Sharing and Stealing

by

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Introduction

The purpose of copyright is to encourage the creation and mass dissemination of a wide variety of works. Until recently, most means of mass dissemination required a significant capital investment. Disseminators needed printing presses, trains or trucks, warehouses, broadcast towers, or communications satellites. It made economic sense to channel the lion's share of the proceeds of copyrights to the publishers and distributors, and the law was designed to facilitate that.[1] Digital distribution raises the possibility of mass dissemination without the assistance of professional distributors, via direct author-to-consumer and consumer-to-consumer dissemination. Digital distribution, thus, invites us to reconsider the assumptions underlying the conventional copyright model.

We are still in the early history of the networked digital environment, but already we've seen experiments with both direct and consumer-to-consumer distribution of works of authorship. Direct author distribution – by itself – has not yet garnered a lot of attention because the most publicized efforts have been less than wholly successful.[2] When direct author distribution is augmented by consumer-to-consumer distribution, though, the combination has the potential to revolutionize the distribution chain. That potential has not escaped the attention of professional distributors. Consumer-to-consumer dissemination, especially in the form of peer-to-peer file sharing, has been met with hostility and panic.[3]

1. *See* BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 75 (1966); JESSICA LITMAN, DIGITAL COPYRIGHT 104 (2001); *see, e.g.*, American Geophysical Union v. Texaco, 60 F.3d 913 (2d Cir. 1994) ("the monopoly privileges conferred by copyright protection and the potential financial rewards therefrom are not directly serving to motivate authors to write individual articles; rather, they serve to motivate publishers to produce journals, which provide the conventional and often exclusive means for disseminating these individual articles").

2. Stephen King's *The Plant* has been the most famous example of the direct distribution model. Stephen King promised to keep writing the novel so long as three quarters of the individuals who downloaded each chapter paid a dollar for it. Initially, 76% of the people who downloaded chapters paid. After 4 chapters, the percentage of paying readers dropped to 46%, and King dropped the project. *See* M.J. Rose, *Stephen King's "Plant" Uprooted*, WIREDNEWS, Nov. 28, 2000, *at* http://www.wired.com/news/culture/0,1284,40356,00.html. While 46% probably exceeds the percentage of paying readers of a typical work of King fiction published in book form (allowing for book borrowers, used book purchasers, etc.), it fell below King's announced minimum.

3. It is not yet clear whether peer-to-peer file sharing of music recordings decreases or increases sales of CDs. Compare Felix Oberholzer & Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis* (March 2004), *available at* http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf (concluding that file sharing does not reduce and may increase sales), with Stan Liebowitz, *Will MP3 Downloads Annihilate the Record Industry? The Evidence So Far* (June 2003), *available at*

Legislation pending in Congress seeks to deter consumers from engaging in peer-to-peer file sharing.[4] Meanwhile, representatives of the music, recording and film industries have sued the purveyors of peer-to-peer file sharing software,[5] the Internet service providers who enable consumers to trade files,[6] and more than 5000 individual consumers accused of making recorded music available to other consumers over the Internet.[7]

In this paper, I propose that we look for some of the answers to the vexing problem of unauthorized exchange of music files on the Internet in the wisdom intellectual property law has accumulated about the protection and distribution of factual information. In particular, I analyze the digital information resource that has developed on the Internet, and suggest that what we should be trying to achieve is an online musical smorgasbord of comparable breadth and variety.

Ten years ago, an influential government task force proposed enhancing the scope of intellectual property rights in the digital environment as a device to encourage investment in the infrastructure underlying a national digital network.[8] As the task force explained, the cost of constructing such a network was beyond the federal government's ability to fund, and the construction would need to be undertaken by the private sector. The private sector, however, would be reluctant to invest its resources unless it saw profits to be made. The network would be commercial only if large numbers of people could be persuaded to subscribe to digital network services, which would require a killer application to draw people online. In the view of the task force, that application was the possibility consumers could enjoy movies, music and other content on demand. Enhanced copyright protection would be needed to persuade the producers of movies, music and other content to make the investment in making their material available over the national digital network. In order to create a viable online information and entertainment resource, the task force concluded, the United States needed to promise the

http://www.utdallas.edu/~liebowit/intprop/records.pdf (attributing decline in CD sales to P2P file sharing). *See also* LAWRENCE LESSIG, FREE CULTURE 68-73 (2004).

4. *See* H.R. 2572, 108th Cong.. (2003); H.R. 2517, 108th Cong. (2003); H.R. 4077, 108th Cong.,(2004); S. 2560, 108th Cong. (2004).

5. *See* MGM v. Grokster, 380 F.3d 1154 (9th Cir. 2004); A&M v. Napster, 239 F.3d 1004 (9th Cir. 2001); *In re* Aimster, 334 F.3d 643 (7th Cir. 2003)

6. *See* RIAA v. Verizon, 351 F.3d 1229 (D.C. Cir. 2003). .

7. *See* RIAA, *Recording Industry Begins Suing P2P File Sharers Who Illegally Offer Copyrighted Music Online*, Sept. 8, 2003, *at* http://www.riaa.com/news/newsletter/090803.asp; Jefferson Graham, *Freeze! Drop the song! File-swappers targeted*, USA TODAY, October 8, 2004, at 3B.

8. *See* INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 7-17, 218-38 (1995).

distributors of copyrighted works a larger share of the copyright pie – only then would they invest the resources needed to develop digital content that would be sufficiently compelling to convince ordinary consumers to pay for Internet access.[9]

With the benefit of hindsight, it's become clear that most of the assumptions underlying that argument were wrong. Greatly expanded copyright has not yet encouraged movies or music online – there is an enormous variety of music and movies available over the Internet, but the overwhelming majority of what's there is there over the vehement objections of the content owners. Nonetheless, the network has grown at an unbelievable rate. The killer application that fueled the growth of the Internet wasn't digital movies, after all. Instead, it was communication – email, chat, online forums and personal web pages. It turns out that people want to communicate with one another, and that they love to share. The information space that has grown up on the World Wide Web is largely the result of anarchic volunteerism – not to build the pipes, which have been constructed by telephone and cable companies to meet consumer demand for broadband Internet access,[10] but to supply the information that runs through them. Anecdotal evidence indicates that at least for some material, untamed digital sharing turns out to be a more efficient method of distribution than either paid subscription or the sale of conventional copies. If untamed anarchic digital sharing is a superior distribution mechanism, or even a useful adjunct to conventional distribution, we ought to encourage it rather than make it more difficult.

