

## LIVING WITHOUT COPYRIGHT IN A DIGITAL WORLD

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The title of this paper, *Living without Copyright in a Digital World*, could be understood in two ways: first, as a functionally accurate description of our current condition, and, second, as a normative statement about where we ought to be going. I mean it to be both. In choosing the title, however, I recognize its potential to raise the hackles of some readers. In what Jessica Litman has called the Copyright Wars,<sup>1</sup> provocative titles and statements have often been thrown out by copyright skeptics, and the copyright bar and industries have instinctively struck back, assuming that anyone who casts doubt on copyright's utility in cyberspace must be a radical, a lunatic, or a simple apologist for theft.

But my hope is to get by the history of irritation and misunderstanding and open what I honestly believe is a long-overdue conversation—a serious discussion among all interested parties about how best to manage the period of great upheaval that our ability to distribute communicative works digitally has caused. I do not claim that anything I will say here is new; rather, the modest aim of this essay is to re-contextualize what we all know in a way that will allow people, whatever their positions, to abandon the battle lines, recognize the extent of the common ground, and begin to think out some of the problems in a spirit of cooperation rather than confrontation.

Let me begin with a clarification, or if you prefer, a caveat. When I talk about living without copyright, I do not want to be understood as saying, “Get over it—there is no place for intellectual property law in cyberspace.” That could turn out to be true, but I am agnostic on the question at present. What I do mean to suggest, however, is that if we do have intellectual property law for the cyberspace of the future, it will—or, at least, should—be quite different from the general system that currently governs owners

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<sup>1</sup> Jessica Litman, *War and Peace: the 34th Annual Donald C. Brace Lecture*, 53 J. COPYRIGHT SOC'Y U.S.A. 1, 1, 3 (2005–06).

and users of communicative works in the analog world.

Having said this, I would like to identify what I referred to earlier as some of the common ground shared by copyright minimalists, maximalists and outright skeptics alike. These are a few home truths that virtually everyone in the field recognizes, even if some don't like to admit it. First, traditional copyright law is simply not up to the job we have tried to assign it in cyberspace. That is not a conclusion that many wanted or expected to reach. It has been hard to abandon the hope that, with just a little tweaking, traditional copyright rules could successfully be ported to the Internet the way they were to other new communications technologies, such as film and television that preceded it. The hope is understandable because the copyright system did manage for three tumultuous centuries of change to maintain a reasonably fair and workable accommodation between needs of users and producers of speech goods. Sadly, hope and reality often do not mesh.

That brings me to the second point of commonality: if one looks at the situation on the ground, it seems that, as a descriptive matter, copyright for digital works has by now become beside the point to owners and users alike. The essence of traditional copyright is that it lodges with owners the right to control copying; the logic of the law suggests, therefore, that each time one user transmits a copyrighted digital file to someone else, an event has occurred that requires the permission of a copyright owner, and, quite possibly, payment as well. This logic, however, is entirely out of synch with the way users think about their own rights to use and disseminate digital works.<sup>2</sup> To borrow again from Professor Litman, to users sharing is not stealing.<sup>3</sup> It is legitimate activity—the chief benefit, in fact, of electronic storage and transmission.

To a user, it is not theft to multiply copies without consent in order to space- and time-shift access to legitimately obtained music or video, or to share a copy with a friend. Nor does the noncommercial user think of herself as “stealing” from a copyright owner when she reuses parts (even extensive parts) of protected works to make her own creations. The availability of works in

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<sup>2</sup> A typical example of what I mean recently appeared in a New York Times article on a new video rental service that several studios are creating in cooperation with BitTorrent. The article quoted a young programmer as saying that he will stick to free (including illegal) sites to download films. “I’m not interested in renting a movie,” he is quoted as saying. “I want to own it. I want total portability. I want to give a copy to my brother.” Brad Stone, *Software Tool of Pirates Gets Work in Hollywood*, N.Y. TIMES, Feb. 26, 2007, at C5.

<sup>3</sup> Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1, 3–4 (2004).

digital form, of new digital tools, and of instant communication invite people to play with, collaborate in remaking, and sharing the creations of others in ways that were unimaginable in the more static analog universe. As Rebecca Tushnet has documented, the Internet is now full of fan fiction,<sup>4</sup> not to mention music mash-ups<sup>5</sup> and fan videos.<sup>6</sup> Again, it is important to re-emphasize that I am not talking now about the activities of commercial pirates, or even about those who, with or without commercial motivation, set up open peer-to-peer sites that facilitate massive uploading and downloading of unlicensed content. I am talking about what ordinary people, with an intact sense of honor, think are acceptable ways to behave in a digital universe.

Of course, digitization has also enabled the kind of massive copying that owners understandably fear will destroy their traditional commercial markets. Making and transmitting content digitally is both cheaper and easier than pirating materials in hard copy, and far more resistant to control. To complicate matters, digital infringement is often not the purview of those who are in it for profit (as is virtually always the case in commercially significant analog copying<sup>7</sup>); many have entered the fray as a kind of game, for the thrill of defeating technological efforts to thwart access or simply to challenge what they perceive as “greedy” copyright owners.

Faced with abundant instances both of massive and more individualized copying, content producers continue to utilize rhetoric that celebrates the importance of copyright in cyberspace;

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<sup>4</sup> Rebecca Tushnet, *Legal Fictions: Copyright, Fan Fiction, and a New Common Law*, 17 *LOY. L.A. ENT. L. J.* 651, 653–54 (1997); Rebecca Tushnet, *Payment in Credit: Copyright Law and Subcultural Creativity*, 70 *L. & CONTEMP. PROBS.* 135 (2007). For example, in March 2007, more than 289,000 Harry Potter stories alone were listed on the FanFiction.net site. FanFiction.net, <http://www.fanfiction.net/cat/202> (last visited Apr. 16, 2007).

<sup>5</sup> For a discussion of music mash-ups, see Wikipedia, The Free Encyclopedia, Mashup (Music), [http://en.wikipedia.org/wiki/Bastard\\_pop](http://en.wikipedia.org/wiki/Bastard_pop) (last visited Apr. 16, 2007).

<sup>6</sup> Discussions of fan videos and links to various sites are available at Internet Video Magazine, Fan Films, Videos and Fan Web Sites, <http://www.internetvideomag.com/Web-Sites/FanSites101.htm> (last visited Apr. 16, 2007).

<sup>7</sup> Copyright owners have claimed that photocopying, even when not done for profit, and the making of analog tapes of music have had a negative impact on the commercial sales of journals and albums. If so, this would be an exception to the point made in the text. The evidence for commercial harm of these activities has, however, been ambiguous at best. Congress exempted private taping of music from liability under the Copyright Act, and studies designed to evaluate the injuriousness of photocopying to the publishing industry failed to substantiate the claim at all or did so only ambiguously. 17 U.S.C. § 1008 (2000); see, e.g., S. J. LIEBOWITZ, *THE IMPACT OF REPROGRAPHY ON THE COPYRIGHT SYSTEM* 16 (1981); Maurice B. Line & D.N. Wood, *The Effect of a Large-Scale Photocopying Service on Journal Sales*, 31 *J. DOCUMENTATION* 234, 234 (1975).

but when they vote with their feet, they are tending to walk in some very different directions having little if anything to do with copyright. As I see it, there are now four general strategies for using the Internet to disseminate content: I will call the proponents of these strategies the Naysayers, the Locksmiths, the Subverters and the Explorers. While individual entities may mix and match aspects of these approaches to suit their own needs, the categories remain sufficiently distinctive to stand on their own as analytical categories.

