1201(k). The Act also requires, somewhat cryptically, that an ISP will benefit from the safe harbor from contributory and vicarious liability only if it "accommodates and does not interfere with standard technical measures," *i.e.*, DRM. 17 U.S.C. § 512(i)(1)(B).

[30] *See* Drew Clark & Bara Vaida, *Copyright Issues; Digital Divide*, National Journal, Sept. 6, 2002, http://nationaljournal.com/about/njweekly/stories/2002/0906nj1.htm# (detailing ongoing struggle between Hollywood and Silicon Valley).

[31] *See id.*

[32] That particular advertising slogan is Apple Computer's. *See* John Naughton, *Hollywood at War with the Internet*, The (London) Times Online, July 26, 2002, http://www.timesonline.co.uk/article/0,,7-365250,00.html. *See also* Brad King, *Are Ads a Gateway to Illegal CDs?*, Wired News, April 11, 2002, http://www.wired.com/news/mp3/0,1285,51719,00.html (describing Apple and Gateway ads).

control standards.[33] In opposition, Silicon Valley-backed legislation would expressly permit consumers to make personal copies and to bypass copy control technology where necessary to do so.[34] At this point, Congress appears unlikely to enact either.[35] The consumer electronics and technology sector is several times larger than the entertainment sector.[36] It remains to be seen whether Hollywood's special cache will be sufficient to overcome that disparity in the legislative arena.

Most recently, copyright industries have threatened to hold employers liable for employees' P2P file swapping in the workplace. The Motion Picture Association of America, the Recording Industry Association of America, the National Music Publishers' Association and the Songwriters Guild have sent a letter to 1,000 large corporations expressing alarm that "piracy of music, movies, and other creative works is taking place at a surprisingly large number of companies."[37] The letter then states such use of a company's digital network subjects the company to "significant legal liability under the Federal copyright law" and ominously warns that the entertainment industries plan to "aggressively enforce our rights in cases of copyright infringement."[38] The copyright industry missive follows a similar letter sent to more than 2,300 university presidents demanding that they prevent students' P2P file swapping.[39]

There is nothing inherently unseemly about enlisting third parties to enforce copyright by making them liable for others' infringements.[40] But the copyright industries' efforts to do so in the P2P context seem increasingly scattershot. On some fronts, they lead to overdeterrence: ISP and search engine removal of material that is noninfringing or potentially valuable speech even if infringing. On other fronts, the copyright industries would impose substantial, innovation impeding and welfare reducing costs on third parties in order to stem the P2P tide. Their apparent need to do so in the

---

[33] The so-called Consumer Broadband and Digital Television Act would mandate technical standards for DRM controls absent agreement between content providers and consumer electronics companies. John Borland, *Anti-piracy Bill Finally Sees Senate*, CNET News.com, Mar. 21, 2002, http://news.com.com/2100-1023-866337.html. The FCC has also issued a proposed rule-making on adopting a DRM control standard, the so-called "broadcast flag," for digital television. FCC, In the Matter of Digital Broadcast Copy Protection, MB Docket No. 02-230, Notice of Proposed Rulemaking, August 8, 2002, http://www.fcc.gov/Daily_Releases/Daily_Business/2002/db0821/FCC-02-231A1.pdf.

[34] Digital Choice and Freedom Act of 2002, H.R. 5522, reproduced in full in 64 BNA Patent, Trademark & Copyright J. 536 (Oct. 11, 2002). *See* Heather Fleming Phillips, *New Bills Aim to Protect Consumers' Use of Digital Media*, SiliconValley.Com, San Jose Mercury News, Oct. 1, 2002, http://www.siliconvalley.com/mld/siliconvalley/4193841.htm.

[35] *But see* Declan McCullagh, *Why Telecoms Back the Pirate Cause*, CNET News.com, August 27, 2002, http://news.com.com/2008-1082-955417.html (quoting Verizon official's expression of concern that the bill might be broken up into pieces that will be reintroduced in new legislation).

[36] *See* Peter S. Menell, , N.Y.U. L. Rev., forthcoming 2002. See also Naughton, *supra* note 32.

[37] Letter of October 25, 2002, http://www.riaa.com/pdf/Corporate%20Outreach.pdf. *See also* Anna Wilde Mathews, *Movie, Music Firms Protect Rights*, Wall St. J., Oct. 24, 2002, at B2 (quoting from the copyright industry letter).

[38] Letter of October 25, 2002, *supra* note 37, at 1.

[39] *See* John Borland, *Hollywood Chases Down Campus Pirates*, CNET News.com, Oct. 10, 2002, http://news.com.com/2100-1023-961637.html. The Motion Picture Association of America has also sent cease-and-desist letters to university administrators demanding that they take action against student P2P file swapping. *Id*. Copyright holders have also sued universities for allowing their students to swap files. *See* Hamdani, *supra* note 24, at 905 n. 12 (discussing Metallica lawsuit against Yale University).

[40] For illuminating discussion of the possible advantages and disadvantages of imposing third party liability in the Internet context, *see* Hamdani, *supra* note 24; Katyal, *supra* note 24.

face of staunch consumer electronics sector resistance suggests that copyright industry efforts to enforce proprietary copyrights on P2P networks will ultimately be for naught and that even successful enforcement might not be worth the candle.

C. Taxpayer Funded Enforcement

The copyright industry has also lobbied aggressively for federal criminal prosecution of P2P file swappers and those who assist them.[41] The industry-supported No Electronic Theft Act, enacted in 1997, provides that large-scale file trading, even if undertaken without any intent to profit monetarily, can constitute a crime.[42] Likewise, the DMCA allows criminal penalties for individual acts of willful circumvention.[43] The Department of Justice has been sparing in bringing indictments under those Acts. But at the urging of entertainment companies and their congressional supporters, Department officials have announced plans to prosecute more aggressively those engaged in P2P file-swapping-related activity.[44]

Ultimately, P2P file swapping will unlikely be contained without draconian criminal prosecutions of individual file swappers. P2P networks make possible the worldwide, decentralized, viral distribution not only of cultural expression but also of information and software tools that enable users to engage in P2P file sharing and to circumvent DRM controls. Once someone, anywhere in the world, puts cultural expression or circumvention software on a computer linked to a P2P network, those items may be made available to all others on the network.[45] And public opinion surveys indicate that most people think there is little, if anything, morally wrong with P2P file sharing.[46] In the face of the ease of P2P dissemination and the permissive social norm, the copyright industries view the aggressive policing of individuals' computer hard drives

---

[41] *See, generally*, Note**,** *The Criminalization of Copyright Infringement in the Digital Era*, 112 Harv. L. Rev. 1705 (1999).

[42] The No Electronic Theft Act, Pub. L. No. 105-147, 111 Stat. 2678 (1997), changed the definition of "financial gain," a prerequisite for criminal penalties for willful copyright infringement, from "for profit" to include the "receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works." Codified in 17 U.S.C. § 101.

[43] The DMCA describes criminal violation in the same terms as the No Electronic Theft Act (NET Act): "willfully and for purposes of commercial advantage or private financial gain." 17 U.S.C. § 1204(a). Thus file trading could in and of itself constitute "private financial gain" under the DMCA, as it can under NETA. *Cf.* Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 Yale L.J. 1575, 1640 (2002) (stating that "[a] circumventor would seem to be in jeopardy of criminal penalties even if the circumvention is trivial," but recognizing that this may depend on whether courts interpret "commercial purpose" and "financial gain" to exclude personal uses).

[44] *See* Matthews, *supra* note 37; Declan McCullagh, *DOJ to Swappers: Law's Not on Your Side*, CNET News.com, August 20, 2002, http://news.com.com/2100-1023-954591.html (reporting statement by Department of Justice attorney that the Department is prepared to begin prosecuting individuals who engage in P2P file swapping, following Congressional and industry lobbying for such prosecutions).

[45] As Microsoft computer security experts have concluded, "any content protection system will leak popular or interesting content into the darknet [i.e., the Internet], because some fraction of users – possibly experts – will overcome any copy prevention mechanism or because the object will enter the darket before copy protection occurs." Biddle, et. al., *supra* note 10 (first assuming and then, after surveying available control technologies, concluding that DRM circumvention cannot be technologically prevented).

[46] *See* note 9 *supra*.

and systematic prosecution of individuals for engaging in P2P file swapping as an essential tool for deterring such conduct.

D. Sabotage

Copyright industries have tentatively begun to use technological self-help, including placing faulty files on P2P networks, to make P2P file sharing less desirable.[47] Conducting such sabotage on a massive scale could be a public relations nightmare, and in any event might not succeed against P2P network countermeasures.[48] Nevertheless, the industries are laying the foundations for the more extensive use of aggressive self-help. Indeed, they have backed legislation that would immunize copyright holders from liability to ISPs and their subscribers for "disabling, interfering with, blocking, diverting, or otherwise impairing" P2P file sharing networks.[49]

E. Sum

In short, the copyright industry's antidote for peer-to-peer copying and distribution is to attempt to assert hermetic control over every access and use of digital content, backed by DRM technology, ISP and other third-party policing, compliant consumer electronics, taxpayer-financed criminal prosecutions, and aggressive technological self-help. With the possible exception of sabotaging P2P networks, there is nothing inherently unseemly about using these tools to reduce enforcement costs. But copyright industry efforts seem increasingly scattershot, leading at times to the suppression of valuable, noninfringing expression and at others to failure. Until such time, if any, that that regime can be put into place, copyright industries continue to attempt to withhold much of their content from online distribution, and the little they have released has only been in grudging, rearguard response to the peer-to-peer networks that they are making every effort to quash.[50] The copyright industry's war on unauthorized P2P file sharing and refusal to unleash its content for online distribution threaten to still the bubbling fount of "bottom-up" self-expression flowing from peer-to-peer network communication. They have also helped to impede deployment of

---

[47] *Cf.* Strahilevitz, *supra* note 9 (suggesting that copyright industries might effectively use technological self-help, including swamping P2P networks with faulty files, to erode the trust and norm of sharing that undergirds P2P networks).

[48] For example, in response to industry uploading of faulty music files, the version of KaZaA includes a feature for users to rate particular files. *See also* Will Knight, *'Rewiring' File-Sharing Networks May Stop Attacks*, NewScientist.com, Nov. 11, 2002, http://www.newscientist.com/news/news.jsp?id=ns99993037 (reporting Stanford researchers' model for redesigning P2P networks to make them less vulnerable to hacker and copyright industry attacks).

[49] A Bill to Amend Title 17, United States Code, to Limit the Liability of Copyright Owners for Protecting Their Works on Peer-to-Peer Networks, H.R. 5211, 107th Cong. (2002). *See also* Declan McCullagh, *Hollywood Hacking Bill Hits House*, CNET News.com, July 25, 2002, http://www.news.com.com.2100-1023-946316.html?tag=rn. The bill is currently being redrafted in the face of severe criticism.

[50] Amy Harmon, *Grudgingly, Music Labels Sell Their Songs Online*, N.Y. Times on the Web, July 1, 2002, http://www.nytimes.com/2002/07/01/technology/01TUNE.html. *See also* Simon Avery, *Company to Put Music Library Online*, July 9, 2002, http://www.siliconvalley.com/mld/siliconvalley/news/3625461.htm (reporting record label plan to release for digital distribution, through its subscription service, only its older, less popular content that doesn't sell quickly in stores and that amounts to less than one tenth of its catalogue).

broadband platforms for the high-speed dissemination of video, audio, and large text files.[51] As such, the industry approach threatens to quell P2P's promise of serving as a highly significant new platform for creativity and speech.

At bottom, the industry approach has created a logjam that shows no signs of easing in the near future. The affected parties thus ought to welcome, at least grudgingly, a regime like the NUL that could enable P2P file swapping to proceed apace while providing compensation for copyright holders. The copyright industries face the daunting prospect that their efforts to enlist third parties to enforce copyright holder control will come to naught and that the systematic prosecution of individual P2P file swappers will prove politically unpalatable.[52] In that event, the industry would both be unable to stop unlicensed copying, distribution, and modification of their content inventories and be left without any compensation for those uses. Under those circumstances, authors and artists should also settle for NUL compensation even if it means relinquishing creative control over noncommercial uses. In fact, as I will discuss below, a thriving and paying P2P regime might enable more authors and artists to receive a modest income from the use of their work than under the current copyright industry dominated system.

For their part, suppliers of goods and services subject to the NUL would, by definition, stand to benefit from increased sales due to P2P file swapping (since the NUL would be imposed only on goods and services the value of which is substantially enhanced by P2P file swapping). They would also avoid the costs of policing and of implementing standardized DRM compliant technology. Finally, consumers would enjoy the privilege of unconstrained noncommercial uses, free from the continued impediments of DRM control and threatened legal action. To be certain, consumers would not warmly embrace the additional costs for P2P-related goods and services that suppliers would likely pass on. But they might be less resistant to compensating their favorite artists and authors through a flat fee imposed on P2P-related goods and services than through the pay-per-use schemes that some copyright holders envision.[53]

---

[51] *See* at U.S. Dept. of Commerce, Office of Technology Policy, Understanding Broadband Demand, Sept. 23, 2002, at 15-17, http://www.ta.doc.gov/reports/TechPolicy/Broadband_020921.pdf (noting that P2P file sharing has been a driving force behind consumer demand for high-speed Internet and larger computer hard drives and concluding that digital entertainment would significantly accelerate "consumer adoption of high-speed connections if available online at reasonable costs and in formats that consumers want"); Lawrence Lessig, *Who's Holding Back Broadband?*, Washington Post, Jan. 8, 2002, at A17 (quoting FCC Chairman Michael Powell as indicating that copyright holder reluctance to release content for broadband distribution has impeded broadband development and suggesting that a compulsory license to use copyright-protect content might be necessary to further broadband). Copyright industry concerns over P2P file swapping have also contributed to substantial delays in the Congressionally-mandated transition to digital television. *See* Mike Musgrove, *Digital TV Founders on Fears of Internet Piracy*, Washington Post, June 1, 2002, at E1 (reporting on inconclusive discussions between motion picture studios and consumer electronics companies regarding the adoption of technical standards for DVD movies' copy-prevention).

[52] *See, e.g.*, Lee Gomes, *Software Makers Turn Small-Time Pirates Into Political Prisoners*, Wall St. J., Nov. 11, 2002, at B1 (expressing outrage at the copyright-industry induced criminalization of file-swapping).