Part I of this essay explores the burgeoning digital information space that has grown up on the Internet in the last two decades. In Part II, I review the legal obstacles preventing us from simply treating digital music the way we treat digital information. Amendments to the copyright law enacted over the past 30 years have erected legal barriers to consumer-to-consumer distribution that make lawful exchange of copyrighted material extremely difficult. Part III tells a true story about my son's third grade classroom, and spends a brief moment looking at his teacher's use of the resources she finds on the Internet. Part IV suggests that we look to the digital information space described in Part I as a model for crafting a solution to the controversy over peer-to-peer file sharing, and reviews some of the proposals made in recent copyright scholarship. Finally, Part V

9. *Id.*; LITMAN, *supra* note 1, at 89-100.

10. *See*, e.g., Jim Hu, *Broadband Numbers Show Heightened Demand*, C|NET NEWS.COM (October 31, 2003), *at* http://news.com.com/2100-1034-5100321.html; Matt Richtel, *Fast and Furious: The Race to Wire America*, N.Y. TIMES, Nov. 16, 2003, § 3 at 1.

briefly outlines a particular solution that is in some respects different from those discussed earlier.

I. Someone knows what I want to know

Someone knows what I want to know. Someone has the information I want. If I can find her, I can learn it from her. She will share it with me.

Which came first, the computer or network television?[11]

I could try to find the answer in a reference book instead. On my bookshelf, I have two editions of the Encyclopedia Britannica, one published in 1989 and one assembled at a public library used-book sale from individual volumes published in 1964 and 1966. I no longer consult either of them with any frequency. In a jewel case somewhere near my desk, I have a multimedia CD ROM version of the Britannica that I received as a gift in 1998. I never look at it at all, and haven't since the month that I received it. I used to buy an Almanac each year to look up quick facts (what's the population of New Zealand?[12] How old is Senator Barbara Mikulski?[13]), but between 1994 and beginning work on this project, I didn't bother. I stopped relying on these books as it became possible to find specific answers to particular questions online, because the person or persons who knew what I wanted to know had been generous enough to post the answer where it was easy for me to find it. The search

11. Television, but not by much. Tom Genova's TV history site, *at* http://www.tvhistory.tv/1941%20QF.htm, tells us that NBC began commercial broadcasts in 1941. *See also* ERIK BARNOUW, TUBE OF PLENTY: THE EVOLUTION OF AMERICAN TELEVISION 99-148 (rev. ed. 1982). According to Asaf Goldschmidt's and Atsushi Akera's introduction to the University of Pennsylvania's special exhibition on John Mauchley, *at* http://www.library.upenn.edu/special/gallery/mauchly/jwmintro.html, the ENIAC computer came along in 1946. *See also* 16 ENCYCLOPEDIA BRITANNICA 641-42 (1989).

12. The 2003 Information Please/Time Almanac lists New Zealand's population at 3,908,037. TIME ALMANAC 2003 WITH INFORMATION PLEASE 828 (2002). The government of New Zealand currently describes its population as "a diverse multi-cultural population of 4 million people, the majority of whom are of British descent. New Zealand's indigenous Maori make up around 14 percent of the population." *See* NZGO, *People and History*, *at* http://www.purenz.com/index.cfm/purenz_page/3DD63CE4-18FD-402B-A74A-A4C7A7AF5630.html. The SNZ Pop Clock *at* http://www.stats.govt.nz/domino/external/web/prod_serv.nsf/htmldocs/Pop+Clock estimates New Zealand's population on 11 October 2003 at 04:16:30 AM as 4,025,641.

13. According to the Information Please/Time Almanac, Senator Mikulski was born in 1936. INFORMATION PLEASE/TIME ALMANAC, *supra* note 12, at 45. *See also*, THE POLITICAL GRAVEYARD INDEX TO POLITICIANS *at* http://politicalgraveyard.com/bio/midkiff-milen.html ("Mikulski, Barbara Ann (b. 1936)—also known as Barbara A. Mikulski—of Baltimore, Md. Born in Baltimore, Md., July 20, 1936. Democrat."). The 2001 World Almanac doesn't include that information, but will tell you that Colin Powell was born in 1937. *See* WORLD ALMANAC AND BOOK OF FACTS 2001 at 320 (2000).

was quicker, and commonly yielded more accurate information, than consulting whatever reference books were handy.

Although the Internet's usefulness as an engine of commerce has flowed and ebbed, its value as a repository of information has continued to grow exponentially. What we used to class as trivia (and therefore useless information) becomes a matchless resource when it is combined with other trivia in searchable form.[14] Volunteers, most of them amateurs, have collected an unimaginable variety of information and are eager to share it with the world. What I want to know may not be in any book on my shelf or in my university's libraries. I can probably find it on the Internet in less than an hour.

What are sesame seeds?[15]

Networked digital technology has transformed information and the way that we interact with it. Digital information is extraordinarily accessible. If I have a question, I don't need to make up an answer that seems plausible, or reason out what it's likely to be. I don't need to go to the library and ask the reference librarian if I can see the library's only copy of a reference book that ought to have the answer. I can just turn to my computer and look it up on the web.[16]

Digital information, moreover, is *shared*. Ten, even five, years ago, it was conventional to talk about the Internet as a tool for disintermediation. Authors and musicians would be able to use digital networks to send stuff directly to their readers and listeners. (Remember Stephen King's *The Plant*?[17]) There's some of that. People post content on their websites for the rest of the world to view. Academics exchange drafts of scholarly papers that way,[18] and independent musicians and composers make

14. *See*, e.g., Yochai Benkler, *Coase's Penguin, or Linux and the Nature of the Firm*, 112 Yale L.J. 369 (2003).