The Naysayers are those who have decided pretty much to stay away from the Internet as a method of distributing content (although they may use it to advertise or to sell hard copies). They do not believe that copyright can protect digital versions of their work, and they are frankly not sure what else will. Although the true Naysayer is probably the rarest avis in the nest, the category has historically included the entire recording industry. Not until Apple was able to convince the industry that iTunes was a better bet than unlicensed peer-to-peer file sharing did efforts to sell music on line finally get started.<sup>8</sup> But the Internet continues to be unappealing to many with valuable intellectual products to sell. If you don't believe me, just try to find a legal site from which to download the Beatles' music.<sup>9</sup>

Many popular books, too, can only be had in hard copy (or possibly as recordings on CD-roms). While publishers may still have some uncertainty about consumer acceptance of e-books, those doubts are not the only reason they have hesitated to distribute texts in digital form.<sup>10</sup> The publishing phenomenon of the last decade, the Harry

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<sup>8</sup> In a recent posting, Apple head Steve Jobs described the terms to which his company had to agree to get the right to sell music on line. Steve Jobs, *Thoughts on Music*, Feb. 6, 2007, <http://www.apple.com/hotnews/thoughtsonmusic>. For another rendition of the history of iTunes, see THOMAS O. BARNETT, INTEROPERABILITY BETWEEN ANTITRUST AND INTELLECTUAL PROPERTY 5-14 (2006), <http://www.usdoj.gov/atr/public/speeches/218316.pdf>.

<sup>9</sup> Recently, a rumor circulated that the Beatles' albums would finally be released for digital distribution. See, e.g., Jonny Evans, *The Beatles Confirm Online Music Plans*, PLAYLIST, Apr. 13, 2006, <http://playlistmag.com/news/2006/04/13/beatles/index.php>. But negotiations between Apple and EMI (which distributes the Beatles) over revised terms for the use of EMI's catalogue last spring failed to generate an agreement to make the Beatles' music available. *EMI, Apple Online Deal: Beatles Still Not for Sale*, CNN.COM, Apr. 2, 2007, <http://edition.cnn.com/2007/SHOWBIZ/Music/04/02/emi.apple/index.html>.

<sup>10</sup> Although consumer acceptance of e-reader devices has been slow to occur, publishers also worry about security of the available digital rights management technology. See Gal Oestreicher-Singer & Arun Sundararajan, *Are Digital Rights Valuable? Theory and Evidence from the E-Book Industry*, Twenty-Fifth International Conference on Information Systems 533, 533 (2004) (suggesting that the threat of piracy significantly depresses the value of

Potter series, can be downloaded only through pirate sites. J.K. Rowling is happy enough to have her books advertised on the Internet, but will not permit the books to be distributed over it.<sup>11</sup> Note also the care Google has taken to reassure its prospective publishing “partners” for Google Book Search that, if they join the program, they will nevertheless retain complete control over whether to distribute their books in hard copy or electronic form.<sup>12</sup> Naysayers, in short, cast their vote against copyright in cyberspace by simply not being there.

The Locksmiths are a more numerous clan. They may actually like the strategic benefits of having copyright in their back pockets, both for its legitimating and its *in terrorem* effects, but they clearly think of it as the tool of last resort for protecting their intellectual property. These producers and distributors place their faith, instead, in contract law and a variety of technology-based devices. Locksmiths love shrink- and clickwrap licenses, and were supporters of the now-aborted Uniform Computer Information Transactions Act (UCITA);<sup>13</sup> Locksmiths also have flocked to adopt digital rights management technologies (DRMs) (and fought to protect them by urging Congress to pass the Digital Millennium Copyright Act<sup>14</sup> (DMCA)). Whatever else you might want to say about these various devices, you would never characterize them as tools of copyright. What each of them does is allow content providers unilaterally to build in terms of use that are crafted to the producer’s (rather than to the Copyright Act’s) specifications.<sup>15</sup>

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digital rights in the publishing industry); *see also* Robert McCrum, *E-Read All About It*, THE OBSERVER, Jan. 15, 2006, *available at* <http://books.guardian.co.uk/ebooks/story/0,,1686540,00.html> (emphasizing the concern of publishers that they be able to police the way e-books are used as a condition of entering that market).

<sup>11</sup> According to an article in *Wired*, children’s books generally are not available in e-book form. The magazine noted, however, that when the sixth of the Potter series appeared, Rowling’s refusal to issue *Harry Potter and the Half-Blood Prince* as an e-book was essentially rendered irrelevant; electronic versions were available on fan sites within hours of publication. Robert Andrews, *Pirates of the Potter-ian*, WIRED NEWS, July 21, 2005.

<sup>12</sup> *See* Google Book Search Help Center, <http://books.google.com/support/partner/bin/answer.py?answer=17869> (last visited Apr. 16, 2007).

<sup>13</sup> The uniform act was approved in its final form by the Commissioners on Uniform State Laws in 2002. Uniform Law Commissioners, A Few Facts About the UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT, [http://www.nccusl.org/Update/uniformact\\_factsheets/uniformacts-fs-ucita.asp](http://www.nccusl.org/Update/uniformact_factsheets/uniformacts-fs-ucita.asp) (last visited Apr. 2, 2007). Since then, only two states (Virginia and Maryland) have adopted it, and the model law is essentially defunct. *Id.*

<sup>14</sup> Digital Millennium Copyright Act of 1998, Pub. L. 105–304, 112 Stat. 2860 (Oct. 28, 1998), codified at 17 U.S.C. §§ 1201–1204, § 512 (2000). A Copyright Office analysis of the statute is available at <http://www.copyright.gov/legislation/dmca.pdf>.

<sup>15</sup> This problem is discussed in relation to contracts in Niva Elkin-Koren, *Copyright Policy*

These approaches may simply bypass the limits on proprietors' rights imposed by copyright law, like the first sale<sup>16</sup> and fair use doctrines,<sup>17</sup> and in doing so may also ignore the user's claims to some level of Internet privacy.<sup>18</sup>

Whereas copyright specifies what users may and may not do with the content they acquire, things like DRMs may also require users to be wedded, whether they like it or not, to specific platforms or equipment if they want the works they acquire to be audible, visible or otherwise useable. Thus, the incorporation of an encryption tool called CSS (for content scrambling system) to protect digital video disks shuts out Linux users from enjoying movies on their computers;<sup>19</sup> similarly, as a by-product of the desire to protect digital music with DRMs, owners of iPods cannot use them to play encrypted music they download from rival providers, and music bought through iTunes cannot be heard except on iPods.<sup>20</sup> A purchaser of a legitimate DVD in London cannot play it there, and then move to New York, and use it on a DVD player purchased in that city.<sup>21</sup>

DRMs may receive backup support from accompanying contract terms.<sup>22</sup> More and more commonly, when users pay for a copy of a work, rather than owning it, they are informed by an electronically displayed contract that they are merely licensees of the provider<sup>23</sup>

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*and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93, 106–13 (1997); *see also* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996) (permitting a contract in the form of a shrinkwrap license to protect data although facts not copyrightable).

<sup>16</sup> R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 577-80 (2003).

<sup>17</sup> Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management Systems*, 15 HARV. J.L. & TECH. 41, 44–47 (2001); Rebecca Tushnet, *My Library: Copyright and the Role of Institutions in a Peer-to-Peer World*, 53 UCLA L. REV. 977, 1015–17 (2006).

<sup>18</sup> Sonia K. Katyal, *Privacy vs. Piracy*, 7 YALE J. L. & TECH. 222, 241–44 (2005).

<sup>19</sup> Universal City Studios, Inc. v. Corley, 273 F.3d 429, 437 (2d Cir. 2001) (claimed purpose of developing deencryption method was to play DVDs on Linux-based computers).

<sup>20</sup> These will, of course, play unencrypted music, but iPods are incompatible with the DRMs used by other music providers. *See* Jobs, *supra* note 8.

<sup>21</sup> Regional coding of DVDs is discussed in COMMITTEE ON CONSUMER POLICY, DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY, ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, DSTI/CP(2005)15/FINAL, REPORT ON DISCLOSURE ISSUES RELATED TO THE USE OF COPY CONTROL AND DIGITAL RIGHTS MANAGEMENT TECHNOLOGIES 9–10 (2006), <http://www.oecd.org/dataoecd/47/31/36546422.pdf>.

<sup>22</sup> *See* Nicola Lucchi, *Intellectual Property Rights in Digital Media: A Comparative Analysis of Legal Protection, Technological Measures, and New Business Models under E.U. and U.S. Law*, 53 BUFF. L. REV. 1111, 1159–62 (2005); Mark Gimbel, *Note: Some Thoughts on the Implications of Trusted Systems for Intellectual Property Law*, 50 STAN. L. REV. 1671, 1684–85 (1998).