[53] *See* Peter C. Fishburn et al., *Fixed-Fee Versus Unit Pricing for Information Goods: Competition, Equilibria, and Price Wars, in* INTERNET PUBLISHING AND BEYOND: THE ECONOMICS OF DIGITAL INFORMATION AND INTELLECTUAL PROPERTY 167, 168-73 (Brian Kahin & Hal R. Varian, eds., 2000).

II. THE RHETORIC OF PROPERTY

"We don't want to shut down innovation. We just want to protect private property from being pillaged."[54] *Jack Valenti, President, Motion Picture Association of America.*

"It is simply not fair to take someone else's music and put it online for free distribution. No one wants their property taken from them and distributed without their permission."[55] *Hillary Rosen, President, Recording Industry Association of America.*

The copyright industries regularly deploy the rhetoric of private property to support their lobbying efforts and litigation. But like copying levies and compulsory licenses (as well as many other facets of copyright law), the NUL reflects an important insight: Copyright law does not and need not make creative expression the copyright holder's "property," certainly not in Blackstone's proverbial sense of "sole and despotic dominion ... in total exclusion of the right of any other individual in the universe."[56]. Rather, as the Supreme Court has repeatedly emphasized, copyright is a limited statutory prerogative designed to benefit the public by providing an economic incentive for the creation and distribution of original expression.[57]

Granted, copyright holders typically enjoy a broad exclusive control over original expression that shares many of the attributes commonly associated with "property." But that is largely due to more than a century of copyright industry lobbying for more expansive rights; copyright need not inherently assume that shape. To add some perspective, consider the first U.S. copyright statute. The Act of May 31, 1790 granted authors of maps, navigational charts, and books the exclusive right to "print, reprint, publish, or vend" for a once-renewable 14-year term.[58] That decidedly limited grant hardly exemplifies the copyright industries' current private property rhetoric, nor did it comport with contemporaneous understandings of private property. Under the 1790 Act, even during the short period that copyrights remained in force, others were free to use copyrighted works in a myriad of ways, including reciting books in public, making copies by hand, and making and publishing translations and abridgements.[59] The Act also pointedly circumscribed the universe of expression that could be subject to an author's

---

[54] Quoted in Edmund Sanders & Jube Shiver Jr., *Digital TV Copyright Concerns Tentatively Resolved by Group*, L.A. Times, April 26, 2002, at Part 3, page 5 (speaking before a congressional committee in favor of requiring television manufacturers to incorporate broadcast flag technology to prevent consumer copying of television programs).

[55] Quoted in Doug Bedell, *Piracy Enforcement Flounders with Rise of MP3*, Dallas Morning News, Aug. 11, 1999.

[56] 2 William Blackstone, Commentaries *2. Scholars note that Blackstone himself must have recognized that description as hyperbole, even as applied to real property. *See, e.g.*, Robert C. Ellickson, *Property in Land*, 102 Yale L.J. 1315, 1362 n.237 (1993).

[57] *See, e.g.*, Fogerty v. Fantasy, Inc., 510 U.S. 517, 526 (1994), *quoting* Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) ("We have often recognized the monopoly privileges that Congress has authorized, while 'intended to motivate the creative activity of authors and inventors by the provision of a special reward,' are limited in nature and must ultimately serve the public good.")

[58] The copyright term could be renewed for one additional 14-year term only if the author was still alive and still a U.S. citizen or resident. Act of May 31, 1790, ch. 15, 1 Stat. 124.

[59] *See* Stowe v. Thomas, 23 F. Cas. 201 (C.C.E.D. Pa. 1853) (No. 13,514) (translation not infringing); Folsom v. Marsh, 9 F. Cas. 342 (C.C. D. Mass. 1841) (defendants infringed because they directly copied significant portions of plaintiff's book rather than creating a bona fide abridgement).

exclusive rights. Under the 1790 Act, works authored by foreigners were ineligible for copyright. Nor did copyright extend to graphics, sheet music, newspapers, songs, or other types of creative works that were not enumerated in the statute. Finally, the Act conditioned copyright protection on compliance with several nontrivial procedural requirements.[60] As a result, only a small fraction of the books published in the early United States enjoyed even the narrow protection afforded under the Act.[61]

Copyright, of course, need not remain within the narrow confines of that first statute. But copyright's original decidedly limited reach does stand in striking opposition to the copyright industries' grandiose claim that any unlicensed use of creative expression is the theft of "private property." In fact, the optimal scope of copyright holder rights -- and the extent to which those rights should have attributes of property -- depends upon how copyright operates to benefit the public. And an examination of copyright's function further highlights the disjunction between copyright and Blackstonian property.

Copyright law aims to solve a systemic market failure. The creation and dissemination of expression have characteristics of "public goods," like lighthouses and national defense. Their suppliers cannot prevent those who don't pay for those goods from enjoying their benefit. Likewise, those who would benefit are too numerous and too dispersed to agree on an enforceable scheme whereby all beneficiaries contribute to paying the supplier. As a result, like all public goods, creative expression will likely be undersupplied absent some legal regime for compensating its suppliers (or its supply by the government).

Copyright's current core – a bundle of exclusive rights in creative expression – is but one solution to this public goods problem. And it is a highly imperfect one at that. Copyright's exclusive rights provide an economic incentive for the creation and dissemination of original expression. But copyright does so by allowing some copyright holders to reap supracompetitive rents, prices in excess of what they could earn in a truly competitive market (where the marginal cost of supplying a consumer with a copy of or access to an expressive work would not reflect the cost of creating the work in the first place). That in turn results in "deadweight loss": some potential consumers and licensees who would have bought access to a copyrighted work at the competitive price will now be denied access.[62] A proliferation of copyright holders' proprietary rights can also make

---

[60] A prospective copyright owner had to obtain a copyright registration prior to the work's publication by depositing a printed copy with the local district court. The owner was then required to publish a notice of that registration in a U.S. newspaper for at least four weeks and, within six months of publication, to deposit another printed copy with the Secretary of State. The registration and publication could also be effected by the "proprietor," i.e., a person to whom the author had transferred the right to publish the work. The author or proprietor also had to pay the district court a registration fee of 60 cents and deposit a copy with the Secretary of State within 6 months of publication. Act of May 31, 1790, §§ 3-4, 1 Stat. 124, 124. *See also* Wheaton v. Peters, 33 U.S. 591, 665-68 (Mem) (1834) (stating that the 1790 Copyright Act required the author or copyright owner to comply with all four of the provisions as set out in sections 3 and 4 of the Copyright Act of 1790 in order to have a valid copyright).

[61] Between 1790 and 1800 there were some 20,800 American imprints, but only 684 copyright registrations. William J. Maher, Copyright Term, Retrospective Extension, and the Copyright Law of 1790 in Historical Context (September 2002), p. 5 n. 8 correcting Gilbreath's figures. [get Maher's OK to cite.] James Gilbreath, *Preface* to ELIZABETH CARTER WILLS, FEDERAL COPYRIGHT RECORDS, 1790-1800, ix, (James Gilbreath, ed., Supt. of Documents, Library of Congress 1987): There were "more than 15,000 American imprints between 1790 and 1800 but only 779 copyright registrations."

[62] *See* Yochai Benkler, *An Unhurried View of Private Ordering in Information Transactions*, 53 Vand. L. Rev. 2063, 2071 (2000).

it prohibitively expensive for prospective licensees to obtain all the permissions needed to use, modify, or distribute creative expression, especially expression, like movies and sound recordings, made up of a number of copyrighted works. And proprietary control means that copyright holders may simply veto uses or distributors they don't like or that might threaten the copyright holders' prevailing business models. As a result of these factors and others, copyright's exclusive rights may sometimes severely inhibit the distribution of expression and the creation of new expression derived from existing works.

Exceptions and limitations to copyright holders' exclusive rights, like fair use and copyright's limited term, are designed to temper the untoward effects of proprietary copyrights.[63] Private copying levies, compulsory licenses, and my proposed NUL do that and more. They also constitute alternative, non-proprietary mechanisms for accomplishing copyright's central mission, providing an economic incentive for suppliers of creative expression. Like proprietary rights, these alternatives are an imperfect solution to the market failure/public goods problem that copyright law is designed to address. It's fair to say that there is no across-the-board perfect solution. Choosing the best mechanism requires comparing costs and benefits given the relevant copyright industry structure, the economics of producing the type of creative expression in question, and the available technologies for producing and distributing that expression.

There may be reasons for preferring exclusive rights in many instances. But we should not inherently privilege proprietary entitlements, certainly not the expansive bundle that the Copyright Act currently accords.[64] Rather, as with any property system, we need to determine whether the costs of maintaining a proprietary copyright exceed its benefits and, more precisely, whether alternative mechanisms might attain equal or greater benefit at lesser cost.[65]

In that regard, P2P technology calls into question the continued necessity, desirability, and viability of proprietary copyright. On the benefits side, proprietary copyright arose in an age in which copyright holders had to make substantial investments in the distribution of hard copies. But P2P networks disseminate expression without that copyright holder investment.[66] Indeed, it is users and the providers of network

---

[63] *See* William M. Landes & Richard A. Posner, *Trademark Law: An Economic Perspective*, 30 J.L. & Econ. 265 (1987).

[64] Nor is the choice between proprietary copyrights and the alternatives properly viewed as a choice between a market versus non-market regime. Proprietary copyrights do support a degree of supplier competition in setting prices and allocating resources based on consumer demand, a characteristic typical of markets. But in a more fundamental sense, all copyright law is a non-market response to systemic market failure, the inability of markets to generate an adequate supply of creative expression. In that sense, proprietary copyrights, with their capacity to enable holders to reap supracompetitive rents, are merely one non-market mechanism among many for addressing that market failure.

[65] Numerous scholars have noted the costs of maintaining property systems and the need to assess costs versus benefits in determining a property system's efficacy. In the intellectual property context, *see* Edmund W. Kitch, *Elementary and Persistent Errors in the Economic Analysis of Intellectual Property*, 53 Vand. L. Rev. 1727, 1732 (2000); Landes & Posner, *supra* note 63, at 266-68; Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1045, 1065 (1989); Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & Com. 509, 516 (1996).

[66] For this point I draw upon Raymond Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. Chi. L. Rev. 263 (2002), and Mark S. Nadel, Questioning the Economic Justification for (and thus the Constitutionality of) Copyright's Prohibition Against

infrastructure, services, and devices, not copyright holders, who supply the public good of distributing original expression over P2P networks. At most, copyright might still foster the supply of the public goods of creating original expression and of creating and disseminating information related to that expression: informing audiences about which expressive works might suit their tastes and interests and informing creators about the tastes and interests of their potential audiences. The question is whether the NUL might provide those benefits as well. I argue that, depending on how it's structured, it could.

At the same time, applying proprietary copyright to P2P file swapping may involve considerable costs. As economic analysts have noted, given its public goods character, intellectual property in general is a "particularly costly form of property."[67] Those costs are magnified in the P2P environment where every user is a potential infringer. As I've discussed, applying proprietary copying to P2P file swapping would entail the wide ranging and partly overlapping costs of deadweight loss, licensing, civil and criminal enforcement, DRM development and implementation, impeded consumer economics innovation, ISP and other third party overdeterrence, impairment of personal privacy, and suppression of P2P users' speech and creativity. These costs must be compared with those of implementing and administering the NUL, or alternative mechanisms for fostering the supply of creative expression suited to audience demand.

Toward that end, and before spelling out the NUL in more detail, it will be instructive to put the NUL in context. First, we'll examine competing regimes for addressing P2P file sharing from opposite ends of the property spectrum: digital abandon and digital lock-up. Then I will briefly describe the current private copying levies that might serve as useful precedent for the NUL.

III. BETWEEN THE SHOALS

My proposal for a NUL levy navigates between the twin shoals of what I term "digital abandon" – the massive unauthorized personal copying and dissemination of copyrighted works -- and "digital lock-up" – copyright industries' hermetic control over every use of and access to those works in digital format. My proposal would give individuals the unhindered right to engage in the noncommercial copying, exchange, and modification of much copyright-protected expression. But to the extent ISPs and consumer electronics manufacturers pass on levy costs to their customers, it would effectively require that individuals pay for that right. My proposal would deny copyright holders proprietary control over noncommercial file sharing and remixing. But it would entitle them to compensation for those uses.[68] Proponents of digital abandon would regard the NUL as an unnecessary tax on users. Proponents of digital lock-up argue that it is unnecessary and undesirable to deviate from the property model for copyright, even in the P2P context.

Unauthorized Copying: § 106, Oct. 7, 2002 draft, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=322120.

[67] Landes & Posner, *supra* note 63, at 268.

[68] To paraphrase Richard Stallman's colorful distinction, they allow free use, in the sense of free (unbounded) speech, but not in the sense of free (gratis) beer.

Some commentators contend that digital abandon would greatly benefit all but entrenched copyright industries.[69] They emphasize that our use of existing expression is a social good, whether seen in market terms as the satisfaction of consumer wants or liberal democratic terms as an instance of personal liberty, self-definition, and self-expression. And they argue that the extension of copyright -- and content providers' technological control – into personal free use zones has no justification. Copyright, they posit, operates primarily to protect traditional content distributors – record labels, book publishers, and movie studios – far more than creators. That protection might have been warranted in the brick-and-mortar world, when content distribution required massive investments in money and labor. But peer-to-peer networks, they maintain, render middlemen-content distributors, and thus copyright, obsolete. In the digital universe, in fact, copyright serves as a vehicle for media conglomerates to entrench their market position and expressive power. The copyright industries have employed copyright infringement litigation to stifle peer-to-peer networks and dry up financing for new media enterprises that threaten industry dominance.[70] Copyright also distorts our expressive universe by rewarding marketing muscle rather than spurring creation. Digital abandon, the commentators maintain, would beneficially undermine copyright industry entrenchment and distortion without unduly reducing incentives for authors. Under a regime of digital abandon, they contend, much expression would be created and disseminated for free. In their view, in fact, such a regime could also provide authors with economic incentives from audience tipping and other sources that do not require copyright protection.

Digital lock-up seems to stand at the opposite end of the spectrum. Yet some commentators maintain that copyright holders' hermetic control would actually enable copyright industries to distribute their vast content inventories without burdening speech.[71] In this view, copyright holders armed with digital control would have every incentive to make their works widely available to all audiences and potential speakers. Copyright holders could do so through differential pricing, charging each user just what she is willing to pay for her desired use, whether it be downloading, a one-time listen or read, or incorporating the work into new expression. What's more, market pricing would

---

[69] In describing the position favoring digital abandon, I extract and synthesize arguments variously (and cogently) expressed by several commentators, including Ramond Ku, Jessica Litman, Glynn Lunney, and Mark Nadel. *See* Ku, *supra* note 66; Jessica Litman, Digital Copyright 151-86 (2001); Glynn S. Lunney Jr., *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 Virg. L. Rev. 813 (2001); Nadel, *supra* note 66.