15. *See* SESAME, PLANT (PLANTS), 1UP INFO ENCYCLOPEDIA, http://www.1upinfo.com/encyclopedia/S/sesame.html. ("Sesame was introduced by African slaves to the U.S. South, where it sometimes becomes a weed. The sesame was once credited with mystic powers.").

16. The conventional wisdom about information available on the Internet is that it lacks the reliability of information printed on dead tree pulp. *See infra* text accompanying footnotes 30-35. That's a plausible charge but not, I think, a true one. Much of information on the web is garbage (as is much information in print) and seekers of truth have needed to develop new skills to distinguish reliable digital information sources from the online equivalent of the *Weekly World News*, but they have developed those skills remarkably quickly. People who find things out for a living, like reporters and librarians, have embraced the Internet as an invaluable research tool. *See, e.g.*, Jeffrey Selingo, *When a Search Engine Isn't Enough, Call a Librarian*, N.Y. TIMES, Feb. 5, 2004, at G1.

17. *See supra* note 2.

18. *See, e.g.*, Michael Froomkin's Home Page *at* http://personal.law.miami.edu/~froomkin/

recordings of their work available for sampling and download.[19] But, while we've seen a small but appreciable amount of direct distribution, there's even more consumer-to-consumer distribution. The "blog" (or weblog) is an increasingly popular art form in which people post ongoing, public, hyperlinked diaries of things they find interesting and want to share.[20] Readers of the blogs write in to contribute their own comments.[21]

Someone has the recording I want. If I can find her, she'll share it with me. I can copy it and pass it on. Someone knows the answer to my question. If I can locate her, she'll tell me. I can learn it and pass it on. Someone has seen the source I want to consult. She can tell me where to find it.

19. *See, e.g.*, Rick Sowash: Composer and Author *at* http://www.sowash.com.

20. *See, e.g.*, Andrew Ross Sorkin, *Building a Web Media Empire on a Daily Dose of Fresh Links*, N.Y. TIMES, Nov. 17, 2003 at C1, *available at* http://www.nytimes.com/2003/11/17/technology/17blog.html. I class the blog as an example of consumer-to-consumer distribution rather than direct distribution because a central feature of so many blogs is the hyperlinked recommendation to other material. *See* LAWRENCE LESSIG, FREE CULTURE 41 (2004). For a sample of the assortment of blogs currently posted in the Web, *see* http://directory.google.com//top//computers/Internet/On_The_Web/Weblogs; http://www.daypop.com; http://www.blogspot.com; http://new.blogger.com.

21. *See* Lawrence Lessig, *The New Road to the White House: How grassroots blogs are transforming presidential politics*, WIRED 11.11, November, 2003, at 136.

Where is a copy of the complaint in Hamilton v. Microsoft?[22]

The most powerful engine driving this information space turns out not to be money – at least if we're focusing on generating and disseminating the content rather than constructing the hardware that it moves through. What seems to be driving the explosive growth in this information space is that people like to look things up, and they want to share. This information economy is largely a gift economy. The overwhelming majority of the information I'm talking about is initially posted by volunteers. Many of them are amateurs, motivated by enthusiasm for their topics, a desire to pass interesting stuffon, and, perhaps, an interest in attention and the benefits it may bring. When one is a volunteer, the time and effort one is willing to put into contributing to the information space can seem limitless. Volunteers move on, of course: they get bored, or broke, or caught up in other things, but there seems to be an inexhaustible supply of new volunteers to take their places, and, luckily, the new volunteers are able to build on earlier volunteers' foundations.[23] I potentially know all of the information the other participants know. Their knowledge can be my knowledge with a few clicks of a mouse. In return, I make my knowledge

22. I quote verbatim the text of two email messages:

Date: Sat, 18 Oct 2003 21:38:14 -0400
To: cyberprof_list@uclink4.berkeley.edu
From: Jessica Litman <litman@mindspring.com>
Subject: Hamilton v. Microsoft

Has anyone seen a copy of the complaint in Hamilton v. Microsoft, the class action suit filed in California recently seeking to hold Microsoft liable for the vulnerability of its software?

Date: Sat, 18 Oct 2003 19:38:14 -0700
To: Jessica Litman <litman@mindspring.com>
From: Wendy Seltzer <wendy@seltzer.com>
Subject: Re: Hamilton v. Microsoft
Cc: cyberprof_list@uclink4.berkeley.edu

I've put a copy up at <*http://www.eff.org/~wseltzer/hamilton_v_microsoft.pdf*> Much as I dislike Microsoft's operating system and tactics, a class action blaming the company for virus attacks and identity theft seems a heavy-handed way to clean them up.
—Wendy

23. Volunteers also turn into entrepreneurs. Yahoo! and the Internet Movie Database are businesses that began as content authored by volunteers and morphed into commercial services. Litman, *supra* note 1, at 103-105.

available to anyone who happens by. Each of us can draw on the information stores of the others.[24]

The rate at which people have adopted the Internet as their research tool of choice is astonishing. People find the easy availability of all that information empowering. People want to know how old Steven Spielberg is. They want to know the history of early radio. They want to know what traveling musicians wore in 15th Century Europe. They want to know how to make Shaker Lemon Pie. They want to know what the Constitution actually says. If it's quick and easy to do so, they'll look it up. They enjoy discovering new stuff. The system has been evolving as we watch: consumer-to-consumer interaction is leading to more information, better information, and more accessible information; more complete and deeper archives; wider ranges of divergent sources.[25] People appreciate the instant gratification of learning answers in a moment. Probably more important than the speed of the system, however, is its breadth and depth. Because of the disparate contributions of a host of volunteers, one can find information that would not appear in conventional reference sources.[26]