<sup>23</sup> *See, e.g.*, the terms under which music can be purchased from the music service Rhapsody. Rhapsody Service Terms & Conditions, <http://rhapreg.real.com/rhapsody/>

who not only subjects the transfer to its choice of terms and conditions but may be able to enforce those terms electronically.<sup>24</sup> Thus the licensee may lose access to her copy if her subscription expires, or may find that a violation of an electronically-imposed restriction has disabled or destroyed it.<sup>25</sup>

My third category, the Subverters—unlike the Locksmiths—actually do “rely” on copyright in cyberspace, but in a sense that would appeal to a character in Alice in Wonderland: they turn the law on its head with the aim of disabling it. That is why they call it “copyleft.”<sup>26</sup> The GNU General Public License<sup>27</sup> and the various Creative Commons licenses<sup>28</sup> allow software designers and other kinds of creators not only to disclaim many of the traditional rights that attach to copyrighted works, but also to limit the ability of future creators to choose whether to enjoy those rights for themselves. Creative Commons also purports to offer a license that allows creators to inject what they have produced into the public domain, or at least allows them to try.<sup>29</sup> The message sent by a typical GPL or Creative Commons license is not simply that it is useless to rely on traditional copyright in cyberspace, but that it isn’t desirable, either.

And, finally, there are the “Explorers”—those who simply open

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freeform?freeformname=RhapC%20Terms (last visited Oct. 4, 2007). Even though the agreement talks about “purchasing” copies of songs, it then goes on to specify that the “purchases” are really licenses, and the consumer may not sell, rent, or otherwise provide copies of songs he obtains to anyone else. *Id.*

<sup>24</sup> See Lucchi, *supra* note 21, at 1159–62; Gimbel, *supra* note 21, at 1684–85.

<sup>25</sup> Movies rented through the new BitTorrent Entertainment Network, for example, are coded so that they will disappear from the recipient’s computer hard drive either thirty days after receipt or twenty-four hours after the recipient first begins to watch one. Brad Stone, *Software Tool of Pirates Gets Work in Hollywood*, N.Y. TIMES, Feb. 26, 2007, at C5.

<sup>26</sup> This term came into common usage when it was adopted by the GNU Project, and is now used to describe the approach I attribute to the Subverters. See What is Copyleft?, <http://www.gnu.org/copyleft/#WhatIsCopyleft> (last visited Apr. 16, 2007). For speculation on who first coined the term, see Wikipedia, Copyleft, <http://en.wikipedia.org/wiki/Copyleft> (last visited Apr. 16, 2007).

<sup>27</sup> GNU stands for “GNU’s Not Unix.” GNU’s Not Unix! - Free Software, Free Society, <http://www.gnu.org> (last visited Apr. 16, 2007). A copy of the General Public License can be found at <http://www.gnu.org/licenses> (last visited Apr. 16, 2007).

<sup>28</sup> Creative Commons, Choosing a License, <http://creativecommons.org/about/licenses> (last visited Apr. 16, 2007).

<sup>29</sup> Whether this is actually possible is a subject of some controversy. The Copyright Act provides that protection attaches to any communicative work once it is fixed in tangible form, 17 U.S.C. § 102(a) (2000), for the life of the author plus 70 years, 17 U.S.C. § 302(a) (2000). Although the statute has provisions that allow authors or their successors, under some circumstances, to terminate copyright grants, 17 U.S.C. §§ 203, 304 (c), (d) (2000), no where does it provide a mechanism by which an author or successor to an author can disclaim copyright altogether. The types of licenses offered are further explained at <http://wiki.creativecommons.org/FAQ> (last visited Apr. 16, 2007).

the gates of the copyright enclosure and walk right through them. Some of them abandon reliance on copyright because they think it creates lots of irritating “problems” that would best be avoided—or, to be more precise, they see copyright an inane barrier to achieving the full potential of the Internet to further learning, creativity and communication. But many others become Explorers because they think copyright is simply unenforceable in cyberspace and they find DRMs an unpalatable or impracticable alternative. In other cases, Explorers experiment because they believe that, if they search around, they will find ways superior to copyright that will enable them to develop audiences and then make money from supplying their work to them.<sup>30</sup>

Again, it is important to be absolutely clear: the class I denominate the Explorers does not include those who bypass copyright by violating it (for example, those who want to engage in distribution of other peoples’ creations by uploading huge numbers of them on peer-to-peer sites). My “Explorers” are individuals and entities interested in disseminating their own expressive materials—and who may well hope to profit directly or indirectly from doing so—but without help from the formal legal regime set out in the Copyright Act. They are busy mounting experiments, most of which undoubtedly will fail or fade away, but some of which could eventually provide reasonable alternatives to the strategies of locking content down or relying on copyleft.<sup>31</sup>

The Naysayers, it seems clear, have adopted a losing strategy. If the content that the public wants is not affirmatively made available on line by its copyright owners, someone else will put it there anyway. That is the lesson one must take away from the recent history of the music industry and online distribution.<sup>32</sup> Ms. Rowling may want Harry Potter confined to hard copy, but that has not prevented pirated copies of the books from circulating to thousands on the Internet. I do not expect this particular tribe to survive in the long run, except for a few holdouts who own copyrighted material that has insufficient relevance to most of us to

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<sup>30</sup> John Perry Barlow, *The Economy of Ideas. Selling Wine Without Bottles on the Global Net*, <http://wewearbuildings.wordpress.com/2006/11/15/john-perry-barlow-the-economy-of-ideas-selling-wine-without-bottles-on-the-global-net> (last visited Apr. 16, 2007).

<sup>31</sup> See *infra* notes 64–78 and accompanying text.

<sup>32</sup> The record industry was initially reluctant to distribute music on line because it feared the possibility of piracy. The result was a plethora of unlicensed sites that allowed consumers to trade music files. Some of this history, and an analysis of the difficult business decisions that the industry had to face is outlined in G. Prem Premkumar, *Alternate Distribution Strategies for Digital Music*, 46 COMMS. OF THE ACM 89, 92–94 (2003).

be worth the effort to scan or otherwise digitize.

The Locksmiths and the Subverters are currently in ascendance, and although they appear quite different on the surface, in truth they have a good deal in common. Either by choice or necessity, both want to use copyright selectively to adopt what is useful to them, but escape from those aspects of formal copyright that they deem troublesome or inconvenient.<sup>33</sup>

Just a few years ago, most observers, I think, would have predicted that the Locksmiths were the ones ultimately destined to set the terms of use for content in cyberspace. Concerned commentators regularly expressed the fear that the Locksmiths would apply DRMs so relentlessly and comprehensively to works distributed on line that they would be in a position to monitor every individual use of a work and extract a small, separate fee each time it was accessed.<sup>34</sup> As things have turned out, the risk of über-controllers dispensing information on a pay-per-bite basis no longer seems so likely. There are several reasons for this: one is that customers did not like it.<sup>35</sup> Another is that services had trouble creating workable systems to manage all the small payments that would be necessary.<sup>36</sup> Finally, DRMs are hackable. Experts in the field suspect that, short of resorting to what some have called “Draconian DRM” (creating devices that recognize particular DRM systems and will handle only content that is protected them), they are likely to remain so, no matter how designers try to avoid the result.<sup>37</sup> The point is made simply by running a casual search on

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<sup>33</sup> See *supra* notes 12–17, 25–28 and accompanying text.

<sup>34</sup> For one discussion of the problem of pay-per-view, see Julie E. Cohen, Lochner *in Cyberspace: the New Economic Orthodoxy of "Rights Management"*, 97 MICH. L. REV. 462, 526–28 (1998). Cf. PATRICK AICHROTH & JENS HASSELBACH, INCENTIVE MANAGEMENT FOR VIRTUAL GOODS: ABOUT COPYRIGHT AND PRODUCTION IN THE DIGITAL DOMAIN (2003), [http://virtualgoods.tu-ilmeneau.de/2003/incentive\\_management.pdf](http://virtualgoods.tu-ilmeneau.de/2003/incentive_management.pdf) (last visited Apr. 16, 2007) (arguing that if use of DRMs is unconditionally supported by the law, owners “will minimize concessions in order to maximize profits”).