[70] For a discussion of this phenomenon from the viewpoint of a scholar who does not advocate digital abandon, *see* Randal C. Picker, Copyright as Entry Policy: The Case of Digital Distribution, Chicago John M. Olin Law & Economics Working Paper No. 147 (2d Series), http://www.law.uchicago.edu/Lawecon/index.html. Jane Ginsburg discusses previous instances in which copyright owners have sought to eliminate a new kind of dissemination, but denies that this is the case with P2P dissemination. Jane C. Ginsburg, *Copyright and Control Over New Technologies of Dissemination*, 101 Colum. L. Rev. 1613 (2001).

[71] Here I synthesize various, leading arguments in support of this copyright maximalist (or "optimist") position in PAUL GOLDSTEIN, COPYRIGHT'S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX (1994); 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 (1998); Stan Liebowitz, Policing Pirates in the Networked Age; Cato Policy Analysis No. 438, May 15, 2002, at 16-19, http://www.cato.org/pubs/pas/pa438.pdf; R. Polk Wagner, Information Wants to be Free; Intellectual Property and the Mythologies of Control, http://www.law.upenn.edu/fac/pwagner/research.html.

signal consumer demand, and thus induce content producers to tailor content and content delivery mechanisms to the full spectrum of consumer tastes. Accordingly, these commentators contend, copyright holder control would both bolster and refine copyright incentives, without relying upon untested alternative compensation schemes and while allowing for widespread public access to existing expression.

Both sides make cogent arguments. But as I have discussed elsewhere, each overstates its case.[72] Like much of today's Internet, a copyright-free realm of digital abandon would undoubtedly be populated with a plethora of volunteer expression. But many expressive works – full-length motion pictures, novels, investigative journalism, and others -- require a sufficiently material commitment of time and money such that far fewer would be created without some mechanism for compensating authors.[73] Of equal, related importance is copyright's structural role in our system of free expression.[74] Copyright underwrites a sector of professional, market-supported authors and publishing enterprises that serves as the cornerstone for a robust, independent press. It helps them garner the wherewithal they need to stand up to government officials, corporations, political parties, and other centers of state and private power. Historically, copyright served to liberate authors from heavy-handed aristocratic patronage by providing them with a potential livelihood from paying audiences. In a liberal democratic society that rightly places a premium on free speech and free press, there remain substantial benefits to funding the creation and dissemination of many expressive works, and to funding them from sources other than state subsidy, corporate munificence, and party patronage.[75]

Advocates of unhindered peer-to-peer file sharing do consider some intriguing alternative mechanisms for compensating creators. These range from voluntary audience tipping, to giving away expression to spur demand for related goods, to product placement advertising. I cannot elaborate upon or fully assess these various alternatives here. It does seem that the proffered alternatives would not be fully effective, complete, or desirable. Online tipping and other forms of voluntary payment, initially much touted, have yet to yield meaningful remuneration.[76] Giving away expression to promote sales of related goods is suited only to a narrow class of creations, like complementary software products or, perhaps, distributing free music to spur demand for live performances. Heavy reliance on product placement advertising is likely to entail what many would see

---

[72] *See* NEIL WEINSTOCK NETANEL, COPYRIGHT'S PARADOX: PROPERTY IN EXPRESSION/FREEDOM OF EXPRESSION (Oxford U. Press forthcoming 2003).

[73] Jane Ginsburg has aptly called such works "sustained works of authorship." Jane C. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV. 1466, 1499 (1995).

[74] *See* Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 Yale L. J. 283, 352-63 (1996).

[75] Neil Weinstock Netanel, *The Commercial Mass Media's Continuing Fourth Estate Role*, *in* THE COMMODIFICATION OF INFORMATION (Niva Elkin-Koren & Neil Netanel eds. forthcoming 2002).

[76] *See* Chris Kelsey, *Bandwidth: Passing the Virtual Hat*, Onstage, Dec 1, 2001, http://onstagemag.com/ar/performance_bandwidth_passing_virtual (discussing limitations of current online tipping services); Janet Kornblum, *Ain't Too Proud to Beg on the Net*, USA Today, Jan. 8, 2002, http://www.usatoday.com/life/cyber/tech/2002/01/08/usat-tipjar.htm (offering a somewhat more optimistic view of the potential for online tipping, but still reporting that online tips for authors have been extremely modest thus far).

as undesirable, advertiser-driven distortions in creative expression.[77] Accordingly, compensating creators through the NUL would seem to provide significant benefits over relying entirely on alternative payment mechanisms and authors' non-compensatory incentives to create.

At the same time, the notion that, under a regime of digital lock-up, copyright holders would engage in near-perfect price discrimination such that all would have access is little more than a pipe dream. For one, copyright industries' have repeatedly exhibited a path dependent resistance to licensing or engaging in new technological methods of exploitation that might endanger their traditional profit centers.[78] Indeed, they have a long history of seeking to reap monopoly rents through anticompetitive collusion, blocking new entrants, and paying off gatekeepers for consumer attention.[79] In the multimedia and Internet contexts, copyright industries have also engaged in protacted cross-sectoral turf battles, leaving would-be licencees with the highly complex, costly task of seeking multiple, overlapping permissions.[80] That institutional conservatism and balkanization does not inspire confidence that, if only given control, the industries would make their full store of cultural expression readily available at reasonable prices.

In addition, advocates of digital lock-up hold a Panglossian view of digital technology's capacity to support access-enhancing price discrimination. The advocates' vision of individualized price discrimination is predicated on the assumption that digital technology can accurately predict consumer valuations by compiling and analyzing user profiles based on individuals' past uses and purchases. But such "Consumer Relationship Management" systems are intrinsically limited; they cannot determine the reasons for past purchases or tease out quirks and changes in a consumer's preferences.[81] Nor is

---

[77] A seminal work on the untoward influence of advertising on our system of free expression is C. EDWIN BAKER, ADVERTISING AND A DEMOCRATIC PRESS (1994). For discussion and criticism of product placement, *see* Mark Crispin Miller, *Hollywood: The Ad*, Atlantic Monthly, Apr. 1990, at 41, 42, 49; Steven L. Snyder, Note, *Movies and Product Placement: Is Hollywood Turning Films into Commercial Speech?*, 1992 U. Ill. L. Rev. 301 (discussing product placement in novels, records, and television, in addition to movies).

[78] Lessig, *supra* note 4, at 89-93 (discussing firms' path dependence).

[79] The industry's anticompetitive behavior continues. As Judge Patel said in granting Napster's request for discovery on issues of record label antitrust violations and copyright misuse by attempting to control digital distribution of music exclusively through their joint ventures: "Even on the undeveloped record before the court, these joint ventures look bad, sound bad, and smell bad." In re Napster, Inc. Copyright Litigation, Memorandum and Order of February 21, 2001, p. 23. *See also* Jon Healey, *Net Services Want Better License Deals From Labels*, L.A. Times, August 5, 2002, at Part 3, Page 5 (detailing independent online music service claims that labels systematically favor their own online services and reporting Justice Department antitrust investigation of those practices); Anna Wilde Mathews, *U.S. Probes Movie-Industry Ventures for Possible Antitrust Problems on Web*, The Wall Street Journal, Dec. 2, 2001. For an historical overview, *see* Lauren J. Katunich, Comment, *Time to Quit Paying the Payola Piper: Why Music Industry Abuse Demands a Complete System Overhaul*, 22 Loy. L.A. Ent. L. Rev. 643 (2002); Simon H. Rifkind, *Music Copyright and Antitrust: A Turbulent Courtship*, 4 Cardozo Arts & Ent. L. J. 1 (1985).

[80] Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 Dayton L. Rev. 547 (1997); R. Anthony Reese, *Copyright and Internet Music Transmissions: Existing Law, Major Controversies, Possible Solutions*, 55 U. Miami L. Rev. 237 (2001). *See also* Jim Hu, *Listen.com Inks Another Broadband Deal*, CNET News.com, Sept. 4, 2002, http://news.com.com/2100-1023-956498.html (citing complexity of clearing multiple rights as barrier to licensed digital distribution of music).

[81] For a discussion of the limitations of digital technology-based systems in determining individual preferences, *see* Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. Rev. 429, 472 (2002); Dan Hunter, *Philippic.com*, 90 Calif. L. Rev. 611, 627-36 (2002).

individualized analysis likely to be commercially or politically tenable. Internet user surveys and, recently, voter referenda show considerable public opposition to suppliers' collection of data about individuals' reading, listening, and viewing habits.[82]

Finally, price discrimination faces material cost and institutional obstacles. Determining user valuations, setting differential pricing, designing product and distribution systems to enable differential pricing, and creating and enforcing prohibitions against consumer arbitrage require considerable information, labor, and financial and organizational resources.[83] Not surprisingly, therefore, copyright industries resist providing no-cost or reduced-price licenses for non-profit, non-commercial, and educational uses.[84] Mid-level decision makers in copyright industry firms often apparently prefer to deny a low-price license outright – or simply to ignore such licensing requests -- than to devote the time required for individualized treatment or to risk a supervisor's wrath for having granted a discount from standard pricing. This resistance arises partly from the vagaries of decision making in a large organization. But it may also make perfect economic sense for the copyright industry firm; at some point the costs of setting and administering differential pricing outweigh the revenues the firm can expect to reap from such a regime.[85]

To some extent, digital technology might lower the costs and institutional barriers to price discrimination, at least with respect to end users of expressive works. But where the consumer is a speaker who wishes to build upon, reformulate, or otherwise incorporate existing expression in new speech, copyright holders will often want to engage in a costly, individualized, non-automated assessment of what price to charge. Moreover, copyright holders are often unwilling to license controversial and critical expression at any reasonable price.[86] Thus, even if individualized price discrimination through digital technology is technically and politically feasible, it is unlikely to conduce

---

[82] For a discussion of public apprehension regarding perceived invasions of privacy through data collection regarding individuals' Internet use, *see* Jerry Kang, *Information Privacy in Cyberspace Transactions*, 50 Stan. L. Rev. 1193, 1196-97 (describing survey results). *See also Bank Privacy Measure Fails*, GrandForks.com, June 12, 2002, http://www.grandforks.com/mld/grandforks/3450535.htm (reporting North Dakota voters' repeal of finance industry-backed legislation that had allowed financial institutions to sell customer data to outside companies without getting the customer's written permission).

[83] See Benkler, *supra* note 62, at 2072-73 (contending that information and implementation costs will always leave price discrimination imperfect); Michael J. Meurer, *Copyright law and Price Discrimination*, 23 Cardozo L. Rev. 55, 101-02 (2001) (discussing costs of implementing price discrimination).

[84] There is a wealth of anecdotal evidence, backed by this author's own experience, to support this point. *See also* John Borland, *Webcasters, Labels Appeal Net Radio Fees*, CNET News.com, Aug. 7, 2002, http://news.com.com/2100-1023-948834.html (reporting that record labels have shown no licensing flexibility towards hobbyist and independent webcasters who will be forced to go offline if required to pay the $.07 per song statutory license rate set by the Librarian of Congress). The labels ultimately agreed to a reduce rate for "small webcasters" under the shadow of legislation that might have exempted them entirely.

[85] *See* Benkler, *supra* note 62, at 2072-73.

[86] The Margaret Mitchell Estate's recent lawsuit against a parodic sequel of *Gone With the Wind* from slaves' viewpoint is a poignant recent example. *See* Suntrust Bank v. Houghton Mifflin Co., 252 F.3d 1165 (11th Cir. 2001) (overturning a preliminary injunction against publication of the sequel on grounds of fair use); David D. Kirkpatrick, *A Writer's Tough Lesson in Birthin' a Parody*, N.Y. Times, Apr. 26, 2001, at E1 (reporting history of Mitchell Estate efforts to prevent unflattering or controversial treatments of the classic Civil War saga). *See also* Worldwide Church of God v. Phila. Church of God, Inc., 227 F.3d 1110 (9th Cir. 2000) (church suppressing use of racist tract written by its founder but since repudiated by the church); Houghton Mifflin Co. v. Noram Pub. Co., Inc, 28 F. Supp. 676 (S.D. N.Y. 1939) (authorized publisher of English translation of *Mein Kampf* suppressing unauthorized, critical translation).

copyright holders to license remixing, fan edits and sequels, or other speech that recasts existing expression in a light that conflicts with the copyright holder's views or repetoire management.

In sum, even if it is feasible in light of enforcement costs, digital lock-up would seem to fortify copyright industries against competing distributors and speakers far more than to reconstitute the expressive benefits of peer-to-peer exchange. A regime of digital lock-up might give copyright industries sufficient confidence to make their works available online. But this regime would largely replicate the structure of the pre-Internet mass media. It would be bereft of much of the user choice and bottom-up reassembly, reconfiguration, and redefinition of popular culture that so profoundly enriches peer-to-peer network communication today.

IV. COPYING EQUIPMENT AND MEDIA LEVIES

Given the disadvantages of digital abandon and digital lock-up, the best solution to the P2P file-swapping conflict likely falls somewhere in between gratis personal copying and copyright holders' proprietary control. Regimes that impose levies on private copying equipment and media have long occupied such a middle ground. But for reasons I will presently discuss, they would not apply to P2P file swapping.

Many countries, including Canada and most of Europe, allow individuals freely to make private copies, in return for which levies are imposed on the equipment and media used for that purpose.[87] Germany's provisions are among the most comprehensive.[88] They make personal copying noninfringing, but impose a levy on the sale of audio and video recording equipment, as well recording media such as blank tapes and cassettes.[89] Likewise, they impose a levy on copying equipment (including photocopiers, scanners and, recently, CD burners), and on certain operators of such equipment (principally photocopiers), including universities, libraries, and copy shops.[90] German (and French) officials have also proposed imposing a levy on general purpose home computers, but this has proven highly controversial.[91]

Private copying levy proceeds are typically paid to a central office and then divided among rights holders' collecting societies pursuant to legislated or negotiated schedules. In turn, the collecting societies disburse the proceeds following a sampling procedure designed to determine the likely level of private copying for each work.

---

[87] For a list of private copying levy provisions of European Union countries, see Lunney, *supra* note 69, at 853 n. 137. For a brief description of Canada's provisions, *see* Ysolde Gendreau & David Vaver, *Canada*, *in* 1 Paul Geller & Melville Nimmer, International Copyright Law and Practice (2002) [hereinafter Geller & Nimmer], § 8[2][f][ii].