Ten years ago, not only Washington, but the entire journalism business believed that the burgeoning digital network (which went by the name, back then, of the "National Information Infrastructure") would

24. If you read a lot of science fiction, this model should feel familiar. A number of authors have portrayed worlds in which characters are connected to a massive electronic database, which they can query at will. *See, e.g.*, FRANK HERBERT, DUNE (1965); JOAN VINGE, THE SNOW QUEEN (1980). This is different. The World Wide Web is certainly not a database in the conventional sense. The information has neither structure nor organization. It has no index, no table of contents, and no hierarchy. The domain name system supplies a hierarchy of location, but information is not organized in any analogous fashion. Instead, the Internet gives me access to a fluid conglomeration of the items millions of individuals have chosen to make publicly available. A variety of third party search engines purport to index only a small portion of the web. *See* Louis Introna & Helen Nissenbaum, *Defining the Web: The Politics of Search Engines*, 33 COMPUTER 54 (Jan. 2000). Rather than a giant database, this is the hive mind, where all members of the species share one another's knowledge and experiences. *See, e.g.*, ORSON SCOTT CARD, ENDER'S GAME (1985); BARBARA HAMBLY, THE TIME OF THE DARK (1982); Robert A. Heinlein, *Methuselah's Children*, reprinted in ROBERT A. HEINLEIN, THE PAST THROUGH TOMORROW 655, 794-808 (1967); ROBERT A. HEINLEIN, THE PUPPET MASTERS (1951); ROBERT A. HEINLEIN, STARSHIP TROOPERS (1959); FRANK HERBERT, HELLSTROM'S HIVE (1974); NANCY KRESS, PROBABILITY MOON (2000); Theodore Sturgeon, *To Marry Medusa*, reprinted in THEODORE STURGEON, THE JOYOUS INVASIONS (1965). Books published during the cold war commonly portrayed hive mind species as the enemy. Hive minders were thinly disguised communists, against whom clever, independent capitalists always managed to prevail. *See* Card, *supra*; Heinlein, Starship Troopers, *supra*; Herbert, *supra*; Sturgeon, *supra*. Frequently insectoid, hive mind creatures possessed great superiority of knowledge, often balanced by a deficit of creativity or ingenuity. See especially Card, *supra*.

25. *See, e.g.*, John Borland, et. al., *Mother of Invention*, C|NET NEWS.COM, Apr. 14, 2002, *at* http://news.com.com/2009-1032-995679.html.

26. *See, e.g.*, *infra* notes 29, 66, 148, and 151, and accompanying text.

develop into a 500 channel interactive television system, with "interactive" meaning that it would incorporate a method for ordering and charging purchases and receiving targeted advertising.[27] There are a number of businesses out there that are continuing to try to shove the Internet in that direction,[28] but it isn't yet anything like a 500 channel TV largely because of the way people have come to interact with information.

What is "the fuct of Pepsiman"?[29]

Let's pause for a word from our friendly reference book publishers. Speed and convenience are all very well, but doesn't selecting the speediest research tool ignore the quality and reliability of the information I retrieve? The Internet, after all, is an infamous source of falsehood and untruth.[30] Books and periodicals have editors and fact checkers to screen out misinformation; websites need not.[31]

The story, as stories often do, turns out to be more complicated. The efforts of editors and fact checkers have apparently not, for example, prevented periodicals from reprinting Internet untruths as if they were fact.[32] That should not be surprising. Many editors and fact checkers are neither well paid nor well qualified to assure the accuracy of the information their employers print. Not all publications use them. Often, fact checkers must rely on authors to direct them to corroborating sources.

27. *See* LITMAN, *supra* note 1, at 89-90. *See, e.g.*, Herbert I. Schiller, *Public way or private road? The 'information highway,'* THE NATION, July 12, 1993, at 64.

28. *See* Jessica Litman, *Electronic Commerce and Free Speech*, 1 ETHICS & INFORMATION TECHNOLOGY 213 (1999).

29. PepsiMan is a promotional superhero featured in Japanese commercials for Pepsi Cola. *See* Pepsinut, PepsiMan *at* http://www.pepsinut.com/PepsiMan.htm. The campaign has spawned a Japanese-only Nintendo game and a variety of promotional toys. *See id.* The "Fuct of PepsiMan" is a pepsi-scented PepsiMan action figure available in Japan and in the occasional U.S. anime store.

See http://www.doctorhook.com/pepsiuniversecom/pmanaction.html; Francine's diary for Nov. 14, 2000 *at* http://francine.diaryland.com/20001114.html.

30. *See, e.g.*, Carl M. Cannon, *The Real Computer Virus*, AMER. JOURNALISM REV., April, 2001, at 28 ("Internet . . . has an unmatched capacity for distributing misinformation"); Paul S. Piper, *Better Read That Again*, 8 SEARCHER, Sept. 1, 2000, at 40 ("Misinformation on the Internet is, and always will be, a problem.").

31. *See, e.g.*, Michael Ollove, *Turning the Pages*, BALT. SUN, Jan. 10, 2000, at 1E; *Fresh Air*: *David Talbot, Founder And Editor In Chief Of Salon Magazine, Discusses The Trials And Tribulations Of Running An Online Magazine* (NPR radio broadcast, June 14, 2000).

32. *See* Cannon, *supra* note 30. *See also Correcting the Record: Times Reporter Who Resigned Leaves Long Trail of Deception*, N.Y. TIMES, May 11, 2003, at A1 (detailing NYT reporter Jayson Blair's fabrication of facts in many NYT articles); Blake Morrison, *Ex-USA Today Reporter Faked Major Stories*, USA TODAY, March 19, 2004, at 1A; *Fabrications Mar Reporters Work*, USA Today, March 19, 2004, at 16A ("Jack Kelley wrote hundreds of stories during his 21 year career at the nation's largest newspaper. Substantial portions of some of his most memorable stories are untrue.").