<sup>35</sup> Clay Shirkey wrote that one reason micropayments did not take off as predicted is that “tiny, unpredictable transactions” caused “both anxiety and confusion, characteristics that users have not heretofore been known to actively seek out.” Clay Shirky, *The Case Against Micropayments*, O’Reilly P2P, Dec. 19, 2000, <http://www.openp2p.com/lpt/a/515> (last visited Apr. 16, 2007). For another discussion of the problems caused by managing millions of tiny payments on line, see Russ Jones, *The False Promise of Frictionless Commerce*, Jan. 15, 2003, <http://www.glenbrook.com/opinions/micropayments.html>.

<sup>36</sup> For one of many studies outlining the problems faced by providers, see Benjamin Lim et al., *Why did an Electronic Payment System Fail? A Case Study from the System Provider’s Perspective*, COLLECTER, Dec. 9, 2006, <http://www.collector2006.unisa.edu.au/Paper%2011%20Benjamin%20Lim.pdf>.

<sup>37</sup> STUART HABER ET AL., HP LABS. CAMBRIDGE, IF PIRACY IS THE PROBLEM, IS DRM THE ANSWER? 7–8 (May 27, 2003), <http://www.hpl.hp.com/techreports/2003/HPL-2003-110.pdf>.

Google to see how many sites offer ways to avoid or to strip DRMs from music files.<sup>38</sup>

Consumers are unwilling to accept the stringent limits on their behavior or the invasions of their privacy that comprehensive DRMs impose. Consequently, they are unhappy about paying for content that is governed by them.<sup>39</sup> Also, DRMs may cause independent problems. The debacle caused when Sony decided to protect its compact disks in 2005 with DRM badly damaged the reputation of the company and outraged those who bought the albums.<sup>40</sup> The DRM turned out to be a form of spyware that installed when the CD was played on a computer and could not then be uninstalled.<sup>41</sup> When Sony tried to fix the problem by recalling the disks and providing programs to uninstall the DRMs, the uninstallers introduced new security vulnerabilities in the affected computers.<sup>42</sup> The ultimate irony of the situation was that the whole mess was caused by technology that was useless on its own terms: experimenters quickly discovered that the protections offered by the DRMs could be defeated by placing a small piece of opaque tape on the outside edge of the CD.<sup>43</sup> As a group of researchers in HP's Trusted Systems Laboratory recently summed things up, "The most effective way for interested parties to defeat piracy may be to compete with it."<sup>44</sup>

The wisdom of that advice has penetrated the music industry, and

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The authors point out: "[t]he key problem is that even if only a small fraction of users are able to get content from a protected form into an unprotected form, then illegitimate distribution networks are likely to make that content available ubiquitously." *Id.* at 1. *See also* Hal R. Varian, *Copying and Copyright*, 19 J. ECON. PERSPS. 121, 134 (2005) (noting the same problem).

<sup>38</sup> The location of these sites, of course, is not reported here, partly not to encourage their use, partly to avoid possible legal liability, and partly because they appear and disappear rapidly, presumably because the music industry monitors for them and shuts them down. My suspicion is that users of them are monitored as well. When this author was doing the research for this article, she wanted to see for herself how hard or easy it would be to find de-encryption information; when she returned to her office the next morning, however, she found that her computer was completely frozen. A technician was called in and removed a plethora of what he identified as "spyware." It is interesting—indeed amusing—to speculate on the possible connection between these events, since that computer has never before or since been similarly afflicted.

<sup>39</sup> *See* Stone, *supra* note 2, at C5.

<sup>40</sup> *See* J. ALEX HALDERMAN & EDWARD W. FELTEN, LESSONS FROM THE SONY CD DRM EPISODE 1–2 (May 16, 2006), <http://itpolicy.princeton.edu/pub/sonydrm-ext.pdf>.

<sup>41</sup> *See id.* at 14.

<sup>42</sup> *Id.* at 21–23.

<sup>43</sup> Gregg Keizer, *Scotch Tape Stymies Sony Copy Protection*, INFORMATIONWEEK, Nov. 21, 2005, <http://www.informationweek.com/story/showArticle.jhtml?articleID=174400748>.

<sup>44</sup> HABER *ET AL.*, *supra* note 36, at 1.

in turn has led to a willingness to experiment with its business models for electronic distribution—increasingly ones that give up trying to charge for things like space shifting, or in some cases for the music itself.<sup>45</sup>

One reason the iTunes music store was so successful from the start is that the terms imposed by its DRM system did not seriously offend prospective clients. Music could be purchased from the site for a modest fee, could be loaded onto numerous iPods, burned to an unlimited number of CDs for personal use, played on as many as five different computers, and could be shared with others on a local network.<sup>46</sup> Of course, the only portable device that can play DRM-protected iTunes is an iPod.<sup>47</sup>

By contrast, the DRM-protected music download service offered by Wal-Mart is cheaper than Apple's,<sup>48</sup> and it would clearly need to be so to have any prayer of competing. Purchasers who buy such music from Wal-Mart can burn their songs only to a maximum of ten CDs and can download the music onto one computer.<sup>49</sup> It is possible to make back up copies on an additional two computers, but the process is a cumbersome one that involves the need for separate transfers of the licenses and music.<sup>50</sup> DRM-protected downloads from Wal-Mart will not play on an iPod.<sup>51</sup> There are new variants coming along on all the time: Spiralfrog just began distributing copy-protected music on line, relying on income from advertising rather than charging its users fees.<sup>52</sup>

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<sup>45</sup> See *infra* text accompanying notes 74–94. See also Posting of Larry Dignan, Five Reasons Why Jobs Went Anti-DRM Now, <http://blogs.zdnet.com/BTL/?p=4447> (Feb. 7, 2007, 07:09 EST) (suggesting that the music industry is more receptive than it has ever been to experimenting with new business models, including ones that do not rely on DRMs).

<sup>46</sup> A description of the terms appears at Apple iTunes Store, *Instant Sonic Gratification*, <http://www.apple.com/itunes/store/music.html> (last visited Oct. 4, 2007).

<sup>47</sup> Jobs, *supra* note 8. For the past few months, iTunes has also been allowed to sell some music that is free of DRMs and will play on any device. See *infra* note 53.

<sup>48</sup> The cost of a DRM-protected song from iTunes is 99¢, whereas one purchased from Wal-Mart costs 88¢. Apple iTunes Store, *supra* note 44; Walmart.com, *Wal-Mart Music Downloads Help*, <http://musicdownloads.walmart.com/catalog/servlet/HelpTopicServlet?topicIndex=0#0> (last visited Oct. 7, 2007). Walmart, too, has recently begun selling some music without DRMs. *Id.*; see *infra* note 53.

<sup>49</sup> Walmart.com, *supra* note 46.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.* Another popular music site dealing in DRM-protected material is Rhapsody. This, too, is governed by its own unique and complex rules and limitations. See Rhapsody Online, [http://www.rhapsody.com/rhapsody\\_faqs](http://www.rhapsody.com/rhapsody_faqs) (last visited Oct. 4, 2007).

<sup>52</sup> See Greg Sandoval, *SpiralFrog's Free-Music Ambitions on Hold 'Til February*, CNet News.com (Jan. 4, 2007), [http://news.com.com/2061-10802\\_3-6147356.html](http://news.com.com/2061-10802_3-6147356.html). SpiralFrog first hoped to roll out the service in December, 2006, but failed to make the date. *Id.* The most recent prediction is that it will begin operating in February of 2007. *Id.*

Nevertheless, to the extent that the service relies on DRMs—even those that offer users some flexibility to time- and space-shift and to share with friends in limited ways—the DRMs are often sufficiently irritating that consumers either try to defeat them or acquire their copies from sources (not necessarily legitimate) that do not attach such technology in the first place.<sup>53</sup> The audience for music downloads may actually be quite willing to pay for their copies, but once they have them they want to be able to listen to them when, where, and on what player they choose. Even Apple, which has clearly benefited up to now from the fact that the DRM system attached to music downloads from iTunes works only on its own enormously popular portable player, acknowledges the legitimacy of the dissatisfaction. People want to be able to buy songs that will play on a variety of platforms, and Steve Jobs, the head of Apple, eventually went on record as favoring the elimination of DRMs from music sold over the Internet,<sup>54</sup> and somewhat surprisingly at least some of the record companies have been willing to try the idea.<sup>55</sup>

Subverters are also interested in controlling the utilization of content, but for different reasons from those of the Locksmiths. The best known of the Subverters, Creative Commons, attempts to cut through the labyrinth of permission-gathering to give users more flexibility and ease in their interactions with content. Subverters tell users what they can and cannot do with digital copyrighted works by attaching machine-searchable and -readable licenses to them rather than DRMs. (It should be noted, however, that nothing prevents a content provider from combining a Creative Commons

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<sup>53</sup> See *supra* note 36.