[88] Reinhold Kreile, *Collection and Distribution of the Statutory Remuneration for Private Copying with Respect to Recorders and Blank Cassettes in Germany*, 23 Int'l Rev. Indus. Prop. & Copyright L. 449, 449 (1992).

[89] Act Dealing with Copyright and Neighboring Rights (Copyright Act of September 9, 1965), Section 54. See also Adolf Dietz, *Germany*, *in* 2 Geller & Nimmer, *supra* note 87, § 8[2][a][ii].

[90] Act Dealing with Copyright and Neighboring Rights (Copyright Act of September 9, 1965), Section 54a.

[91] Dietz, supra note 89, § 8[2][a][ii], citing Zweiter Bericht der Bundesregierung über die Entwicklung der urheberrechtlichen Vergütung gemäb §§ 54 ff. Urheberrechtsgesetz (Second Remuneration Report), Bundestags-Drucksache 14/3972, July 11, 2000, also published in 2000 UFITA (III), 691, summarized in 2000 GRUR 860 (German Federal Government proposal).

A private copying levy is found in U.S. law as well, but it is far less extensive than that of other countries. In its 1984 decision, *Sony Corp. of America v. Universal City Studios*,[92] the U.S. Supreme Court ruled that home video recording of television programs is noninfringing fair use. In *Sony*'s wake, Congress considered, but rejected legislation that would have imposed a levy on the sale of videocassette recorders.[93] At the same time, *Sony* left open whether home recording of music would also constitute fair use. Unlike home recording of TV programs, which, *Sony* emphasized, typically involves making a temporary copy to view at a more convenient time, music recording usually entails "librarying," making a permanent copy for the user's collection. The music industry was willing to abide by the uncertainty about whether that distinction makes a difference so long as home recording equipment enabled consumers only to make imperfect copies of commercial recordings. But that changed with the advent of digital audio recorders capable of making perfect copies that might supplant CD sales. With that development, the record labels lobbied Congress to take action, by banning the manufacture and import of digital recorders.[94]

Ultimately, the record labels and consumer equipment manufacturers hammered out a compromise, which was codified in the Audio Home Recording Act of 1992.[95] The AHRA imposes a levy on digital audio recording devices and blank storage media. In return for the levy (and for requiring manufacturers of digital audio tape recorders to incorporate technology preventing serial digital copying), the Act prohibits suits against consumers for noncommercial copying of music using digital or analog equipment designed for that purpose.[96]

The AHRA might serve as useful precedent for the NUL, but its levy provisions have largely remained a dead letter because the market for digital audio recording devices never developed. Nor would the Act immunize all who engage in P2P file swapping. The Act applies only to music, not video and text files. In addition, as courts have suggested, the AHRA would not immunize home audio taping via general purpose computers and other devices not designed primarily to record music.[97] Further, the Act's immunization for private copying would not extend to remixing or making files available for download to others on a P2P network.[98]

Likewise with respect to the European Union. In its May 22, 2001 Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information

---

[92] 464 U.S. 417 (1984).
[93] H.R. 1030, 98th Cong. (1983).
[94] See H.R. Rep. No. 102-873(II), 102d Cong., 2d Sess. 2 (1992) (noting music industry concerns that digital audio tapes could enable perfect copies that would greatly decrease consumer demand for commercial prerecorded music). *See also* Ginsburg, *supra* note 70, at 1628 (describing background to enactment of the AHRA).
[95] Pub. L. No. 102-563, 106 Stat 4237, codified at 17 U.S.C. §§ 1001-1010.
[96] 17 U.S.C. §§ 1003-1007.
[97] Napster; Diamond Rio.
[98] *See, e.g.*, In re Aimster Copyright Litig., Master File No. 01 c 8933, Multi District Litigation # 1425, 2002 U.S. Dist. LEXIS 17054, U.S. Dist. Ct., N.D. Ill., September 4, 2002 (issuing preliminary injunction against P2P file sharing service and holding that the AHRA's immunization of consumer music copying does not extend to making music files available for others to copy on a P2P network).

Society,[99] the E.U. endorsed the extension of the private copying levies in the digital sphere. The Directive authorizes EU member states to allow private, non-commercial copying in "any medium" so long as "rightholders receive fair compensation."[100] So far, so good. But the Directive also countenances copyright holders' employment of DRM technology and online "click-wrap" contract to control access to and uses of works, including using those tools to prevent unlicensed private copying.[101] In addition, the Directive's provision allowing private, non-commercial copying is an exception only to the exclusive right of reproduction. It does not encompass making works available to the public by way of on-demand transmission or distribution of copies.[102]

The NUL, as I will presently delineate, would be far more comprehensive than current private copying levies.[103] It would allow private digital and nondigital copying of

---

[99] Directive 2001/29/EC of the European Parliament and of the Council Directive on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L167) 10 [hereinafter EU Copyright Directive].

[100] EU Copyright Directive, Art. 5.b(2) provides. "Member States may provide for exceptions or limitations to the reproduction right provided for in Article 2 in the following cases:

(b) in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures referred to in Article 6 to the work or subject-matter concerned."

[101] As European commentators have bitterly lamented, the Directive is far from a paradigm of clarity. See, e.g., Bernt Hugenholtz, *Why the Copyright Directive is Unimportant, and Possibly Invalid*, 11 EIPR 501 (2000). In particular, it inartfully attempts to balance the European tradition of allowing private copying with rightholders' interest in using technology and contract to prevent unlicensed digital copying. Article 5.2(b) provides that when a country does impose a private copying levy, "fair compensation" must "[take] account of the application or non-application of technological measures" to control access. Whether this means that the levy should be greater to account for an additional rightholder prerogative (that of controlling access in addition to copying) or less to reflect the inability of my users to make private copies is unclear. In addition, the Directive generally requires EU member states to take appropriate measures to ensure that copyright holders tailor DRM controls to enable users to benefit from limitations and exceptions to copyright holder rights. But the Directive provides only that EU member states *may* take such measures with respect to private copying on media other than paper and provides that member states shall not abrogate DRM controls for works or subject matter made available to the public on agreed contractual terms via an Internet site. EU Copyright Directive, Art. 4. For further discussion on the tension between private copying and DRM in the EU Directive, *see* Alvise Maria Casellati, *The Evolution of Article 6.4 of the European Information Society Copyright Directive*, 24 Colum.-VLA J.L. & Arts 369 (2001).

[102] The Directive requires that copyright owners have the exclusive right to authorize or prohibit any communication to the public of their works, including the making available to the public in such a way that members of the public may access the works from a place and at a time individually chosen by them. EU Copyright Directive, Art. 3(1). It also requires that copyright owners have the exclusive right to authorize or prohibit the distribution of copies to the public by sale or otherwise. EU Copyright Directive, Art. 4(1).

[103] Canada seems to come the closest to a system of levies that would allow for compensating P2P file swapping, at least of music. Canada's Federal Court of Appeal recently upheld a decision of the Canadian Copyright Board that persons who post music on web sites (but not ISPs) must pay a royalty in an amount to be determined by the Board. Society of Composers, Authors and Music Publishers of Canada v. Canadian Ass'n of Internet Providers, 2001 FCA 166 (May 2, 2002). In addition, the Canadian collecting society that administers reproduction rights in musical works has proposed to the Copyright Board a tariff for a levy on operators of electronic networks (which appear to include ISPs) on which copyrighted music is distributed. The proposed levy would be a monthly royalty "the highest of 0.65% of its gross revenues or 10¢ per month per customer." Statement of Proposed Royalties to Be Collected by SODRAN for the Reproduction, in Canada, of Musical Works in the Exploitation of an Electronic Network for the Years 2001 and 2002, Supp. C. Gaz. Pt. I, at 4 (May 13, 2000). For further discussion of levies and rights in

all types of communicative expression. It would also permit individuals' noncommercial remixing and dissemination of existing works through P2P networks. In return, it would impose a levy on a far broader range of goods and services than under current private copy levy regimes. Following my description of the NUL and how it would operate, I will consider some common criticisms that scholars have put forth regarding levies.

V. A NONCOMMERCIAL USE LEVY

The increasingly bitter standoff between the copyright industry, on the one hand, and the telecommunications and consumer electronics industries and new media enterprises, on the other, has spawned a number of suggestions for allowing unhindered P2P file swapping while compensating copyright holders with proceeds of a compulsory license or levy. Proponents have included such disparate voices as FCC Chairman Michael Powell,[104] telecommunications giant Verizon Communications,[105] and various representatives of the P2P and technology communities.[106] Similarly, the NUL would establish a free flowing, but paying P2P regime. It would promote the benefits of P2P self-expression while still remunerating authors (and their assigns). In this Part, I flesh out my NUL proposal in more detail.

A. Noncommercial Use Privilege

Under the NUL regime, individuals would enjoy a privilege to engage in the noncommercial copying and distribution of over digital networks of certain types of copyright-protected content. The privilege would also extend to individuals' noncommercial remixes, adaptations, and modifications of such content as long as the derivative creator identifies the underlying work and indicates that it has been modified.[107] That inclusion of modified versions of existing works goes far beyond existing levy regimes. But it embraces speech that is among the most creative and vital of P2P communication. It would encompass expression ranging from fan fiction (such as stories that build upon television series episodes and characters) to remixes of popular

---

music transmission in several jurisdictions, *see* Daniel J. Gervais, *Transmissions of Music on the Internet: An Analysis of the Copyright Laws of Canada, France, Germany, Japan, the United Kingdom, and the United States*, 34 Vand. J. Transnat'l L. 1363 (2001).

[104] *See* Lessig, *supra* note 51, at A17 (quoting FCC Chairman Michael Powell as suggesting that a compulsory license to use copyright-protect content might be necessary to further broadband).

[105] In the words of Verizon vice president and associate general counsel, Sarah Deutsch: "Companies like Verizon would want increased access to content. We've proposed a compulsory license (for) both video and music as a way to compensate the content owner and legitimize the file-sharing and other activities that are occurring today that are very difficult to stop." McCullagh, *supra* note 35. *See also* Jefferson Graham, *Kazaa, Verizon Propose to Pay Artists Directly*, USA Today, May 13, 2002, http://www.usatoday.com/life/cyber/tech/2002/05/14/music-kazaa.htm (reporting that an "unlikely alliance' of Verizon and P2P file-swapping service KaZaA are jointly proposing that an Internet use fee be imposed on computer manufacturers, blank CD makers, ISPs, and P2P software developers).

[106] *See*, e.g, Steven M. Cherry, *Getting Copyright Right*, IEEE Spectrum Online, July 1, 2002, http://www.spectrum.ieee.org/WEBONLY/publicfeature/feb02/copyr.html; Philip S. Corwin, Letter to Sen. Josheph R. Biden, Jr. on behalf of Sharman Networks, Feb. 26, 2002, at 14-16, http://www.ipuf.org/ipuf/BidenReportLetterBA.htm (arguing in favor of legislation that would establish an "Intellectual Property Use Fee"); Serguei Osokine, A Quick Case for Intellectual Property Use Fee (IPUF), Mar. 2, 2002, http://www.ipuf.org/ipuf/ipuf.htm (Gnutella software developer).

[107] The derivative creator would be required to do so both as part of the work's digital "copyright management information," within the meaning of Section 1202 of the Copyright Act and in a manner that is perceptible to a reader, listener, or viewer.

songs.[108] The requirement that the creator of a modified work clearly identifies it as such would prevent confusion regarding what is the "authentic," copyright-holder-authorized version. The limitation to noncommercial modifications would prevent market actors from putting out unlicensed competing versions (unless otherwise privileged to do so under traditional copyright law).

The privilege might also be extended to individuals' noncommercial streaming and webcasting. Using free software, such as SHOUTcast, individuals can create personal online "radio" stations, transmitting their music selections to anyone on the Internet who cares to listen.[109] Such individual webcasting is unlikely to garner enough listeners to have anywhere near the economic impact of file sharing. But it does implicate a complex array of public performance right for both sound recordings and musical works and existing compulsory licenses for webcasters and public broadcasting entities.[110] To avoid conflict with those compulsory license regimes, the NUL privilege, if extended to individual webcasting, should apply only to individual webcasters who neither earn revenue nor solicit donations from the public.

The user privilege would be protected by law. It could not be waived by a shrinkwrap or other mass-market license.[111] Nor would digital content providers be entitled to employ technological DRM controls to block the privileged uses or to sabotage P2P networks by flooding them with computer viruses or deceptive files.[112] The EU Copyright Directive and the DMCA both apparently allow technology and contract to supplant statutory limitations on copyright holders' proprietary control.[113] Given the ease

---

[108] *See* Neil Strauss, *Spreading by the Web, Pop's Bootleg Remix*, N.Y. Times, May 9, 2002, at A1; Rebecca Tushnet, *Legal Fictions: Copyright, Fan Fiction, and a New Common Law*, 17 Loy. L.A. Ent. L.J. 651 (1997); Deborah Tussey, *From Fan Sites to Filesharing: Personal Use in Cyberspace*, 35 Ga. L. Rev. 1129 (2001).

[109] *See* SHOUTcast <www.shoutcast.com>, which makes available the enabling software without charge and maintains a list of individuals' webcasted "radio" stations. *See also* Jonathan Zittrain, *What the Publisher Can Teach the Patient: Intellectual Property and Privacy in an Era of Trusted Privication*, 52 Stan. L. Rev. 1201 (2001) (describing SHOUTcast).

[110] *See* 17 U.S.C. §§ 114(d)(2) and 118.

[111] This would likely require an explicit provision of the Copyright Act preempting state contract law on this point. *See* Bowers v. Baystate Technologies, Inc., 2002 WL 1917337 (Fed. Cir. 2002) (holding that shrink-wrap license forbidding reverse engineering of computer program was not preempted by federal copyright law); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (holding that a shrink-wrap license protecting nonoriginal, and thus noncopyrightable expression, was not preempted by federal copyright law).

[112] *Cf.* Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 Harv. J. L & Tech. 41 (2001) (comparing technological and institutional arrangements for integrating fair use into DRM).