The customs of different disciplines may control how carefully content is checked.[33] Correcting errors in print publications is difficult and expensive. Except in cases egregious enough to merit a recall,[34] the corrections must be put off until the publication of a later edition.

On the World Wide Web, in contrast, correcting errors and revising documents is simple and inexpensive. One can rewrite a file several times each day and spend nothing more than the time that it takes to enter the revisions and transmit the file to the server. If one makes a mistake, there are dozens of eager volunteers likely to send one an email offering corrections.[35] Indeed, the feedback of knowledgeable readers is a powerful force promoting accuracy on the web. With the world looking in, errors are much more likely to be identified, [36] and correcting them is easy.

Stepping back to look at the whole dynamic information space, it becomes clear that the remote participation of readers doesn't stop at writing comments in other people's blogs, or even at writing in to correct errors or misstatements. Fellow enthusiasts are likely to reuse the information they find in one web page – or a dozen—in their own web pages. A reader may simply post a hyperlink to someone else's page, or she may appropriate some prose, combine it with her own prose and additional prose lifted from some other sites, and post the amalgam as her own (with or without attribution). Thus does information spread. What makes this economy so astonishingly useful is information sharing – we're not each downloading facts from some giant Encyclopedia Britannica in the sky. We are both finding what we need and making available material that we've generated or assembled.

33. Law is a particularly curious example. The editors of most law journals are students, and the closest we get to fact checking is cite-checking, where students will confirm that sources support the assertions for which they are cited. In practice, anything can be corroborated merely by identifying some document that asserts it.

34. Florence Fabricant, *Magazine Corrects a Cookie Recipe*, N.Y. TIMES, Aug. 7, 1991 at C4 (Gourmet magazine published a recipe calling for "oil of wintergreen" as an ingredient. Upon discovering that oil of wintergreen is toxic, the magazine sent out a warning letter to its 800,000 subscribers.); Heather McPherson, *Icebox Rolls and Other Things that Go Bump in the Kitchen*, ORLANDO SENTINAL TRIBUNE, April 7, 2004, at F1 (error in icebox roll recipe posed fire hazard and led to the recall of the April 2004 issue of Southern Living Magazine).

35. For my Law in Cyberspace seminar, I post all students' assignments. *See* http://www.law.wayne.edu/litman/classes/cyber/syllabus.html. I regularly get email from complete strangers objecting to one of my students' characterizations of facts or law and requesting or demanding that I replace the file with a corrected version.

36. *See* Clive Thompson, *The Honesty Virus*, N.Y. TIMES MAGAZINE, March 21, 2004, at 24 (suggesting that one reason people are careful what they post on the Internet is that they realize how easy it is for online liars to get caught).

Who invented the phonograph?[37]

This information system is vital and dynamic because information sharing is almost frictionless. Material is passed along at low cost with few practical or legal barriers. Jeff Dalehite, webmaster of scratchdj.com, is free to post the details of the early history of the phonograph without seeking the consent of his sources. Dalehite's site tells us that Thomas Edison invented the cylinder phonograph in the 1870s and patented it in 1878. Dalehite recounts the details of the commercial standards competition between Edison's phonograph and the disk gramophone introduced to the U.S. market in 1901 by the Victor Talking Machine Company.[38] He attributes none of his sources; he need not even know whether the information he has abstracted was original to the references he used or derived by them from some other source. Technical writer Samuel Berliner III has posted a site honoring famous people throughout history named Berliner. His site reports that the disk gramophone was invented by Emile Berliner in 1887. Berliner needs no permission from Frederick W. Nile, the author of a 1926 biography of Emile Berliner,[39] nor the National Inventors Hall of Fame, who have posted a short profile of Berliner,[40] from whom he initially learned that information.[41] Neither Dalehite nor Berliner has secured a license from Tommy Cichanowski for any facts they might have learned by studying *Tommy's History of Western Technology*,[42] nor have they sought the blessing of the periodical *Electronic Design*, whose February 1976 issue commemorating the U.S, bicentennial[43] furnished many of the dates that Cichanowski reports. If one were unable to post facts without determining who controlled them and obtaining a license to pass those facts on, this online information space would not exist.

37. According to the Audio Engineering Society Historical Committee, "Thomas Alva Edison, working in his lab, succeeds in recovering Mary's Little Lamb from a strip of tinfoil wrapped around a spinning cylinder." Audio Engineering Society Historical Committee, *AudioTimeline*, *at* http://www.aes.org/aeshc/docs/audio.history.timeline.html. Edison and Emile Berliner each has a plausible claim to the invention of the first phonograph record. Edison's invention was first, but used rotating cylinders rather than a flat disk. Berliner appears to have invented the disk format for phonograph recordings. *See infra* notes 38-43 and accompanying text.

38. *See The History of Turntablism*, *at* http://www.scratchdj.com/history.shtml.

39. FREDERIC W. NILE, EMILE BERLINER: MAKER OF THE MICROPHONE (1926).

40. *See* Hall of Fame Inventor Profile: *Emile Berliner at* http://www.invent.org/hall_of_fame/13.html.

41. *See* S. Berliner III, *Emile Berliner Page*, *at* http://home.att.net/~Berliner-Ultrasonics/berlemil.html.

42. Tommy Cichanowski, *Tommy's History of Western Technology at* http://www.luminet.net/~wenonah/history/edpart3.htm.

43. 24 Electronic Design No. 4 (Feb. 1976)

II. Formalities and Default Rules

Who wrote "When I was One-and-Twenty"?[44]

The purpose of copyright is to promote the progress of science, by encouraging the production and dissemination of works of authorship.[45]The

44. A. E. Housman. *See, e.g.*, http://www.amherst.edu/~rjyanco/literature/alfrededwardhousman/poems/ashropshirelad/wheniwasoneandtwenty.html. The answer is not in BARTLETT'S FAMILIAR QUOTATIONS (Justin Kaplan ed., 16th ed. 1992). The Encyclopedia Britannica has a nice squib on Mr. Housman, but doesn't mention the titles of any of his poems. *See* 6 ENCYCLOPEDIA BRITANNICA 85 (15th ed. 1989). The poem is included in OSCAR WILLIAMS, A LITTLE TREASURY OF MODERN POETRY 62 (1952), but the book is indexed only by author and not by title.