<sup>54</sup> Clearly Apple enjoyed an initial advantage in being able to sell both music and the only portable player on which it could be heard. But the company has come under increasing pressure from European anti-trust authorities because of the linkage. See Eric Pfanner, *Europe Cool to Apple's Suggestions on Music*, N.Y. TIMES, Feb. 7, 2007, at C11. At the same time, Jobs argues that the company's agreement with the music industry requires it to guarantee the security of the DRM system it uses to protect the music it is licensed to sell, and that it cannot do that if it does not limit iTunes to iPods. Jobs, *supra* note 8, at 1. An alternative solution, says Jobs, is for the record companies to give up the requirement that a DRM system be used. Jobs, *supra* note 8, at 3.

<sup>55</sup> By the spring and summer of 2007, first EMI Music, and then Universal, took the plunge and now allow several outlets, including the iTunes Store, Walmart, and Amazon.com, to sell some or all of their music without DRMs. Mike Snider, *More Songs for Sharing: Following EMI, Universal Decides to Experiment with Selling Restriction-free Downloads*, USA TODAY, April 21, 2007, at 3D; Jose Vilches, *Amazon Opens DRM-free Downloads Store*, TECHSPOT NEWS, Sept. 25, 2007, <http://www.techspot.com/news/27176-amazon-opens-drmfree-downloads-store.html>. Universal at present considers the offer an "experiment." Jeff Leeds, *Universal to Sell Some Music without the Piracy Protection*, N.Y. TIMES, Aug. 10, 2007, at C6.

license with some form of DRM.<sup>56</sup>) Currently, well over 16 million different works of all kinds have been released subject to Creative Commons licenses.<sup>57</sup>

The terms contained in these licenses, however, take many forms.<sup>58</sup> All require that, whatever the user does or does not do with the work once she obtains it, she give the original author proper attribution. Other terms can be added to that basic proviso, with the result that some licenses, for example, permit noncommercial uses but prohibit commercial ones. Curiously, about a third of adopters of Creative Commons licenses refuse to allow the public to use the work to make their own adaptations and other derivatives without specific permission.<sup>59</sup> The irony of this lies in the fact that a major philosophical underpinning of the Creative Commons movement is the removal of copyright impediments to user creativity.

The General Public License, which currently is used to distribute some sixty to seventy percent of the “free” (i.e. open source) software found on major sites,<sup>60</sup> is more standardized. It encourages users to create derivative works (that is, to make changes to and improvements in the software’s code), but with the proviso that, if they do so, they must make their own modifications freely available to others on the same terms.<sup>61</sup>

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<sup>56</sup> The only restriction on the use of DRMs in combination with Creative Commons licenses is that the DRM must not restrict a use otherwise granted by the license. See Creative Commons Wiki, Frequently Asked Questions, <http://wiki.creativecommons.org/FAQ> (follow link number 5.13 in right hand column) (last visited May 15, 2007).

<sup>57</sup> Michael Carroll, in an article published last year, gave the figure 16,000,000 as current at that time. Michael W. Carroll, *Creative Commons and the New Intermediaries*, 2006 MICH. ST. L. REV. 45, 47 (2006).

<sup>58</sup> Six main variations are available for digital distribution, as well as things like sampling licenses, special licenses for use in developing countries, and a license dedicating the work to the public domain. Association Litteraire et Artistique Internationale, *Memorandum on Creative Commons Licenses*, 29 COLUM. J. L. & ARTS 261, 263, 265 (2006).

<sup>59</sup> Niva Elkin-Koren, *What Contracts Cannot Do: The Limits of Private Ordering in Facilitating a Creative Commons*, 74 FORDHAM L. REV. 375, 401 (2005). Elkin-Koren also notes that a high percentage of those who use Creative Commons licenses do not permit commercial uses without prior express permission. *Id.*

<sup>60</sup> According to the entry on the General Public License in Wikipedia, the GPL is the most widely used open software license. The site reports that: “As of January 2006, the GPL accounted for nearly 66% of the 41,962 free software projects listed on Freshmeat, and as of January 2006, about 68% of the projects listed on SourceForge.” Wikipedia, GNU General Public License, [http://en.wikipedia.org/wiki/GNU\\_General\\_Public\\_License](http://en.wikipedia.org/wiki/GNU_General_Public_License) (last visited May 15, 2007).

<sup>61</sup> Modifications that are purely for personal use do not need to be distributed to others, but if the maker of the derivative does opt to distribute the software, he or she must also reveal the underlying source code. GNU Project, Frequently Asked Questions about the GNU GPL, <http://www.gnu.org/licenses/gpl-faq.html> (last visited May 15, 2007). The GPL does not,

Obviously, however much they differ in their philosophy and goals, Locksmiths and Subverters have figured out, at least in theory, how to exercise control over the future life of the digital works they release. One can imagine, however, a very different approach based not on control but on abdication of control—a situation where once the terms governing the initial transmission of the content are fulfilled, the content provider considers himself to be fully compensated and in no need of reliance on copyright, licensing, or DRMs. This vision is the one that animates the group I have denominated the Explorers.

Among those I classify as Explorers are such early visionaries of the Internet as Esther Dyson<sup>62</sup> and John Perry Barlow.<sup>63</sup> Their positions have been caricatured by many in the intellectual property community as suggesting that artists do not need to be paid for making their creative works available. You know—information wants to be free.

That, of course, was not what they were saying at all, or at least it was a great over-simplification of their arguments. They had two important insights. First, they saw that Internet distribution had the potential to completely reshape the content industries, making many of their traditional functions irrelevant and unnecessary.<sup>64</sup> They also saw that copyright would be hard-pressed to prevent the rapid duplication and proliferation of copies that digitization made possible.<sup>65</sup> Thus, new business models and a different set of expectations would, as matters both of necessity and opportunity, develop so that creators could continue to profit from their talents

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however, demand that code be distributed without payment; “free” in the context of the GPL means free from restrictions on making further modifications. *Id.*

<sup>62</sup> See generally Esther Dyson, *Intellectual Value: A Radical New Way of Looking at Compensation for Owners and Creators in the Net-Based Economy*, WIRED, July 1995, available at <http://www.wired.com/wired/archive/3.07/dyson.html?pg=1&topic=> (discussing the economics of free content and the business strategies that providers could use) [hereinafter Dyson, *Intellectual Value*]; ESTHER DYSON, INTELLECTUAL PROPERTY ON THE NET (n.d.), [http://www.eff.org/Misc/Publications/Esther\\_Dyson/ip\\_on\\_the\\_net.article](http://www.eff.org/Misc/Publications/Esther_Dyson/ip_on_the_net.article) (discussing the devaluation of content because of its wide-spread availability) [hereinafter Dyson, *Intellectual Property*]. See also ESTHER DYSON, *RELEASE 2.0: A DESIGN FOR LIVING IN THE DIGITAL AGE* (1997).

<sup>63</sup> See generally Barlow, *The Economy of Ideas*, *supra* note 29 (discussing concerns over mass distribution of content and how to protect the content). Another, later iteration of the same ideas can be found in Barlow, *Wine Bottles*, *supra* note 29.

<sup>64</sup> See Barlow, *Wine Bottles*, *supra* note 29; see also Dyson, *Intellectual Property*, *supra* note 59.