[113] On the EU Copyright Directive, *see* note 101 *supra*. The DMCA provides that nothing in its anti-circumvention provisions "shall affect rights, remedies, limitations or defenses to copyright infringement, including fair use, under this title." 17 U.S.C. § 1201(c)(1) (2001). However, that clause appears, and has thus far been interpreted by courts, to apply only to traditional copyright actions, not to actions for violation of the DMCA anti-circumvention provisions. *See, e.g.*, Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001) (holding that distribution of software enabling the circumvention of encryption designed to control access and copying of films stored on DVDs contravenes the DMCA even if user copying would constitute fair use); Sony Computer Entm't of Am., Inc. v. GameMasters, Inc., 87 F. Supp. 2d 976 (N.D. Cal. 1999) (holding that copyright holder demonstrated a strong likelihood of success on its claim that defendant's sale of a video game enhancer violated the DMCA's anti-trafficking provisions even if the enhancer did not give rise to traditional copyright infringement). *See also* Nimmer, *supra* note 12, at

of implementing DRM controls and mass-market licenses in the digital network environment, the NUL user privilege might be eviscerated if made only a default rule. The likely result would be a return to the wasteful battle over enforcement of proprietary, DRM-based controls that characterize the current, pre-NUL status quo.

As noted above, the user privilege would apply only to "certain types of copyright-protected content." By that term I mean communicative expression, including movies, music, text, and graphics, as opposed to computer programs. Although computer programs constitute a "literary work" under copyright law and have been held by some courts in some contexts to constitute "speech" for First Amendment purposes, their primary purpose is to serve as a tool.[114] Accordingly, their unlicensed P2P distribution does not have the same import for self-expression as the trading and remixing of works of popular culture. In addition, because computer programs are tools, and tools that work in complementary relation with other tools, the economics of creating, marketing, and using them is fundamentally different – and more varied -- than that pertaining to most cultural works.[115] For those reasons, it would be exceedingly difficult to use a statistical sample of computer software downloads or uses to gauge the proper amount of levy proceeds to allocate to a software producer.

The user privilege would also be limited to expression that the copyright holder has previously released to the public, whether online or offline. Copyright doctrine rightly extends special solicitude for unpublished works.[116] Authors' interest in privacy and creative control (at least in determining when a work is to be released to the public) should trump the interest of P2P file swappers unless the publication and distribution of the work meets the requirements for fair use.

In order to enjoy the privilege, the use would have to be "noncommercial." Commercial exploiters of copyright-protected works should either obtain a license or qualify for fair use or some other exception to copyright holders' exclusive rights. By "noncommercial" I mean that the individual is not selling copies of, access to, or advertising in connection with the copyright-protected work or any modification of the work. Contrary to some current law,[117] an individual's receipt of other works in digital format over P2P file swapping networks would not render a use "commercial."

---

731 (noting that the DMCA's fair use savings clause appears to apply only to traditional copyright actions). *But see* Jane C. Ginsburg, *Copyright Legislation for the "Digital Millennium"*, 23 COLUM.-VLA J.L. & ARTS 137, 151-52 (1999) (raising the possibility that under appropriate circumstances, such as where encryption protects an entirely public domain work, courts might and ought to apply the fair use defense to use of a circumvention device to gain access).

[114] *See* Pamela Samuelson et al., *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308, 2359–61 (1994) (indicating that although computer programs are ostensibly protected as literary works, but courts have effectively accorded them a quasi-sui generis protection that better comports with their functional nature).

[115] In addition to their complementary relation with hardware and other software, computer programs, as tools, are far more susceptible to consumer lock-in and network effects than is communicative expression. *See* CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES 103-225 (1999) (discussing lock-in, network effects, and complementary goods).

[116] Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985).

[117] *See, e.g.*, A&M Records v. Napster, Inc., 239 F.3d 1004, 1015 (9th Cir. 2001) (stating that personal uses are "commercial," and thus disfavored for fair use, whenever users "get for free something they would ordinarily have to buy"). *See also* No Electronic Theft Act, Pub. L. No. 105-147, 111 Stat. 2678 (1997),

Significantly, enterprises that supply goods or services used in P2P file swapping would also benefit from the privilege. Courts have held some such suppliers, including Napster, contributorily or vicariously liable for P2P participants' copyright infringements. But that rule would no longer obtain under the NUL regime. Because noncommercial P2P file swapping would not infringe the copyrights of swapped works, suppliers would not be contributorily or vicariously liable for such uses.

But that does not mean that P2P enterprises would necessarily get away scot-free. As I will now discuss, commercial suppliers of P2P software and services, like suppliers of other P2P-related items, would have to pay the NUL.

B. Imposing the NUL

The NUL would be levied upon commercial providers of all consumer products and services the value of which, the Copyright Office determines, P2P file swapping substantially enhances. In addition to commercial suppliers of P2P software and services, the NUL would be imposed on Internet Service Providers, computer hardware manufacturers, manufacturers of consumer electronic devices (including CD burners, MP3 players, and digital video recorders) used to copy, store, perform, or transmit downloaded files, and manufacturers of storage media. As technology evolves, the NUL might also extend to new products and services. For example, if, as some commentators predict, wireless communications "commons" based on spread spectrum or Wi-Fi technology supplant proprietary ISP-operated networks, the NUL might be imposed on consumers' wireless communications equipment.[118]

The Copyright Office would rely on objective market data and criteria to determine whether the value of a particular consumer product or service is "substantially enhanced" by P2P file swapping. The term "substantially enhanced" would be defined by law as a set threshold percentage of total retail value. I make no proposal regarding what exactly that threshold should be. But since, as I'll discuss below, suppliers would likely pay differential levies, in amounts corresponding to the Copyright Office finding of how much the value of each product and service is enhanced by P2P file swapping, the threshold percentage should be set quite low. A P2P-related consumer good or service should be exempt only if the levy on that item would be so small as to be not worth the costs of administration.

---

changing the definition of "financial gain," a prerequisite for criminal penalties for willful copyright infringement, from "for profit" to include the "receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works."

[118] *See* Nicholas Negroponte, *Being Wireless*, Wired, Oct. 2002, at 116 (predicting that micro-operators of Wi-Fi networks will soon replace large wired and wireless telephone companies). *See also* Yochai Benkler, *Overcoming Agoraphobia: Building the Commons of the Digitally Networked Environment*, 11 Harv. J. L. & Tech. 287 (1998) (discussing possibilities for a telecommunications commons employing spread spectrum technology); NATIONAL ACADEMY OF SCIENCES, BROADBAND: BRINGING HOME THE BITS 143-44 (2002) (describing WLAN and other broadband mobile technologies that take advantage of unlicensed spectrum as presenting an "interesting possibility" for bottom-up, small operator high-speed communications networks).

C. Determining the NUL Amount

1. Process

The amount of the NUL would be determined (and periodically readjusted) through negotiations between associations representing the industries upon which the levy is imposed and associations representing holders of rights in different categories of works. In absence of agreement, the amount would be set in mandatory arbitration before a Copyright Office arbitration board, similar to the arbitration proceedings regarding levies and compulsory licenses under existing copyright law.[119] The NUL would effectively consist of various sub-levies due from different levy payers to different rights holders. However, the NUL obligors would be entitled to require that all possible claimants participate in a single negotiation to determine both the size of the overall levy burden and the share of the proceeds to be paid to each right holder category. In that manner, the right holders will have to be cognizant of the overall ceiling for NUL payments and will need to negotiate with other right holders to determine their relative portions of the pie.

By the same token, the industries upon which the levy is imposed will negotiate with one another to determine their relative payment burdens. But in that regard, the Copyright Office finding of how much the value of each product and service is enhanced by P2P file swapping should serve as a presumptive indication of each supplier's relative payment burden.

2. Criteria

In the event of mandatory arbitration before the Copyright Office arbitration board, the board would set the NUL at rates and terms calculated to maximize the availability of creative works to the public. The NUL should thus afford authors a fair return for their creative work and levy payers a fair income under prevailing economic conditions. It should also reflect the relative roles of the copyright holders and levy payers in making the copyrighted works available to the public, taking into account their respective creative contribution, technological contribution, capital investment, cost, and risk.

That formula draws upon Copyright Act provisions regarding compulsory licenses for cable and satellite retransmissions and certain satellite digital audio radio services.[120] But it decidedly differs from current Copyright Act provisions regarding a compulsory license for the transmission of sound recordings via Internet radio, or "webcasting." The webcasting provisions require copyright arbitration panels to set a rate and terms that

---

[119] The current Copyright Arbitration Royalty Panel ("CARP") process has been criticized on a number of counts. Criticism centers on the high cost of CARP proceedings (due in part from the fact that the parties must pay the arbitrators' hourly fees) and on the fact that CARP arbitrators are chosen ad hoc and often have no expertise in copyright law, leading to a lack of predictability of results. In congressional hearings on the CARP structure and process, the Copyright Office has recommended that the process be revamped. *See* Committee on the Judiciary: Subcommittee on Courts, the Internet, and Intellectual Property. Hearings on "The CART (Copyright Arbitration Royalty Panel) Structure and Process," Statement of Marybeth Peters. Register of Copyrights, June 13, 2002, at 71, http://commdocs.house.gov/committees/judiciary/hju80194.000/hju80194_0.htm. The recommendations to make the arbitration proceedings more efficient, predictable, and professional have particular force with respect to the NUL, which would entail a far more widely reaching, multiple industry proceeding than current CARP arbitrations.

[120] 17 U.S.C. § 801(b)(1).

"would have been negotiated in the marketplace between a willing seller and a willing buyer.[121] In contrast the NUL would be set, like other compulsory licenses, at a rate designed to maximize public access to existing works while ensuring reasonable remuneration to copyright holders and authors.

My proposal would posit, in other words, that copyright holders only have a right to remuneration for noncommercial P2P file swapping; they do not have a proprietary right to refuse to grant permission for such activity or the right to receive the full monetary value of that proprietary right. The rationale for this is simple. The NUL would not serve merely to overcome transaction cost barriers to voluntary licensing of noncommercial P2P file swapping, although that is one of its advantages. Rather the levy is meant to occupy a middle ground between digital abandon and digital lock-up. It is a compromise between the position that noncommercial, personal uses should be the prerogative of the individual and the position that the law should guarantee that both copyright holders' exclusive rights and practical ability to enforce those rights extend to P2P noncommercial uses.

Nor should the NUL be designed to replace copyright industry revenues from sales of hard copies, like CDs and DVDs. Rather the levy rate should reflect the lower costs of online distribution and the lesser need for industry investment in infrastructure for physical distribution. Affording authors and their assigns a fair return for creative work does not mean providing copyright industries with a hedge against technological change and new market conditions.

In sum, the NUL regime as I envision it would approximate a market bargain between the consumer public and the copyright industries. But instead of relying on separate bargains for each discrete use of each copyright-protected work, it would entail bargaining at the wholesale level between levy payers, effectively acting as representatives and proxies for the consumer public, and copyright holder associations. In addition, the NUL regime would provide that the parties bargain under the shadow of a liability rule rather than property rule. NUL mandatory arbitration would set the levy in terms of social value and cost-plus pricing rather than the degree of market power and supracompetitive rents endemic to a proprietary copyright regime.

3. A Rough Estimate

It is difficult to predict the amount of proceeds the NUL would garner. The size and character of markets for Internet access services and consumer copying equipment and media are highly fluid. To the extent it is a relevant factor, the potential market value of digital distributions of copyright-protected material also defies easy approximation. Copyright industry sites for online downloading would provide a useful benchmark. But they are very much in their infancy and, at this stage, reflect little more than an experimental incursion into the market. There is also a "chicken or the egg" problem;

[121] 17 U.S.C. § 114(f)(2)(B). For application of that standard, *see* Copyright Office Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings and Ephemeral Recordings, 37 C.F.R. Part 261, 67 Fed. Reg. 45240 (2002). The proposed "Internet Radio Fairness Act," H.R. 5284, would eliminate the willing buyer/willing seller standard and replace it with the objective-based standard generally applicable to compulsory licenses under the Copyright Act, as set forth in Section 801(b)(1) of the Act.

consumer demand for digital copying devices, like CD burners, and digital distribution platforms, like broadband Internet access, depends on the availability of desirable content,[122] but the widespread availability of such goods and services also greatly increases the demand for and value of digital distribution of copyright holder content.

I have calculated a rough estimate of the total annual proceeds that the NUL might reasonably yield. As indicated in Tables I and II, the levy could plausibly amount to some $3 billion per year (and could be adjusted somewhat higher or lower as policy dictates). Table I sets forth recent gross sales estimates for residential commercial ISP Internet access service, home computers, free-standing CD burners, MP3 players, and blank CDs. The sales of each of those items can fairly be attributed to a significant, albeit varying, degree to P2P file swapping. Table I also includes gross sales for VCRs and DVD players. These items do not currently play a significant role in P2P file swapping. But they serve as a rough proxy for digital video recorders, such as the RePlayTV 4000, which will likely replace VCRs and nonrecording DVD players in the near future and which could readily be used to share video files.

Table II then provides the rough estimate for the NUL proceeds. If the NUL were set at 5.5 percent of the gross retail sales for each of the items listed in Table I, it would yield $2.34 billion. If we add a yearly $50 per student charge for university-sponsored Internet access (and college students are the heaviest users of P2P file sharing networks),[123] annual NUL proceeds would total just under $3 billion.[124]

In actual fact, the NUL imposed on any given item would vary depending on the extent to which P2P file swapping enhances that item's value. The figure I've used, 5.5 percent of gross retail sales, might seem high for many items. Compare, for example, the

---

[122] Seth Schiesel, *A New Model for AOL May Influence Cable's Future*, N.Y. Times, Aug. 26, 2002, at C1 (noting that cable operators are highly dependent on popular content providers and reporting on AOL business plan to apply that lesson to its dealings with broadband operators).

[123] As reported in a recent survey, "[c]ollege Internet users are twice as likely to have ever downloaded music files when compared to all Internet users (60% of college Internet users have done so, compared to 28% overall). And, college Internet users are three times as likely to download music on any given day (14%, compared to 4% of the overall population of Internet users)." Steve Jones, et. al., The Internet Goes to College: How Students are Living in the Future with Today's Technology 6 (Pew Internet and American Life Project 2002), http://www.pewinternet.org/reports/pdfs/PIP_College_Report.pdf. According to the survey: "College students also lead other Internet users in *file sharing* of all kinds. Forty-four percent of college Internet users report sharing files from their own computers while 26% of the overall population of Internet users has shared files. The sharing of files other than music is also greater among college Internet users – 52% of them have downloaded files other than music while 41% of the overall population of Internet users reported doing so." *Id*. at 7.