45. We in the intellectual property community have come to accept a version of that principle based on a primitive conception of the economic analysis of law: copyright promotes authorship by offering incentives to authors that encourage them to create new works and distribute them to the public. Thus, it has become conventional to argue that enhanced copyright protection is desirable if and only if it enhances incentives, or that any diminution in copyright protection will discourage the creation of new works by reducing authors' and publishers' incentives. *See, e.g.*, Stephen Breyer, *The Uneasy Case for Copyright*, 84 HARV. L. REV. 281 (1970); I Trotter Hardy, *The Internet and the Law: Copyright and "New-Use" Technologies*, 23 NOVA L. REV. 657 (1999); Deborah Tussey, *Owning the Law: Intellectual Property Rights in Primary Law*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J.. 173, 226-28 (1998). The incentive rationale for copyright has become so conventional that it is easy to forget that it is in fact relatively recent. *See* Litman, *supra* note 1, at 79-81. The Supreme Court first articulated an incentive explanation for copyright in 1975, in a case in which it explained that copyright's incentives for authors must yield to the public's interest in broad dissemination of protected works. *See* Twentieth Century Music v. Aiken, 422 U.S. 151, 156 (1975):

> The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. "The sole interest of the United States and the primary object in conferring the monopoly," this Court has said, "lie in the general benefits derived by the public from the labors of authors."

(quoting Fox Film Corp. v. Doral, 286 U.S. 123, 127 (1932)) (footnotes omitted). A discussion of the economic rationale for copyright in the earlier case of *Mazer v. Stein*, 347 U.S. 201, 219 (1952), described the basis for copyright in terms of reward and desert:

> The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.

The rationale has evolved into a justification for any expansion in the scope of copyright protection: stronger copyrights mean more powerful incentives mean that more works of authorship will be created and distributed to a larger slice of the public. Opponents of copyright expansion have tried to argue against enhancements within the confines of the incentive model, with little success. *See, e.g.*, Eldred v. Ashcroft, 537 U.S. 186 (2002).

contributions of this networked digital information space to the "Progress of Science" are difficult to overestimate. Already, a network of people sharing what they know has made many of the most popular reference sources obsolete. Thus, one might reasonably expect that a law designed to promote the Progress of Science would encourage the robust growth and prodigious use of this network to exchange the full spectrum of interesting material.

Under current law, though, the information space I'm talking about is lawful only because so much of its content – the facts, information, and ideas – is in the public domain.[46] To the extent that the material in this information space is in the public domain, we can all share it, use it, and reuse it. To the extent it's protected by copyright, on the other hand, we would need permission to do all of that, and, as a practical matter, it would be impossible to secure that permission. One of the most salient lessons from the copyright wars of the last few years is that if express permission is required before one can post a collection of anything on the Internet, one will be unable to do it.[47]

To appreciate the extent of the problem, it's helpful to review key changes in the copyright law and the information space over the past thirty years. Today, facts are some of the only material solidly part of the public domain. Thirty years ago, the public domain was far more expansive. In 1974, federal copyright protection was not automatic. To get it, you needed to distribute copies of your work to the public, and the copies needed to be marked with a copyright notice.[48] Notice of copyright – the familiar C-in-a-circle, along with the name of the copyright owner and the date the work was first published – secured copyright. Distributing copies without notice caused the work to enter the public domain.[49] Indeed, while the copyright system offered authors protection for a limited time as an incentive to encourage them to distribute their works to the public, it also attempted to ensure that most works entered the public domain promptly, so that the

46. *See, e.g.* Feist Publications v. Rural Telephone Service, 499 U.S. 340 (1991).

47. *See* Litman, *supra* note 1, at 151-65; Jessica Litman, *War Stories*, 20 CARDOZO ARTS & ENT. L.J. 337 (2002); Danny O'Brien, *Something Completely Different*, WIRED, Nov. 2003, at 29, 31.

48. Copyright Act, ch. 320, §§ 10, 19, 35 Stat. 1075, 1078-1079 (1909) (current version at 17 U.S.C. §§ 401, 402 (2000)). Section 12 of the Act permitted copyright in designated classes of unpublished works to be secured through registration. Those works – lectures, plays, paintings, sculptures and motion pictures – were commonly commercially exploited without distributing copies to the public. *Id.* at § 12

49. *See* WILLIAM F. PATRY, LATMAN'S THE COPYRIGHT LAW 154-55 (1986); *see, e.g.*, J.A. Richards v. New York Post, 23 F. Supp. 619 (S.D.N.Y. 1938).

public could make unfettered use of them.[50] Copyright law was designed to separate works whose authors wanted copyright protection enough to follow a few simple rules for preserving it, from works that would have been created and distributed anyway.[51]

Thirty years ago, when you saw something you wanted to use or share, the default rule was that you were entitled to do so. Unless the object was marked "do not copy" you were, with some modest exceptions, entitled to assume it was in the public domain, because the absence of a copyright notice ensured that it was in the public domain (even if it hadn't been before).[52] Not only that, but the notice had to be accurate, had to tell you when the copyright was scheduled to expire, and had to tell you to whom you needed to address any request for permission.[53] The overwhelming majority of potentially copyrightable works didn't have this notice and entered the public domain the minute copies were publicly distributed. Of the ones that bore the prescribed copyright notice, only a fraction were registered, and of the fraction that were registered, only 15% were renewed, so for most of the copyright-protected works that had the requisite notice, copyright protection lasted only 28 years.[54]

When was the U.S. army first officially racially segregated? When was it officially integrated?[55]

The formalities get a bad rap these days. We've left that sort of thinking behind us; we're more enlightened now. We know better than to

50. *See, e.g.*, London v. Biograph, 231 F. 696 (2d Cir. 1916); Stone & McCarrick v. Dugan Piano, 210 F. 399 (E.D. La. 1914).