<sup>65</sup> See Barlow, *Wine Bottles*, *supra* note 29; see also Dyson, *Intellectual Property*, *supra* note 59.

and reap the benefits of the new technology.<sup>66</sup> Those interested in understanding the potential of the Internet to create new business models proposed many seemingly radical—and to some, silly—ideas. For example, having musicians give away free copies of their recordings as a hook to win an audience and then convince their fans to buy expensive tickets to live concerts.<sup>67</sup> The idea of giving content away to win a paying audience—even if only as a temporary measure—turns out to have some genuine appeal to many musicians.<sup>68</sup> Evidence indicates that many of them, in hopes of building enough demand to generate income from future live and recorded performances, have started websites from which their fans and potential fans can download the artist's music free.<sup>69</sup> Although management of micropayments has been something of a stumbling block to success in this sphere,<sup>70</sup> some early Explorers also envisioned a system in which musicians would be supported, not by sales, but by lots of small, voluntary contributions from their fans.<sup>71</sup>

Perhaps the most innovative of the Explorer projects came from two well-known cryptographers, Bruce Schneier and John Kelsey.<sup>72</sup> They were interested in a non-copyright-based system that could be used to compensate authors of literary works who wanted to distribute them in cyberspace. They suggested that authors could

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<sup>66</sup> Suggestions of this sort have been taken seriously by economists. Hal Varian, for example, in a recent article on on-line business models, suggests a wide variety of non-copyright-based models that might enable creators to be compensated even if their basic work product is circulated free. They include among others the sale of personalized versions or ones enhanced by information complements. See Varian, *supra* note 36, at 135.

<sup>67</sup> See Dyson, *Intellectual Value*, *supra* note 59; Michael David Crawford, *Links to Tens of Thousands of Legal Music Downloads*, <http://www.goingware.com/tips/legal-downloads.html> (last visited May 15, 2007).

<sup>68</sup> The Grateful Dead has nurtured its fan base for years by its own variant of giving its music away. The band allows taped recordings by fans of its live performances to be posted on the web for free downloading. *Grateful Dead Allows Free Web Downloads*, BILLBOARD, Dec. 1, 2005, [http://www.billboard.com/bbcom/news/article\\_display.jsp?vnu\\_content\\_id=1001612914](http://www.billboard.com/bbcom/news/article_display.jsp?vnu_content_id=1001612914).

<sup>69</sup> Crawford, *supra* note 64 (“Enjoy free music without getting in trouble by downloading the legal MP3s many musicians provide as a way to promote themselves.”).

<sup>70</sup> For a discussion of the problems involved with charging for large numbers of small value transactions on the internet, see Clay Shirky, *The Case Against Micropayments*, Openp2p.com, Dec. 19, 2000, <http://www.openp2p.com/lpt/a/515>.

<sup>71</sup> See, e.g., Crawford, *supra* note 64 (discussing this approach in the section of his essay headed “How Will Artists Earn Money?”). A variety of suggested approaches to compensating musicians other than by buying music from record companies are discussed in Diane Leenheer Zimmerman, *Authorship without Ownership: Reconsidering Incentives in a Digital Age*, 52 DEPAUL L. REV. 1121, 1123–24 (2003).

<sup>72</sup> See generally John Kelsey & Bruce Schneier, *Electronic Commerce and the Street Performer Protocol*, <http://www.schneier.com/paper-street-performer.html> (discussing a mechanism to obtain payments for public works).

post samples of their work on line and accompany the sample with a “release” price that, if reached, would trigger distribution either of the full work, or the next section of it. Members of the public who want to contribute to the price asked for the work would deposit money into an escrow fund until either the target was reached, or it became clear that the project would fail to command sufficient support. If the project failed, donors would get their money back. If it succeeded, the author would post the work, free to anyone who wanted it. At its most generous, the plan contemplated a donation of the work, once paid for, to the public domain.<sup>73</sup>

A few years ago, intrigued by the idea of payment without concomitant control, I decided to explore the feasibility of the Kelsey and Schneier plan.<sup>74</sup> Their description of it bore some uncanny similarities to the practice in England during the nineteenth century under which books were issued in serial form. A careful examination of that history convinced me that a system in which the author sells a work outright for a fixed price and retains no further control was more plausible than I initially thought. As it turned out, the equivalent of what Kelsey and Schneier proposed was the norm in the Victorian publishing industry. Authors typically sold their work (and their copyrights) to their publishers for a flat fee up front.<sup>75</sup> To the extent that there were benefits to be enjoyed from the existence of copyright, they flowed to the publishers, not authors.<sup>76</sup> Despite this fact, the writing of fiction was a flourishing trade, and the last two-thirds of the century was perhaps the most economically successful period ever in which to be an author.<sup>77</sup> What this suggested was that if authors could go directly to the public with their work, and be paid for it in a lump sum (or by the chapter), they probably would have sufficient incentives to continue writing even without the protection of copyright.

With or without relying on the reassurances offered by history, entrepreneurs today have created several novel platforms through which they hope to exploit the Kelsey and Schneier ideas. Examples include T'Daa, the Digital Art Auction, a site the name of which is self-explanatory;<sup>78</sup> Freinutz, a site seeking to support the

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<sup>73</sup> *Id.* at 5–7.

<sup>74</sup> *See* Zimmerman, *supra* note 69, at 1124.

<sup>75</sup> *Id.* at 1137–44.

<sup>76</sup> *Id.*

<sup>77</sup> *Id.* at 1143–44.

<sup>78</sup> T'DAA! The Digital Art Auction, Introduction, <http://tdaa.digitalproductions.co.uk/>? (last

production of a wide range of cultural products, including software, music, and film;<sup>79</sup> SellaBand, where audiences are invited to invest in their favorite musicians to enable them to record their work professionally;<sup>80</sup> and Copycan, a site designed simply to implement the Street Performer Protocol without regard to the type of content.<sup>81</sup> What each of these sites has in common is that they encourage creators to reach their audiences directly, without the intervention of such traditional intermediaries as publishers, record companies, or film studios. Many free sites, especially for music, also help audiences by permitting them to more efficiently identify artists they are likely to enjoy. Musicians are aggregated at a single site, and users are encouraged, in somewhat the way restaurants are rated in Zagat guides,<sup>82</sup> to double as critics by rating performers and commenting on their favorites and least favorites.<sup>83</sup> Some offer subscription services to encourage users to familiarize themselves with new works. Thus, sites provide analogues to the editorial and bundling functions of, say, a magazine or other professional selector/disseminator of content.<sup>84</sup> The works posted on these sites are not necessarily donated to the public for all time, but they are commonly available to be downloaded without restrictions for at least some significant period of time.

The best-known writer to step outside the copyright fold is probably Stephen King, who experimented with an auction system to launch his book, *The Plant*.<sup>85</sup> King posted the first chapter, and

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visited May 15, 2007).

<sup>79</sup> Freinutz, <http://www.freinutz.net/en/urheber/index.html> (last visited Mar 25, 2007).

<sup>80</sup> SellaBand, How It Works, <http://www.sellaband.com/site/how-it-works.html> (last visited May 15, 2007).

<sup>81</sup> Copycan, Buy It for the Commons, <https://copycan.org/> (last visited May 15, 2007). The Protocol has even been adapted to raise funds for charity, gifts and other social activities. See, e.g., Paul Harrison, The Rational Street Performer Protocol, <http://www.logarithmic.net/pfh/rspp> (last visited May 18, 2007); Fundable, Online Fundraising, <http://www.fundable.com/> (last visited May 15, 2007).

<sup>82</sup> Zagat guides rely for their ratings on the compiled reports of patrons. See, e.g., ZAGAT SURVEY 2007 NEW YORK CITY RESTAURANTS 4 (Curt Gathje & Carol Diuguid eds., 2006) (stating that the guides are compiled “[b]y regularly surveying large numbers of avid customers.”).

<sup>83</sup> This is a model described by Premkumar as the artist-intermediary-customer strategy, where musicians are aggregated on a site that also provides reviews and also may send out alerts about interesting new works. See Premkumar, *supra* note 31, at 93. See also Crawford, *supra* note 65 (providing lists of sites and links to information on how consumers can find what they like and post reviews of the music they listen to).

<sup>84</sup> In my Article, I suggested that bundling and branding or selectivity might be necessary to enable those who were not already famous to market works of authorship. Zimmerman, *supra*, note 69, at 1168.

<sup>85</sup> Stephen King, *How I Got That Story*, TIME EUROPE, Jan. 8, 2000, available at

then offered to post each subsequent one as soon as three-quarters of those who downloaded the previous chapter had paid a dollar for the download.<sup>86</sup> The whole thing worked on the honor system, and King made at least \$600,000 from the project by the time it was over.<sup>87</sup> More recently, Lawrence Watt-Evans, the author of a series of fantasy novels called *The Legend of Ethshar*, similarly released the ninth book online chapter by chapter, once readers agreed to pay his stipulated price.<sup>88</sup> The book remained on the web free to all as long as it continued to be a work in progress.<sup>89</sup> When it was completed, however, Watt-Evans took it down, and issued the final version in hard copy.<sup>90</sup> What each of these examples has in common is that “donors” paid the author’s asking price for the work, but access was then available to the public at large.