[124] As of 1999, there were 14.5 million students enrolled in degree-granted institutions of higher education in the United States. *See* National Center for Educational Statistics, Digest of Educational Statistics, 2000, http://nces.ed.gov/pubs2001/digest/ch3.html#1. Eighty-five percent of those students use the Internet. U.S. DEPARTMENT OF COMMERCE, ECONOMICS AND STATISTICS ADMINISTRATION, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, A NATION ONLINE: HOW AMERICANS ARE EXPANDING THEIR USE OF THE INTERNET 43 (Feb. 2002) [hereinafter A NATION ONLINE]. I assume that almost all of those student Internet users have Internet access through their college or university. *See* Hiawatha Bray, *Internet Visionary Hopes His Plan Has the E-Touch*, Boston Globe, July 23, 2001, at A1 (noting that "nearly every American college provides a free link to the Internet"); *see also* Barnaby J. Feder, *I.B.M. to Run a Venture to Rent Films Over the Web*, N.Y. Times, Sept. 9, 2002, at C6 (reporting that MovieLink and I.B.M. see a multi-billion market for online distribution of films, based on estimates that 13 million households and 10 million college dorm rooms have a broadband connection).

Audio Home Recording Act (AHRA), which imposes a levy of only 3 percent of the manufacturer's price on digital recording equipment and 2 percent on recording media. And even the AHRA levy exceeds the razor thin profit margins that manufacturers must endure on most consumer electronics devices.[125] On the other hand, the compulsory license royalties rates recently negotiated by small webcasters and the recording industry for the webcasters' digital performance of sound recordings are set at a much higher rate: the greater of 7 percent of webcaster expenses or 10 percent of the webcaster's first $250,000 in gross revenue and 12 percent of any gross revenue above $250,000.[126] Moreover, sales of some items in Table I, notably MP3 players, CD burners, and residential broadband Internet service, are still far from market saturation. As sales for those items increase, the average levy percentage required to an annual $3 billion yield would decline.[127] [E.g., I used 2001 figures. Broadband was 10.78 million subscribers. By last quarter of 2002: 15.6 million. Leichtman Research Group, Press Release: Broadband Internet Tops 15.6 Million in the U.S., Nov. 6, 2002, http://www.leichtmanresearch.com/press/1107release.pdf.]

[125] *See* Irene M. Kunii, et. al., *Can Sony Regain the Magic?*, Business Week, March 11, 2002, at 72 (reporting that Sony's operating profit margins on electronics products fell to 1% in 2001, down from 10% in 1991). *See also* EACEM's Comments on the Commission's Green Paper on Liability for Defective Products COM(1999) 396 final, Nov. 1999, at 6, http://europa.eu.int/comm/internal_market/en/goods/liability/027.pdf (stating that profit margins of European consumer electronics manufacturers are a maximum of three percent).

[126] Small Webcaster Amendments Act of 2002 (H.R. 5469), text reproduced in 64 BNA Patent, Trademark & Copyright J. 529 (Oct. 11, 2002). The legislation, which would codify the negotiated agreement, passed the House on October 7, 2002, but has not yet come up for vote in the Senate. For small webcasters (defined as those with annual revenues less than $1.25 million), the negotiated rates were lower than the 0.7 cents per song, per listener royalties that the Copyright Office imposed on webcasters generally in response to the report of the Copyright Arbitration Royalty Panel. Webcasters must also pay license fees for publicly performing the musical compositions featured in the sound recordings. Pursuant to its Experimental License Agreement for Internet Sites & Services - Release 4.0, ASCAP gives webcasters a choice of three possible rate schemes. The simplest provides for a royalty rate of 1.615% of adjusted gross revenue, plus 0.048 cents per users' Internet session. *See* The ASCAP Experimental License Agreement for Internet Sites & Services - Release 4.0, http://www.ascap.com/weblicense/ascap.pdf.

[127] I have also excluded sales of computers and Internet service to businesses on the assumption that employers will generally seek to prevent employees from using work time to engage in P2P file swapping. However, a considerable amount of P2P file swapping currently takes place in workplaces nonetheless. *See* Anna Wilde Mathews, *Movie, Music Firms Protect Rights*, Wall St. J., Oct. 24, 2002, at B2 (reporting copyright industry plans to send a letter to 1,000 large corporations warning them to halt P2P file swapping at their workplaces and stating that "piracy of music, movies, and other creative works is taking place at a surprisingly large number of companies").

Table I: Annual Gross Sales of P2P-Related Service and Equipment

Service or Product	**Annual Sales Estimate (2001) (in Billion Dollars)**
Home Computers	$20[128]
Free-Standing CD Burners	$0.7[129]
MP3 Players	$0.47[130]
DVD players	$2.4[131]
VCRs	$2.3[132]
Blank CDs	$0.3[133]
Broadband Internet Residential Service	$5.7[134]
Dial-up Internet Residential Service	$10.35[135]
Total	**$42.5**

[128] According to Computer Industry Almanac, as of 2001, yearly sales of personal computers in the U.S. total over 40 million units and some 50.4% of personal computers in the U.S. are used in homes. Computer Industry Almanac Inc., Press Release: PCs-In-Use Surpassed 600 M. Over 45% of Worldwide PCs Are in Homes, http://www.c-I-a.com/pr0302.htm. I have roughly estimated an average sales price of $1,000 per home computer.

[129] Devin Leonard, *This is War*, Fortune, May 27, 2002, http://www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=207975.

[130] Worldwide sales for MP3 players in 2001 totaled 2.9 million. Jonathan Cassell, *Mixed Messages in the Consumer Supply Chain*, Electronic News, June 10, 2002, at 36. I estimate that 80% of these sales took place in the U.S. *See* Cahners In-stat Group, Demand for MP3 Players Rises as Digital Music's Beat Gets Louder, InstatWIRE, Sept, 27, 2000, http://www.instat.com/instatwire/content/marketalerts/sept2000/mm0012da_0927.htm (noting that as of 1999, 90% of portable MP3 players were sold in the U.S. and Canada). The average sales price of an MP3 player in 2001 was $204. Consumer Electronics, Volume 41; Issue 7, Feb. 12, 2001.

[131] Russ Arensman, *DVD Sales Soar, While Prices Plunge*, Electronic Business, March 1, 2002, at 34 (citing Consumer Electronics Association data).

[132] *U.S. Census Bureau Daily Features For June 6-7*, U.S. Newswire, June 6, 2002 (reporting U.S. Census data on U.S. VCR sales).

[133] Phil Kloer, *Burn CD Burn*, Atlanta-Journal Constitution, Jan. 11, 2002, at 1E (reporting that, according to the International Recording Media Association, 1.2 billion blank CDs were sold in North America in 2001 and that the average price per blank CD was $0.25).

[134] According to a government survey, 53.9 million households had Internet access as of September 2001. A NATION ONLINE, *supra* note 124, at 3. Of these, approximately 20% (or 10.78 million) have broadband Internet connections and the remainder have dial-up. Federal Communications Commission, Third Report; In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket 98-146, at 28 (Feb. 6, 2002) [hereinafter FCC Third Report]. Accordingly to an industry analyst, as of December 2001, the average monthly subscription price for broadband service was $44.22 and for dial-up, the price was approximately $20. *See* Mark Kersey, *AOL Time Warner is at a Crossroads*, ISP-Planet, http://www.isp-planet.com/research/2002/ars_020130.html.

[135] *See* note 134 *supra*.

Table II: Rough Estimate of Annual NUL Proceeds

Source	**Amount (in Billion Dollars)**
5.5% of Retail Sales	$2.34
College Students Internet Access	$0.62
Total	**$2.96**

At bottom, the political plausibility of my estimated NUL "tax" will depend in large part on whether the NUL (plus the costs of industry-wide negotiations and administrative proceedings to set the amount) would be more or less expensive for suppliers than implementing DRM compliant technology and policing users on behalf of copyright holders.[136] It will also depend on the value consumers would place on the user privilege provided under the NUL regime. Certainly, consumers get much more from the NUL than the AHRA. The NUL would allow consumers to distribute, modify, and make unlimited copies of all types of cultural expression (and, possibly, webcast music); the AHRA gives users a privilege only to copy music and subjects that privilege to serial copying limitations.

What about the copyright owner side? Would $3 billion be sufficient revenue? That depends on what we define as "sufficient" and what is our metric for measuring it. From the copyright industry perspective, the proper metric would be the amount of industry revenues supplanted by unhindered P2P file sharing. In that regard, $3 billion is considerably less than annual U.S. record sales ($13 billion) and video rentals ($8 billion), to give two examples of copyright industry sales that the industry alleges would be eviscerated in a P2P file sharing world.[137]

But even assuming for the moment that P2P file sharing would substantially supplant those revenues, a proper point of comparison should not be current copyright holder gross revenues from hard copy distributions. Rather it should be the gross revenues that we might expect copyright holders to earn at a time when their own online distribution would take the place of much hard copy distribution. At most, the law should support copyright holder revenues from exploiting new technological means of dissemination; it should not protect brick-and-mortar distribution in the face of more efficient means of dissemination.

The difference could be significant. The figures for record sales and video rentals include both retail mark-ups and the considerable costs of manufacture and physical distribution of copies to retail stores. (In addition, the figure for record sales reflects

[136] *See* Dina Bass, PC, *Consumer-Electronics Makers Balk at Piracy Control Demands*, Detroit News, Aug. 22, 2002, http://www.detnews.com/2002/technology/0208/22/technology-568051.htm (reporting consumer electronics manufacturers' claims that adding DRM compliant software and chip to their products would add hundreds of millions of dollars to manufacturing costs).

[137] *See* Benjamin M. Compaine & Douglas Gomery, WHO OWNS THE MEDIA?; COMPETITION AND CONCENTRATION IN THE MASS MEDIA INDUSTRY 324 (records), 420 (video) (3rd ed. 2000).

record industry collusive retail price maintenance, the target of a May 2000 FTC Consent Decree.[138]) Those components make up roughly half of hard copy distribution costs.[139] They would be eliminated in copyright holders' online distribution, where all distribution costs are borne by Internet users and ISPs.[140]

In addition, it remains uncertain to what extent untrammeled P2P file sharing would actually supplant hard copy sales.[141] Studies of the effects of file sharing on CD sales are inconclusive, but the best preliminary empirical data suggests that file swapping will supplant no more than 20 percent of CD sales.[142] Some studies even suggest that music file swappers are more likely to increase their music spending than those who do not swap files.[143] Indeed, following Microsoft's recent use of KaZaA as a marketing portal,[144] copyright industries might use P2P file swapping to promote their products, and

---

[138] *See* Statement of the FTC, In the Matters of Time Warner Inc.; Sony Music Entertainment Inc.; Capitol Records, Inc.; Universal Music & Video Distribution Corp. and UMG Recordings, Inc.; BMG Music, No. 971-0070 (May 10, 2000), at http://ftc.gov/os/2000/05/cdstatement.htm. The Commission estimated that, over a three-year period, U.S. consumers paid as much as $480 million more than they should have for CDs and other music because of the record labels' anticompetitive collusion. *See* Press Release, Federal Trade Commission, Record Companies Settle FTC Charges of Restraining Competition in the CD Music Market, May 10, 2000, http://www.ftc.gov/opa/2000/05/cdpres.htm. In other words, approximately 1-1/4% of the gross annual record sales figure can be attributed to the record labels' collusive price maintenance. In September 2002, the labels agreed to pay consumers $67.3 million in cash and donate $75.7 million worth of CDs to charities and schools in settlement of a lawsuit brought by 43 states alleging that the labels' "minimum advertised pricing" policy amounted to price-fixing in violation of antitrust law. *See* Lisa M. Bowman, *Labels Pay to Settle Price-Fixing Suit*, CNET News.com, Sept. 30, 2002, http://news.com.com/2100-1023-960183.html.

[139] Approximately 50% of the price paid by the consumer for a CD is directly attributable to disc manufacture and packaging, distribution, retail costs, and retail mark-up. *See* Compaine & Gomery, *supra* note 137, at 326 (reproducing a table breaking down the costs involved in producing and distributing a CD). Brick-and-mortar markets are also likely to yield larger profit margins from greater price dispersion and price stickiness. *See* Sanjay Gosain & Zoonky Lee, *The Internet and the Reshaping of the Music CD Market*, 11 Electronic Markets 140, 141-43 (2001) (noting that mature electronic markets should reduce information asymmetries for buyers by helping them to be better informed about prices).

[140] Both the recording and motion picture industries have implemented limited online distribution sites. *See* Amy Harmon, *Movie Studios Provide Link for Internet Downloading*, N.Y. Times, Nov. 11, 2002, at C1.

[141] Industry analyst Forrester Research recently concluded that there is no evidence of decreased CD buying among frequent digital music consumers. *Forrester Sees $2 Billion Digital Music Market By 2007*, SiliconValleyNews.com, Aug. 13, 2002, http://www.siliconvalley.com/mld/siliconvalley/news/editorial/3856253.htm.

[142] Stan Liebowitz, Record Sales, MP3 Downloads, and the Annihilation Hypothesis; Preliminary, August 22, 2002, http://wwwpub.utdallas.edu/~liebowit/knowledge_goods/records.pdf (basing conclusions on an empirical study of the past 30 years of recorded music sales). For an analysis of the studies submitted by party experts in the Napster litigation, *see* Liebowitz, *supra* note 71. Given bandwith and digital storage constraints, P2P file sharing should supplant even less of movie rentals and DVD sales.

[143] *See* Alex Daniels, *Digital Rights Put to Test*, WashingtonPost.com, June 4, 2002, http://www.washingtonpost.com/ac2/wp-dyn/A56664-2002Jun4 (reporting Jupiter Media Metrix survey finding that music listeners who had engaged in P2P file sharing were 75 percent more likely to increase their music spending than those who had not).

[144] *See* Amy Harmon, *Marketers Try to Turn Web Pirates Into Customers*, N.Y. Times, Nov. 4, 2002, at C1; Jon Healey, *Microsoft Using Kazaa as a Marketing Portal*, L.A. Times, Oct. 21, 2002, http://www.latimes.com/technology/la-fi-micro21oct21004425,0,5120889.story.