51. *Accord* LAWRENCE LESSIG, FREE CULTURE 133-39 (2004).

52. *See* Vincent Doyle et. al., *Notice of Copyright*, 1 STUDIES ON COPYRIGHT 229, 231 (1968).

53. *See* ALAN LATMAN, THE COPYRIGHT LAW 121-41 (5TH ED. 1979).

54. *See* Barbara Ringer, *Renewal of Copyright*, 1 STUDIES ON COPYRIGHT 503, 583 (1968).

55. According to the Redstone Arsenal Historical Information, History of Black Military Service, *at* http://www.redstone.army.mil/history/integrate/history.htm, African American soldiers served side by side with whites as well as in segregated units until 1820, when Congress passed a law prohibiting the enlistment of blacks in the Army. BennieJ.McRae,Jr.'s *Lest We Forget* site *at* http://www.coax.net/people/lwf/hisusct.htm explains that African American volunteers sought to serve in the Civil War, but Lincoln initially refused to permit enlistment of black soldiers. In 1862, Congress passed a law authorizing the use of black troops. A number of black companies were recruited and in 1863, the War Department established the Bureau of Colored Troops. During the Civil War, blacks served in segregated regiments, commanded by white officers. The Gilder Lehrman Institute of American History, *at* http://www.gliah.uh.edu/historyonline/

integrating.cfm, reports that it was not until 1869 that Congress enacted a law requiring soldiers to fight in racially segregated units. In 1948, President Truman issued an executive order directing the armed forces to desegregate. Integration began slowly on a unit-by-unit basis, and in 1951, the Army Chief of Staff ordered all units to desegregate.

condition copyright protection on a bunch of technical requirements.[56] (We feel more comfortable conditioning use of copyrighted works on a bunch of even more technical requirements.[57]) The formalities have been so thoroughly discredited that some of us have even stopped teaching them.[58]

What we miss when we dismiss the formalities as characteristic of a provincial and outmoded attitude is that the formalities were the principal method embodied in U.S. copyright law for preserving the public domain and encouraging the public to use, reuse, and share potentially copyrightable material. If you read older copyright cases, textbooks and law review articles, you find a broad consensus that copyright law was designed to encourage the growth of the public domain.[59] The theory underlying the system was that a rich public domain was essential to the progress of knowledge. By offering copyright for a limited time to authors who distributed their works to the public, copyright bribed them to generate material for the public domain.[60]

The old rules worked to preserve copyright for works whose owners wanted it enough to take the affirmative steps required to assert it. The law made copyright subject to exceedingly modest requirements to claim protection and put the public on notice. It was designed to force everything else into the public domain, so that everyone else could make whatever use of it they wanted. Copyright wasn't automatic, but it was easy to secure. Putting a notice on publicly distributed copies might not be trivial, but it is far easier than the effort involved in applying for a patent, or registering a trademark. Retaining copyright after the initial 28 year term was a little harder, but again, not very hard. Nothing one would need a lawyer for. Meanwhile, the rules were designed to make it easier for people who

56. *See* Jane C. Ginsburg & John M. Kernochan, *One Hundred And Two Years Later: The U.S. Joins the Berne Convention*, 13 COLUM.-VLA J. L. & ARTS 1 (1988).

57. *See* Litman, *supra* note 1, at 22-34.

58. *See, e.g.*, SHELDON W. HALPERN, DAVID E. SHIPLEY & HOWARD B. ABRAMS, COPYRIGHT: CASES AND MATERIALS 43-44, 295-97 (1992). *Compare* ALAN LATMAN AND ROBERT A. GORMAN, COPYRIGHT FOR THE EIGHTIES: CASES AND MATERIALS 263-303 (1981) with ROBERT A GORMAN & JANE C. GINSBURG, COPYRIGHT: CASES AND MATERIALS 383-413 (6th ed. 2001), and BENJAMIN KAPLAN & RALPH S. BROWN, COPYRIGHT 100-157 (1960) with RALPH S. BROWN & ROBERT C. DENICOLA, COPYRIGHT 35-48 (8th ed. 2002) .

59. *See* Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975); United States v. Paramount Pictures, Inc., 334 U.S. 131, 158 (1948); Fox Film Corp. v. Doyal, 286 U.S. 123, 127-8 (1932). *See also* Stewart v. Abend, 495 U.S. 207, 228-29 (1990); L. RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE (1968); David Lange, *Recognizing the Public Domain*, 44 LAW & CONTEMP. PROBS. 147 (1981). *But see* EATON S. DRONE, DRONE ON COPYRIGHT 1-26 (Boston, Little, Brown & Co. 1879) (arguing that literary property has its origins in natural law and, like other property, should be perpetual).

60. *See* Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 1013 (1990); L. Ray Patterson, *Free Speech, Copyright and Fair Use*, 40 VAND. L. REV. 1 (1987).

wanted to negotiate a license to use a work protected by copyright to know whether and whom they needed to ask. Again, for most licenses, a lawyer would be strictly optional.

Congress abandoned many of the formalities when it enacted the 1976 Copyright Revision Act,[61] and ditched the rest of them in 1989 when we acceded to the *Berne Convention*.[62] In 1976, we essentially abolished the rule that publication without notice or with inaccurate notice sent the work into the public domain,[63] and in 1989 we abolished the notice requirement entirely.[64] We also made other changes to the law that, cumulatively, reversed the default rule. Today, all potentially copyrightable works are protected by copyright, whether their authors want copyright protection or not.[65]

How do you make Shaker lemon pie?[66]

A second, less obvious but still crucial, change transformed the U.S. copyright system from one designed to ensure the enhancement of the public domain to one designed to support the indefinite proprietary treatment of articulated thought. In 1976, Congress adopted divisibility of

61. Pub. L. No. 94-553, 90 Stat. 2541.

62. Berne Convention Implementation Act, Pub. L. No. 100-568, 102 Stat. 2853.

63. In 1976, Congress enacted the 1976 Copyright Act. Although the 1976 Act required copyright notice, *see* 17 U.S.C. §§ 401, 402, it also included generous savings provisions that allowed copyright owners to cure notice defects. *See* 17 U.S.C. §§ 404, 405, 406 (2000). By muting the effect of no notice or inaccurate notice, Congress caused notice to stop performing both its function of establishing what was and was not protected by copyright, and also its function of notifying the public what rights it had and whom it needed to ask for permission to copy a work.