In another variant, the well-known rock group, Radiohead, announced in the fall of 2007 that it would make its latest album available initially by digital download, and simply allow fans to decide how much to pay them for it.<sup>91</sup> Cory Doctorow, a writer of science fiction (who also writes for *Wired Magazine*) has simply chosen to post his books online for free downloading, although he also sells them, apparently in the form of hard copies.<sup>92</sup>

A content distributor can play with mixing up these roles a little, borrowing a bit from the Locksmiths, acting as something of a Subverter, and adding a touch of Explorer.<sup>93</sup> An example of this

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<http://www.time.com/time/europe/magazine/2001/0108/king.html>.

<sup>86</sup> David D. Kirkpatrick, *A Stephen King Online Horror Tale Turns into a Mini-Disaster*, N.Y. TIMES, Nov. 29, 2000, at C1. By the fifth chapter, payment fell off enough that King called the project quits. *Id.*

<sup>87</sup> King, *supra* note 83.

<sup>88</sup> Watt-Evans explains how he came to release the book, and the terms, on his website. See Lawrence Watt-Evans, *The Spriggan Mirror: A Legend Ethshar on the Installment Plan*, <http://www.ethshar.com/thesprigganexperiment0.html>.

<sup>89</sup> *Id.*

<sup>90</sup> He writes that he removed the free online version at the request of the publisher of the hard copy version. *Id.* Considering the experiment a success, the author is now working on a tenth book, *The Vondish Ambassador*, using the same online release strategy. *Id.*

<sup>91</sup> Melena Ryzik, *Radiohead Fans, Guided by Conscience (and Budget)*, N.Y. TIMES, Oct. 4, 2007, at E1. Ryzik reports that interviewees intended to pay anywhere from 14 cents to \$9. A special boxed set, including the album, a book of artwork, and other materials is said also to be available for purchase for £40, or the equivalent. *Id.*

<sup>92</sup> Doctorow explains why he has chosen to give his books away on his website. Cory Doctorow, *Corey Doctorow's Craphound.com*, Bio, <http://www.craphound.com/bio.php> (last visited May 15, 2007).

<sup>93</sup> One discussion of experimentation with approaches, from a pro-business perspective, can be found in DIGITAL CONNECTIONS COUNCIL, COMMITTEE FOR ECONOMIC DEVELOPMENT, PROMOTING INNOVATION AND ECONOMIC GROWTH: THE SPECIAL PROBLEM OF DIGITAL INTELLECTUAL PROPERTY 45–52 (2004) [hereinafter *Promoting Innovation*].

kind of experimentation is the business model developed by Magnatunes to distribute music.<sup>94</sup> The site relies heavily on Creative Commons licenses, which allow customers to use the music they download for any noncommercial purpose, including the making of a noncommercial derivative works.<sup>95</sup> The licenses also permit purchasers to give copies of any album they buy to as many as three friends, but puts them on their honor (copyright-protecting DRMs are not used) to give away no more than that.<sup>96</sup> The payment scheme, however, is a fluid one that seems to owe more to the Explorers than to the Locksmiths and Subverters. As in the Radiohead example, purchasers decide for themselves (but here within a range of \$5 to \$18 per album) what they want to pay.<sup>97</sup> They are informed that half their chosen sum will go directly to the artists.<sup>98</sup>

The characteristic that is in greatest supply today in the delivery of information goods in cyberspace is experimentation. Clearly, no one knows what will work best.<sup>99</sup> It is still within the realm of possibility—the objections of John Updike to the contrary notwithstanding—that, for at least some kinds of creators, the best way to earn a return on their efforts will be to give away their content for free and make their profits on complementary goods and services<sup>100</sup>—just as the Dysons and Barlows of the world originally

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<sup>94</sup> For information on Magnatunes generally, see Magnatunes, Information, <http://magnatune.com/info>. See also Kevin Maney, *Apple's iTunes Might Not Be the Only Answer*, USA TODAY, 3B (Jan. 20, 2004), available at [http://www.usatoday.com/tech/columnist/KevinManey/2004-01-20-piracy\\_x.htm](http://www.usatoday.com/tech/columnist/KevinManey/2004-01-20-piracy_x.htm).

<sup>95</sup> Magnatunes, The Big Ideas, <http://magnatune.com/info/ethos> (last visited May 18, 2007).

<sup>96</sup> Magnatunes, Give 3 Free Copies to Your Friends, at <http://magnatune.com/info/give> (last visited May 18, 2007); Magnatunes, Why We Are Not Evil!, <http://magnatune.com/info/whynotevil> (last visited May 18, 2007).

<sup>97</sup> Magnatunes, The Business Model: How We (and Our Artists) Pay the Rent, <http://www.magnatune.com/info/model> (last visited May 18, 2007).

<sup>98</sup> Magnatunes, Why We Are Not Evil at <http://www.magnatune.com/info/whynotevil> (last visited May 18, 2007).

<sup>99</sup> PROMOTING INNOVATION, *supra* note 90, at 53.

<sup>100</sup> An article in the New York Times Magazine, published in the spring of 2006, suggested that authors and artists might now need to earn their livings by selling “performances, access to the creator, personalization, add-on information, the scarcity of attention (via ads), sponsorship, periodic subscriptions” and other sources of value, rather than copies of their works. Kevin Kelly, *Scan This Book*, N.Y. TIMES, May 14, 2006, (Magazine), available at <http://www.nytimes.com/2006/05/14/magazine/14publishing.html?pagewanted=9ei=5090&en=c07443d368771668&ex=1305259200>. Author John Updike responded in a passionate essay, terming Kelly’s suggestion “a pretty grisly scenario” calling to mind a “pre-literate societ[y], where only the present, live person can make an impression and offer, as it were, value.” John Updike, *The End of Authorship*, N.Y. TIMES, June 25, 2006, (Book Review), available at <http://www.nytimes.com/2006/06/25/books/review/25updike.html?ex=130888000&en=4fa5abe6e5cc20aa&ei=5088&partner=rssnyt&emc=rss>. Prior to publishing his response as an essay,

suggested.

The point I am trying to make is that we are at such an early stage in learning how to use the Internet to distribute content that we cannot possibly know what will work, and certainly cannot know what will work best. The most useful thing we can do, therefore, is to nurture an environment that encourages experimentation until we have time to learn which models have the best chance to succeed.

Whatever those models look like, I am willing to bet that they will all share two fundamental characteristics. First, they will not go to extremes to try to prevent all unauthorized copying and uses. Although it is cliché to mention, it is nonetheless useful to keep in mind that the computer software industry survives and thrives, despite what is widely agreed to be huge annual losses to piracy.<sup>101</sup> This is but one example that suggests that copyright owners not only can absorb significant amounts of uncompensated copying without being driven from the market, but they may be better off doing so rather than engaging in the draconian tactics that may lead to the unintended consequences and consumer revolts that the Sony experiment involved.<sup>102</sup> Second, any devices to control what users do with digital copies once they get them will take account of what the users—and not just the content owners—view as fair and equitable. If not, then owners can continue to look forward to more innings of that great “Beat the System” game, assured that their opponents will be not merely rogue hackers, but the average Jane and Joe in joyful pursuit of revenge.

As long as we are still at a basic stage of searching for which models work best, and for what, the best policy for lawmakers to pursue will be one that does little more than clear the path of obstacles so that experiments can unfold. Congress should intervene with new legislation only at those points where it becomes

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Udike delivered it as an address to an annual convention of booksellers in Washington, D.C. Bob Thompson, *It's Lits v. Techs*, NEWS & OBSERVER, May 25, 2006, at E1, available at <http://newsobserver.com/105/story/443148.html>.