Peer networks also undermine the justification for paying for marketing out of copyright holders' monopoly rents. Ku, *supra* note 69, at text accompanying notes 342-354; Nadel, *supra* note 69. Audiences generally want to know what others whose opinions they value think of new music, books, and movies.

in so doing might realize some savings on the considerable sums they now expend on advertising and payola.[145]

As Table III indicates, if, as the preliminary data suggests, unhindered file swapping would supplant 20 percent of the industries' sales from CD sales and movie rentals, and if hard copy distribution costs make up some 50% of gross revenues from those sources, my estimated NUL would comfortably exceed the industries' lost revenues. Significantly, moreover, P2P file sharing would not supplant (or would likely supplant a far lower percentage of) other copyright industry revenues. These would include, among others, revenues from live public performances, broadcasts, webcasts, and commercial licensees.[146]

Table III: Comparison

Copyright industry adjusted hard copy revenues (CD sales and movie rentals)	$10.5 billion
20% loss from P2P file sharing	$2.10 billion
NUL proceeds	$2.96 billion

Thus far, I've assessed the possible sufficiency of NUL proceeds using the copyright industry metric of lost net revenues from current sales. While my figures are partly rough estimates, they do suggest that the NUL could plausibly substitute for lost copyright industry revenues from unhindered, noncommercial P2P file sharing. And more profoundly, even if the NUL does not substitute for the net revenues earned by today's copyright industries, it shouldn't have to. Rather, with levy paying industries negotiating opposite copyright holders as proxies for Internet users, the NUL should reflect the value of copyright holder inventories and future works in the P2P network environment. Together with commercial licensing and offline sources of copyright holder revenue, it would supply ample funding for the creation of "sustained works of authorship." At the same time, it would greatly broaden public access to existing expression, eliminating much of the deadweight loss associated with proprietary copyright.

Peer recommendations and metering technology can provide that information without the enormous sums that copyright industries now spend on marketing, promotion, and payola. *See* Yochai Benkler, *Coase's Penguin, or, Linux and The Nature of the Firm*, 112 YALE L. J. (forthcoming Winter 2002-03), http://www.benkler.org/CoasesPenguin.PDF.

[145] *See* RICHARD E. CAVES, CREATIVE INDUSTRIES; CONTRACTS BETWEEN ART AND COMMERCE 286-96 (2000) (discussing payola in various industries); Ralph Blumenthal, *Charges of Payola Over Radio Music*, N.Y. Times, May 25, 2002, http://www.nytimes.com/2002/05/25/arts/music/25PAYO.html.

[146] P2P file sharing, and even P2P streaming, should not substantially supplant broadcasting and webcasting revenues. Many consumers will continue to want to listen to and view programming selected by mass media gatekeepers, in part to be in the know about what others are experiencing. See Neil Weinstock Netanel, *Market Hierarchy and Copyright in Our System of Free Expression*, 53 Vanderbilt L. Rev. 1879, 1907-09 (2000) (discussing informational and cultural works solidarity and associational good characteristics).

4. Distribution of NUL Proceeds

Levy distribution is no less important than determining the levy's amount. The NUL regime would involve two levels of distribution. First, it would require a macro distribution, a determination of which percentage of the total NUL proceeds will be allocated to each copyright holder category. For example, holders of copyrights in sound recordings might receive 15%, holders of copyrights in musical compositions 10%, holders of copyrights in motion pictures 20%, and so on. Following that basic allocation, the NUL would then require a micro distribution, a determination of the share of each copyright holder within each category.

I will say something about each level of distribution, but first we need to address a fundamental question: To what extent, if any, should the NUL be used as a vehicle for redistributing revenues from copyright industries (record labels, movie studios, book publishers, and the like) to creators? In some countries, equipment and media levies are used in part to subsidize authors who might not otherwise garner market support.[147] Some commentators have advocated that such an approach be adopted in the U.S. as well.[148] Others have proposed that some portion of levy proceeds be distributed directly to authors and performers, sidestepping copyright industry intermediaries, who often hold the copyright in a work and pay authors what many deem to be meager royalties. For example, the proposed Music Online Competition Act would distribute half of statutory license payments directly to performing artists rather than funneling that payment through record companies, as is generally the case with respect to copyright and performers' royalties under current law.[149]

Such proposals are well-meaning, but should ultimately be rejected. Levy proceeds would best be distributed in the manner that most closely reflects audience demand. They should also be paid to current copyright holders. While subsidizing certain forms of noncommercial authorship can be a salutary endeavor, using levy proceeds for that purpose would greatly complicate and raise the cost of administering levy distributions. It would also open the door to interest group rent seeking at the legislative level.[150]

Distributing proceeds directly to authors also makes some sense in principle. Much of the record label or book publisher investment and contribution to value is directed to offline, brick-and-mortar distribution rather than online P2P dissemination. P2P networks open opportunities for authors to distribute their works directly to audiences, and much of the cost of P2P distribution is born by network participants. That is not to say that intermediaries would perform no useful function in an age of P2P distribution. Record labels, for example, discover artists who may have popular appeal, help assemble

---

[147] *See* Lunney, *supra* note 69, at 915 (noting that a number of European countries require that a certain portion of the levy funds be set aside for specified social and cultural purposes, including funding young or avant-garde artists).

[148] *See, e.g.*, Lunney, *supra* note 69, at 912 (characterizing the directing of incentives towards the "marginal, rather than non-marginal work" as a clear advantage of a levy-based approach).

[149] The Music Online Competition Act of 2001, 107th Cong., 1st Sess., Introduced Aug. 3, 2001. Similarly, the Audio Home Recording Act provides for direct distributions to performers, nonfeatured vocalists, and writers. 17 U.S.C. § 1006(b).

[150] Copyright legislation is notorious for interest group rent seeking and allocation. *See* JESSICA LITMAN, DIGITAL COPYRIGHT 35-63 (2001).

bands, package and market record albums, and finance concert tours in addition to distributing records.[151] Nevertheless, P2P dissemination does call into question the continuing dominance of traditional copyright industries. At the very least, it provides opportunities for authors and artists to reach a select audience and earn a modest income even if they're not among the select few chosen for mass-market stardom by copyright industry gatekeepers. And given their decreased dependency on copyright industry intermediaries for financing the significant costs of hard copy distribution, authors might be able to turn to a variety of third parties to provide publicity, editing, financing, and other such services.

But if authors in fact have less need for intermediaries in the P2P environment, then once P2P distribution reaches its full potential, authors will be in a far better bargaining position vis-à-vis record labels, book publishers, and other intermediaries than they are today. In that event, authors may well be able to retain copyright ownership over their works or least bargain for greater royalties. Ultimately, it seems, strengthening paying P2P file sharing through the NUL regime would engender a market solution to what some perceive to be the industry's unfair exploitation of authors under current conditions.

a. Micro Distribution

The most straightforward method for distributing NUL proceeds to copyright holders is to do so in line with consumer demand.[152] I propose, accordingly, that levy proceeds would be distributed to copyright holders in proportion to the number of downloads of their respective works and of Internet users' adaptations of their works, as measured by digital fingerprinting and sampling technologies.[153] To the extent technologically feasible, the allocation of proceeds should also reflect subsequent uses of those works.[154] Metering subsequent uses in addition to downloads would more accurately reflect each work's value. Certain types of works tend to be subject to more repeated viewing, reading, or listening than others, and such ongoing use is an important, additional component of a work's value. [155] One advantage of digital lock-up is that to the extent

---

[151] *See* Laura M. Holson, *Young Band, Derailed Dream*, N.Y. Times, Oct. 1, 2002, at B1.

[152] That is not the only plausible method. P2P users might also vote for which artists should receive the proceeds or allocate proceeds to intermediaries based on which artists those intermediaries represent. *See* James Love, How Should Musicians Be Paid to Create Digital Works?, PowerPoint presentation, Banff Centre, New Media Institute Workshop, July 4, 2002, slides 47-51, http://www.cptech.org/slides/banff-p2p-cl.ppt.

[153] Possible technologies include variants of Relatable's TRM and Relatable Engine and Audible Magic's content-based identification technology. *See* Relatable, http://www.relatable.com; Audible Magic, http://www.audiblemagic.com. *See also* Evan Hansen, *EMI, Audible Magic Ink Anti-piracy Deal*, CNET News.com, Oct. 29, 2002, http://news.com.com/2100-1023-963756.html.

[154] Metering of such subsequent uses as well as downloads appears to be technologically feasible. *See* Cherry, *supra* note 106 (describing "RightsMarket" music-playing tracking software); Chris Oakes, *Word Docs with Ears*, Wired News, Aug 31, 2000, http://www.wired.com/news/techology/1,1282,38516,00.html (noting that code in a word processed document or email message can track subsequent uses of the file and report those uses over the Internet to another location); Brad King, *Songbird: Big Huff, Small Puff*, Wired News, May 10, 2001, http://www.wired.com/news/mp3/0,1285,43687,00.html (discussing file-swapping tracking systems of varying effectiveness).

[155] As a rough measure of this, *see* Eric W. Rothenbuhler & John M. Streck, *The Economics of the Music Industry, in* Media Economics; Theory and Practice 199, 200, 202 (Alison Alexander, et. al., eds., 2nd ed. 1998) (showing than consumers spend widely varied amounts of time per dollar on different types of media.)

consumers could make a micropayment for each use, creators' remuneration would more precisely reflect a work's value. A levy scheme that measures subsequent use would share that advantage while avoiding the drawbacks of copyright holders' hermetic control.[156]

Measuring both downloads and subsequent uses over pure P2P networks would require DRM technology that fingerprints files embodying copyright-protected works, tracks uses on personal computers, and transfers metering information to the location where use information is aggregated. Subsequent uses on devices, like MP3 players, that are not connected to the Internet would likely elide tracking, at least under current technology, but metering downloads from personal computers to such devices could serve as a rough proxy for subsequent use. Of course, metering downloads and uses raises privacy and free speech concerns, especially if, as would seem to make the most sense, metering is undertaken by or on behalf of associations representing the copyright holders. But these concerns can be substantially ameliorated; metering could be subjected to strict technological and legal guarantees against any tabulation or use of the information other than as an aggregate measure of all user downloads and uses of each work. If the only ramification of metering use is that the user's favorite authors and recording artists receive more money, users might well welcome such metering.

b. Macro Distribution

Macro distribution, the allocation of NUL proceeds among copyright holder categories would require cross industry negotiation and, most probably, a Copyright Office arbitration board proceeding. Aggregate data regarding user downloads and uses would be of some help in setting that allocation. But such data could not be determinative because different types of copyright-protected works involve vastly different levels of investment and stand at the head of very different industry structures. For example, a full-length motion picture recorded on a DVD generally represents a far greater capital investment, incorporates many more copyright-protected works, and features many more performers than a song, or series of songs, recorded on a CD.

As a result, the arbitration board would need, in effect, to set a sub-levy for each category of copyright holder. In so doing, it would take account of the relative creative contribution, technological contribution, capital investment, cost, and risk characteristics of each category.

[156] Of course, counting downloads, or even repeated uses, does not necessarily measure a work's value to the consumer. Neither expressive works nor uses of those works are necessarily fungible. It may be that devotees of Harry Potter value each read more than readers of a local newspaper or listeners to a popular song value their repeated uses, even though each might access the work the same number of times. A copyright holder's perfect price discrimination would measure that value, but as I have discussed above, such price discrimination can exist only in theory. All in all, metering downloads and uses would seem to be a good enough proxy for private valuation.

VI. CRITICISMS OF PRIVATE COPYING LEVIES

Commentators raise a number of concerns about private copying equipment and media levies. Indeed, among the relatively favorable assessments, Terry Fisher's concludes that although "a tax-and-royalty regime would likely be better than what we currently have, [it] would also have serious flaws."[157] In this Section, I briefly review these concerns and consider their applicability to the NUL. The concerns fall into three broad categories: insufficient funds, inequitable cross-subsidization, and distribution complexities.[158]

A. Insufficient Funds

Commentators express doubt that private copying levies can generate sufficient funds to satisfy copyright holders without imposing price increases on consumer electronics equipment that consumers deem unacceptable. As Glynn Lunney notes, even Germany's relatively extensive system of levies yields less than three percent of the total licensing revenue collected by GEMA, Germany's principal collective rights organization for music performances and reproductions.[159] And as Jane Ginsburg emphasizes, that pricing quandary may be even more intractable if levies are applied to all kinds of works subject to P2P file sharing, not just music.[160]

It is difficult to assess the insufficient funds concern in any definitive sense because no one knows how much money would be sufficient to spur the creation and dissemination of sustained works of authorship at an optimal level. To be certain, as I've discussed above, the NUL would not be designed to guarantee the copyright industries' current revenues and market position. Nor should it be designed to do so, especially in the face of network dissemination technology that appears significantly to diminish the value of the industries' contribution. Further, the NUL need not compensate copyright holders for all uses of their work. Rather the levy would aim to compensate copyright holders only for the noncommercial uses permitted under the NUL regime. As such, the some $3 billion in annual proceeds that, according to my rough conjecture, the NUL might yield is not an insignificant sum.

In that regard, the NUL proceeds would not represent copyright holders' sole source of revenue. Noncommercial P2P file swapping might well significantly supplant sales of digital hard copies, such as sounds recordings embodied on CDs and movies on DVDs, as well as copyright industry sites for digital distribution of the content. But, as I've noted above, preliminary data suggests that P2P file swapping will harm sales to a far lesser extent than portrayed in copyright industry jeremiad. Industries might offer sufficient brand recognition and value-added service and products so that many

---

[157] Fisher, *supra* note 161.

[158] A fourth possible objection to the NUL is that it might run counter to U.S. obligations under international intellectual property treaties. For discussion of that issue, see NETANEL, *supra* note 72.

[159] Lunney, *supra* note 69, at 855. *But see* Ku, *supra* note 69, at [text at notes 333-335] (asserting that a two percent levy on consumer electronics sales would yield a significant amount, "equal to projected revenues for the entire digital downloading market under copyright in 2002").

[160] Ginsburg, *supra* note 70, at 1643.

consumers prefer to buy content from them. Copyright holders can also profit from commercial licensing and offline sales and performances.

B. Inequitable Cross-subsidization

Commentators contend that levies require low-volume users and nonusers of copyrighted material to subsidize high-volume users. I may use my computer hard drive, CD burner, and blank CDs entirely to store my own work. It is arguably unfair to require that I pay a levy on that equipment and media so that others can reproduce copyright-protected material. [161] Such a levy, commentators contend, is also inefficient.[162] It increases the product prices in a manner that may be incommensurate with the use of products to copy copyright-protected material. As such, it may impose an innovation-impeding tax on certain digital technologies.