<sup>101</sup> Estimates of the scope of the problem vary. The Business Software Alliance has been reported as saying that 35 per cent of programs used on personal computers worldwide are pirated. Eric Pfanner, *Mixed Results on Software Piracy*, INT'L HERALD TRIB., May 19, 2005, at 23, available at <http://www.iht.com/articles/2005/05/18/business/piracy.php>. The Software & Information Industry Association estimates that in the United States the piracy rate is 25 percent, a figure the Association calls “the lowest rate of any country.” It estimates that \$11 to \$12 billion per year is lost to the industry in this way. SOFTWARE & INFO. INDUS. ASS'N, ANTI-PIRACY: WHAT IS PIRACY?, <http://www.siiia.net/piracy/whatis.asp> (last visited May 18, 2007).

<sup>102</sup> See *supra* notes 39–41 and accompanying text.

necessary—and I emphasize the word “necessary”—to keep systems of innovation afloat.<sup>103</sup> Content providers did not need a DMCA to enable them to experiment with DRMs, and the costs of that unnecessary legal intervention continue to unfold.<sup>104</sup> The DMCA, in short, is an abject lesson with the following moral: beware “emergency” legislation intended to back up copyright owners “under siege.” Owners are often quite able to develop tools to protect themselves without congressional help, and there is nothing necessarily wrong with allowing them to take a few risks while they struggle to find the right tools to do so. This means, for example, that Congress and regulatory agencies should resist the various pressures from the copyright industries to require that electronic recording and playback devices be made DRM-compliant.<sup>105</sup> If legislators and regulators do make legal interventions, they should be ones that serve the interests of transparency and consumer awareness. If content providers want to use DRMs to protect their works, for example, it is entirely reasonable that Congress insist that they tell consumers clearly and effectively just what the DRMs in question do and what risks if any they pose.<sup>106</sup>

A tricky question will be to decide when we have finally accrued enough experience to be comfortable that structural revisions in existing law are sane and responsive to real need. I would suggest that we may be approaching that point with regard to digital

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<sup>103</sup> As the report of the Digital Connections Council notes, “Calls for government action are weakest when the petitioner asks the government to mandate or impose a particular technology. . . .” PROMOTING INNOVATION, *supra* note 90, at 44.

<sup>104</sup> See, e.g., Joseph Liu, *The DMCA and the Regulation of Scientific Research*, 18 BERKELEY TECH. L.J. 501, 503–04 (2003) (criticizing the impact of the legislation on encryption research); Alfred C. Yen, *What Federal Gun Control Can Teach Us About the DMCA's Anti-Trafficking Provisions*, 2003 WIS. L. REV. 649, 667–68 (2003) (discussing the ways in which the DMCA upsets the copyright statute's balance).

<sup>105</sup> An example of a dispute on this subject is the so-called “broadcast flag” rule promulgated by the Federal Communications Commission, and then struck down by the Court of Appeals for the District of Columbia, which would have required all televisions to be equipped so that they would recognize which programs could, and could not be recorded at home by consumers. *Am. Library Ass'n v. FCC*, 406 F.3d 689, 691, 692 (D.C. Cir. 2005). Content providers continue to lobby Congress to mandate the technology. Gigi Sohn, *Hollywood on the Hill: Time to Bury the Broadcast Flag?*, PUB. KNOWLEDGE, Feb. 6, 2007, <http://www.publicknowledge.org/node/815> (last visited May 18, 2007).

<sup>106</sup> This point is made with compelling clarity in a recent report from the Center for Democracy and Technology. The report points out that, without transparency and greater consumer education about the existence and implications of DRMs used by the content industry, users are in a poor position to influence competition among devices or to evaluate them. Nevertheless, the Center argues, it will be consumers “who will ultimately have the final say in whether various approaches to content protection succeed or fail.” CTR. FOR DEMOCRACY & TECH., EVALUATING DRM: BUILDING A MARKETPLACE FOR THE CONVERGENT WORLD 3–4, 24 (2006).

copying for personal use, and to creating noncommercial derivative works. Here it does seem to make little sense for the law to offer, or at least seem to offer, remedies against many behaviors which increasing numbers of licensors now concede they have little interest in preventing. For example, it took a long time for the recording industry to agree that it was not so terrible of people to make copies of music they had purchased in digital form to load onto the hard drives of their computers and onto portable playback devices for purposes of portability.<sup>107</sup> I would argue that users at some point should have the security of knowing that the industry cannot subsequently change its policy and begin pursuing copyright actions against individuals for engaging in personal copying for space-shifting their MP3 files.<sup>108</sup> Reform of intellectual property law should aim for a decent level of congruence with the public's common sense and sense of fairness. Undoubtedly, feelings of public responsibility toward creators and the copyright industries have eroded to some extent in the past decade or two, but the damage is unlikely to be repaired without reconciling the inconsistencies between our *de jure* and our *de facto* notions of what is and is not acceptable.

What is the conclusion I reach about copyright and the digital environment? Certainly not that copyright is outmoded across the board. Were it not for a few serious glitches—such as the

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<sup>107</sup> Arguably, it may not yet have decided. The recording industry initially objected to any form of copying of digital music, including for purposes of listening to CDs on portable players. *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys. Inc.*, 180 F.3d 1072, 1073, 1075 (9th Cir. 1999). In the course of the oral argument in the *Grokster* litigation before the United States Supreme Court counsel for the RIAA, Donald B. Verilli, said,

The record companies, my clients, have said, for some time now, and it's been on their Website for some time now, that it's perfectly lawful to take a CD that you've purchased, upload it onto your computer, put it onto your iPod. There is a very, very significant lawful commercial use for that device, going forward.

Oral argument at 14, *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005) (No. 04-480). Indeed, the recording industry website continues to say that the industry has no objections to a consumer taking her own CDs and copying them on her computer or onto a portable device. RECORDING INDUS. ASS'N OF AM., WHAT IS YOUR STAND ON MP3?, <http://www.riaa.com/issues/ask/default.asp#stand> (last visited May 18, 2007). However, in a written joint submission to the Copyright Office during the most recent rulemaking proceedings under the DMCA, industry spokesmen seemed to shift position, stating that "creating a back-up copy of a music CD is not a non-infringing use." ASS'N OF AM. PUBLISHERS ET AL., JOINT REPLY COMMENTS 22 (2006), available at [http://www.copyright.gov/1201/2006/reply/11metalitz\\_AAP.pdf](http://www.copyright.gov/1201/2006/reply/11metalitz_AAP.pdf) (industry commentary on the Exemption to Prohibition in Circumvention of Copyright Protection Systems for Access Control Technologies, codified at 37 C.F.R. 201 (2006)). See also Posting of Fred von Lohman, [http://www.eff.org/deeplinks/archives/2006\\_02.php](http://www.eff.org/deeplinks/archives/2006_02.php) (Feb. 27, 2006) (commenting on the apparent about-face that this statement represented).

<sup>108</sup> von Lohman, *supra* note 104.

interminable duration of the right<sup>109</sup>—traditional copyright is capable of functioning quite well in the analog world. It does not seem facially implausible that this law might, therefore, be preserved to deal with that world in pretty much its current form, even while we might choose to eschew or radically alter it for digital works. What the ultimate legal regime should be in the digital world I cannot say because neither I nor anyone else knows yet whether it is best to rely on a single version of a Creative Commons license or a variety of them, on some more modest iterations of DRMs, on an auction approach to finance content à la the Street Performer Protocol, or just on posting content and letting whoever wants it take it for free. Maybe a system will emerge that no one has thought of yet. Frankly, I do not care as long as it works for creators and for users—although I am certainly curious to see where we will end up. In the meantime, however, I just do not want to see unnecessary roadblocks interfere with our ability to find out what is efficient and socially successful. If the conversation finally gets started on the best regime to manage communicative works in cyberspace, I hope it will quickly get past preconceptions and old grudges, and will not get stuck on how to preserve the legal regime we have—just because it is the one we have always known. After all, no one is actually using it anyway.

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<sup>109</sup> As noted earlier, the current term of copyright is the life of the author plus 70 years. 17 U.S.C. § 302 (a) (2000). One of the unhappy results of the lengthening duration is the exacerbation of the so-called orphan works problem—that is, the problem of works for which permission for use cannot be obtained because no one can figure out who owns the rights to them any longer. Recently, the Copyright Office recommended amendments to the Copyright Act to try to solve the problem of unusable works, although the recommendation has yet to become law. U.S. COPYRIGHT OFFICE, REPORT ON ORPHAN WORKS 93 (2006), <http://www.copyright.gov/orphan-report.pdf>.