There are a number of responses to these concerns. First, the low-volume user subsidy problem is somewhat overstated. Imposing the levy will encourage some low-volume users to become higher-volume users. If paying an extra $100 for a personal computer enables me legally to use it to trade music and video files, I will be more likely to use the computer for that purpose and I might find that I enjoy doing so. Put differently, under a proprietary copyright regime, I must pay a supracompetitive price for getting access to and using creative works, and, as a result, will enjoy less than I would in a competitive market (and will place a lesser value on computers and other devices used viewing and listening to those works). Under the levy regime, I will pay a blanket fee up front, but then will have access to an unlimited array of works at their zero marginal cost. It's not readily apparent that the proprietary regime is more equitable and more efficient than the levy regime, especially when one considers that consumer behavior may be partly endogenous to the prevailing regime. In fact, experience and market research show that information product consumers tend to prefer flat rates over differential unit pricing, even if that might mean paying somewhat more overall.[163]

Second, the NUL could be imposed selectively in ways that mitigate the nonuser cross-subsidy. For example, the NUL could take cognizance of the fact that, for their own reasons, businesses are likely to forbid employees from devoting work time to engage in P2P file swapping. To that end, as I've posited, the NUL would be imposed only on residential Internet access and home computers.[164] In addition, the type of equipment or service may sometimes serve as a rough proxy for an individual's ability to engage in, and thus valuation for, file trading. At least under current technology, the speed and character of Internet connection provides a good example. Although file

---

[161] William Fisher, Digital Music: Problems and Possibilities (last revised October 10, 2000) http://www.law.harvard.edu/Academic_Affairs/coursepages/tfisher/Music.html#IV2; Ginsburg *supra* note 7094, at 1644; Lunney, *supra* note 69, at 856.

[162] Fisher, *supra* note 161; Lunney, *supra* note 69, at 856-67.

[163] *See* Peter C. Fishburn et al., *Fixed-Fee Versus Unit Pricing for Information Goods: Competition, Equilibria, and Price Wars, in* INTERNET PUBLISHING AND BEYOND: THE ECONOMICS OF DIGITAL INFORMATION AND INTELLECTUAL PROPERTY 167, 168-73 (Brian Kahin & Hal R. Varian, eds., 2000).

[164] Under current ISP-based Internet access, the limitation to residential Internet access could be easily effected at the level of the ISP. The limitation to home computers might be implemented by providing businesses with a rebate.

compression technology has greatly reduced the time needed to download files, high-speed access is still a significant advantage for downloading music files and a virtual necessity for downloading movie files. Not surprisingly, therefore, according to a recent survey, half of all broadband subscribers, but only a quarter of dial-up subscribers, have downloaded music files, and some 12 percent of broadband subscribers, but essentially no dial-up subscribers, have downloaded movie files.[165] Broadband Internet also typically allows the subscriber to be online all the time without taking up a phone line. This characteristic is highly conducive to subscribers who wish their collections of music or movie files to be continually accessible to others on their P2P network.[166]

Thus ISPs could significantly ameliorate the nonuser cross-subsidy problem by passing on levy costs to broadband, but not dial-up, subscribers. In fact, the law setting out the ISP levy scheme might impose the levy only on the provision of high-speed Internet service to residential subscribers. Similarly, computers and other devices might be levied proportionately to their microprocessor speed and digital storage capacity. That also could serve as a rough proxy for use in P2P file sharing.

Such arrangements would roughly parallel the compromise embodied in the Audio Home Recording Act. Under the AHRA, a levy was imposed only on digital recording equipment and media, which provided the most ready vehicle for consumers to make copies that could supplant purchases of record labels' prerecorded music. But home copying was allowed on analog as well as digital systems.[167]

ISPs might even differentiate between broadband subscribers who wish to engage in sharing copyright-protected files and those who do not. They could establish a low price tier for those who promise to refrain from such file-sharing.[168] An ISP could detect its subscriber's cheating by tracing the uploading or downloading of watermarked files (which would be an exception to the general rule that tracing technology be used only to meter aggregate uses). Likewise, ISPs might charge willing subscribers only for actual uploads, downloads, and subsequent uses of watermarked, copyright-protected files.

---

[165] John B. Horrigan & Lee Rainie, The Broadband Difference; How Online Americans' Behavior Changes With High-Speed Internet Connections at Home 29 (Pew Internet and American Life Project 2002), http://www.pewinternet.org/reports/pdfs/PIP_Broadband_Report.pdf.

[166] Jane Black, *Will Cable Unplug the File Swappers?*, Business Week Online, June 12, 2002, http://www.businessweek.com:/print/technology/content/jun2002/tc20020612_1108.htm?mainwindow (discussing tiering plans based on speed and bandwith usage and noting that the new pricing models could raise costs for P2P file sharing).

[167] The AHRA remained much of a dead letter because digital music recording systems never took off in the market. But all indications are that American consumers have a strong pent-up demand for high-speed Internet service. *See* Broadband 2001, A Comprehensive Analysis of Demand, Supply, Economics, and Industry Dynamics in the U.S. Broadband Market, J.P. Morgan Chase & Co. and McKinsey & Company, Inc., Apr. 2, 2001, at 1, cited in FCC Third Report, *supra* note 134, at 28 n. 143 (predicting that residential high-speed service subscribership will increase from 1.9 million at the beginning of 2000 to 40 million at the end of 2005). Indeed, consumers' demand for broadband has been dampened in large part because of the dearth of quality content. An ISP levy that opened broadband to untrammeled P2P file sharing would help spur demand for the service.

[168] ISPs could quite readily offer subscribers different tiers of Internet service at different prices depending on whether the subscriber wishes the right to engage in P2P trading of copyright-protected files. Indeed, ISPs already offer different tiers of service at differential pricing. They typically price high-speed Internet access, or "broadband," at $44 per month and dial-up access, or "narrowband," at $20 per month. *See* Kersey, *supra* note 134. ISPs are also poised to break high-speed access into various tiers, charging the most for the highest speed. *Id*.; Black, *supra* note 166.

Given healthy competition between ISPs, a consumer could choose among numerous possible configurations and could move from tier to tier or from ISP to ISP if his demand for P2P file swapping changes.

C. Distribution

Finally, commentators note the administrative costs of distributing levy proceeds to authors and copyright owners.[169] The AHRA only involves the home copying of music, yet even that law reflects a delicate compromise for dividing levy proceeds among various rights holders. Like the problem of pricing as a whole, that task would be rendered far more formidable if the levy is to encompass all kinds of works.

Certainly the negotiations and arbitration proceedings to establish the NUL amount and allocation among copyright holder categories would be far from simple. Technological systems that track downloads and uses of copyright-protected materials could greatly simplify the micro distribution of NUL proceeds. But the macro distribution would entail considerable administrative costs.

On the other hand, as I've discussed, a proprietary copyright regime also involves its own array of considerable costs, ranging from enforcement costs to degrading the capability of consumer electronics. It's far from clear that NUL administrative costs would exceed those burdens.

VII. GOVERNMENT REWARDS

If we are to institute a comprehensive levy to fund noncommercial uses, why not simply pay for copyright holder compensation out of general tax revenues? Various government rewards and subsidies have long provided significant support for both inventive and artistic activity. Proposals to replace intellectual property with a system of government rewards have been the subject of scholarly and policymaker attention since the mid-nineteenth century. Recent economic analysis has brought renewed interest to this possibility.[170] While the focus has been on patent, scholars have also considered the possibility that government rewards might provide an adequate incentive for the creation and dissemination of expression while avoiding the deadweight loss and other costs attendant to proprietary copyright.[171]

Scholars have not presented a detailed proposal for government rewards to authors in lieu of copyright. But we can imagine that it could take much the same form as the NUL, except that authors would receive payments from an entity funded by general tax revenues rather than levies imposed on selected services and devices. As

---

[169] Ginsburg *supra* note 70, at 1644.

[170] *See, e.g.*, Michael Abramowicz, *Perfecting Patent Prizes*, VAND. L. REV. (forthcoming) *available at* http://www.ssrn.com/abstract=292079); Steve P. Calandrillo, *An Economic Analysis Of Intellectual Property Rights: Justifications and Problems Of Exclusive Rights, Incentives To Generate Information, and the Alternative of a Government-Run Reward System*, 9 Fordham Intell. Prop. Media & Ent. L.J. 301 (1998); Nancy Gallini & Suzanne Scotchmer, *Intellectual Property: When is it the Best Incentive System?*, *in* 2 INNOVATION POLICY AND THE ECONOMY (Adam Jaffe, Joshua Lerner & Scott Stern eds., forthcoming MIT Press 2002); Steven Shavell & Tanguy Van Ypersele, *Rewards Versus Intellectual Property Rights*, 44 J. L. & Econ. 525 (2001).

[171] In particular, *see* Arnold Plant, *The Economic Aspects of Copyright in Books*, 1 ECONOMICA 167, 193 (1934); Michael Polanyi, *Patent Reform*, 11 REV. ECON. STUD. 61,65 (sum1944).

under the NUL regime, payment distributions could reflect each work's aggregate private value, based on a calculation derived from the number of downloads and uses of copyright-protected works reported by tracking and metering technology. Likewise, a government reward regime could permit free copying, distribution, and, with some possible limitations, modifications of expressive works.

A government rewards regime would have some advantages over the NUL. First, it would obviate the need to determine which P2P file-swapping related services and devices should be subject to the levy and what should be the amount of the levy imposed on each service and device. Second, it would avoid imposing a potentially innovation inhibiting tax on new technologies for delivering and improving P2P communication and private copying. Third, a government rewards regime would be funded by a progressive income tax rather than regressive "sales tax" on goods and services.

On the other hand, as scholars have noted, a system of government rewards would have a number of potential drawbacks. First, commentators question whether the public would support sufficient funding for government rewards from general tax revenues. Funding government rewards from general tax revenues might well be a bargain. If properly tailored, it would dramatically lower the price for access to and secondary uses of expression and inventions, while still providing enough to give authors and inventors an incentive to create them. Nevertheless, even if economically rational, raising taxes is rarely a winning campaign plank. Of course, consumers wouldn't welcome paying a levy on P2P file-swapping related devices and services either. But consumers might at least see a more direct nexus between the use of such devices and services and swapping copyright-protected material.

Which leads to the second point: funding author payments from general tax revenues raises the issue of cross-subsidization, possibly to an even greater degree than private copying levies. Taxpayer funded government rewards schemes spread the cost of author payments among a far greater population. Thus while each person's share of that cost will be less under a government rewards scheme, it is likely that many more people who do not never engage in file sharing and never copy copyright-protected works will have to pay.

Of course, an argument for government rewards is that all of society benefits from both the creation of original expression and the greater creativity, knowledge, diversity of expression, and cultural involvement that P2P file sharing engenders. After all, both the creation of original expression and cheap public access to that expression means more dissemination of information, ideas, and opinion, and greater possibilities for further creative expression that builds upon existing works. As a member of a liberal democratic polity, I benefit from those goods, regardless of whether I directly consume copyright-protected material. For that reason, perhaps, both the initial creation of sustained works of authorship and subsequent P2P file sharing *should* be cross-subsidized, and cross-subsidized by the entire citizenry.[172]

---

[172] To some extent public libraries serve a similar function. They spread cost of acquiring and maintaining copies and providing access over the entire citizenry. *See* R. Anthony Reese, The First-Sale Doctrine in the Era of Digital Networks.

There is much to that argument. Yet nevertheless, even if P2P file sharing has social value, it also has private value specific to those who participate in it. And while a strong argument can be made that we shouldn't distinguish between types of expression in assessing expression's social value, it *is* hard to justify taxpayer-funded government subsidies for television sitcoms and popular songs that might find sufficient financial support in the market even without such subsidies. At bottom, therefore, government funds would be better spent subsidizing noncommercial expression and high-speed Internet access, as is currently the case. The latter would indirectly support P2P file sharing, but would also underwrite many other communicative activities as well.

Finally, government rewards for authorship raises the specter of untoward government influence on authors' speech. In theory, a rewards system could be established with safeguards to prevent such influence. The law could require that rewards be disbursed strictly in accordance with neutral and objective criteria, such as data on user access and downloads. In addition, the disbursing body could be an independent and free-standing agency, insulated from political meddling. In practice, however, past experience demonstrates that even in democratic states and even under conditions designed to insure expressive independence, public funding brings a degree of government interference.[173]

A reward for authorship program funded by the citizenry as a whole, rather than by those who are likely to copy, distribute, and modify copyright-protected works, would suffer from like vulnerability. It would inevitably be open – perhaps rightly so – to public scrutiny and debate, with the attendant possibility of government officials' involvement in selecting which types of speech will and will not be funded. In contrast, since the NUL would be funded by users, not the public fisc, it would be an important step removed from political oversight and interference. The distribution of NUL levies would be seen more in market terms than as an expression of political values and priorities. As such, elected officials would likely feel less temptation and less need to meddle in its particulars.

At bottom, therefore, despite the advantages of a government rewards system, I suspect that the NUL would be both politically more tenable and more desirable.

V. CONCLUSION

In China, where reportedly more than 90 percent of movies, music, and software are illegal copies, authorities have begun to go to extraordinarily lengths to prevent unlicensed copying and distribution. In addition to draconian criminal penalties for illicit distribution, movie preview audiences are now subjected to security measure even more intrusive than those instituted in airports.[174] They have identity card numbers inscribed on their tickets and are videotaped as they enter the theater. Before taking their seats, they must deposit all cellphones, watches, car keys, and pens, and pass through a metal detector. Before watching the movie, they must sit through a lecture about the evils of illegal copying.

---

[173] *See* Netanel, *supra* note 75.

[174] *See* Joseph Kahn, *The Pinch of Piracy Wakes China Up on Copyright Issue*, N.Y. Times, Nov. 1, 2002, at C1.

Copyright industries would institute digital parallels to maintain proprietary control of their content in the face of unlicensed P2P file swapping. The social costs of such a regime would far outweigh its benefits. At bottom, unlike the commercial piracy so prevalent in China, the noncommercial sharing and reworking of cultural expression in P2P networks is a phenomenon to be celebrated, not repressed. It is fundamentally speech, not theft. The key is to find a means efficiently to compensate authors and copyright holders without impeding P2P file sharers' expressive activity.

Thus, P2P file sharing is yet another instance in which copyright holders' proprietary control should give way to a right of compensation. Copyright law – a legal regime designed to provide economic incentives for the creation and distribution of original expression – is broad enough to encompass both. The Noncommercial Use Levy would be an important mechanism for ensuring that authors and copyright holders continue to receive adequate remuneration for the creation of "sustained works of authorship." No less importantly, it would accord noncommercial users an unhindered entitlement to copy, share, and modify the music, movies, stories, and art that populate our culture.