64. *See* 1 WILLIAM F. PATRY, COPYRIGHT LAW AND PRACTICE 437-54 (1994).

65. There is a rich recent copyright literature analyzing the problems that have accompanied recent expansions in copyright rights. Most of the scholarship focuses on substantive expansion: in copyright subject matter, in the duration of copyright, and in the scope of copyright rights. *See, e.g.*, James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 LAW. & CONTEMP. PROBS. 33 (2003); Dennis S. Karjala, *The Term of Copyright* in LAURA N. GASSAWAY, GROWING PAINS: ADAPTING COPYRIGHT FOR LIBRARIES, EDUCATION AND SOCIETY 33 (1997); LAWRENCE LESSIG, THE FUTURE OF IDEAS 196-99 (2001); Neil Weinstock Netanel, *Locating Copyright within the First Amendment Skein*, 54 STAN L. REV. 1, 12-30 (2001); L. Ray Patterson, *Copyright and "the Exclusive Right" of Authors*, 1 J. INTELL. PROP. L. 1 (1993). Relatively little critical attention has focused on the formalities.

66. Someone named Susan Green submitted the classic version of the recipe to AllRecipe's site at www.pierecipes.com, *see* http://www.pierecipes.com/az/ShakerLemonPie.asp. The same recipe was submitted by someone named Pat Dennis to the Carnegie Mellon University recipe server. *See* http://www-2.cs.cmu.edu/~mjw/recipes/pie/sweet/shaker-lemon-pie.html. The Encyclopedia Britannica Online at http://www.britannica.com/ ("Search Results You Can Trust") includes entries for "lemon," "pie" and "Shaker," but nothing for "shaker lemon pie."

copyright.[67] So far as I can tell, the change was completely uncontroversial. Divisibility is exceedingly useful. It's the biggest reason that authors don't need to sign over their copyrights when they publish things. It allows the author to keep control over different sorts of exploitation of her work by different entities. The problem with divisibility is that it potentially requires multiple licenses for any single use of a copyrighted work, while simultaneously making it very difficult to tell who owns the rights one needs to license.[68]

There once was an interesting Internet start-up named MP3.com, which specialized in making both major-label and unsigned music available in the MP3 format. MP3.com intended to stream copyrighted music to its subscribers, and bought ASCAP and BMI public performance licenses to allow it to do so. That seems right. If you look at the statutory definition of public performance, it appears to cover Internet streaming quite nicely.[69] MP3.com got sued for willful infringement (and lost) because it didn't also license the reproduction rights to those songs, which are controlled by a different entity.[70]

This is much worse in the Internet context because copyright owners have asserted, so far successfully, that every time a work is made available over the Internet, someone has reproduced the work, distributed the work,

67. *See* 17 U.S.C. § 201(d) (2000); H.R. REP. NO. 94-1476, at 123 (1976).

68. *See* Mark A. Lemley, *Dealing With Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547 (1997); Lydia Pallas Loren, *Untangling the Web of Music Copyrights*, 53 CASE W. RES. L. REV. 673 (2003); John Schwartz, *Music Sharing Service at M.I.T. is Shut Down*, N.Y. TIMES, Nov. 3, 2003, at C13. Professor Lydia Loren recently summed up the problems the music industry faces in putting its works online:

> [T]here are too many vested industry players for downstream users to be able to efficiently obtain the authorizations needed for downstream use of recorded music. Second, the divisible yet overlapping rights granted to copyright owners lead to industry gridlock and problems with holdout behavior. Finally, the demands for payment from the downstream user by too many vested industry players, combined with industry consolidation, result in the price being too high to achieve the goal of copyright.

Loren, *supra*, at 698.

69. *See* 17 U.S.C. § 101 (2000):

> To perform or display a work "publicly" means . . . (2) to transmit or otherwise communicate a performance or display of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

70. *See* TEEVEE Toons v. MP3.com, 134 F. Supp. 2d 546 (S.D.N.Y. 2001); UMG Recordings v. MP3.com, 109 F. Supp. 2d 223 (S.D.N.Y. 2000); *see also* Schwartz, *supra* note 68 (MIT music streaming service suspended because of dispute over whether the licensors of the various elements of the service had the authority to sell MIT the licenses it purchased).

and publicly performed or displayed the work.[71] Anyone who wants to post a work on the web, thus, needs a license from the owners of each of these rights, plus a license from the owners of each of these rights in any underlying works that are incorporated within the work.[72] Under the current leading analysis of how copyright law interacts with the Internet, making any material available over the Internet (whether via posting it on a website, sending it through email, posting it to Usenet news, typing it on Internet relay chat or making it available in a share directory associated with a peer-to-peer file trading application) constitutes a reproduction of the material, a distribution of the material to the public, and a public display or performance of the material. It is therefore illegal unless done with the authorization of the copyright owners of the reproduction right, the public distribution right, and the public display or public performance right, as well as the copyright owners of those rights in any underlying material.[73] It counts as an actionable copy notwithstanding the fact that the reproduction may be ephemeral (what the law used to deem unfixed).[74] It counts as a distribution to the public notwithstanding the fact that no tangible copy of the material is transferred (what the law used to deem a display or performance rather than a distribution).[75] It constitutes a public display or performance notwithstanding the fact that any display or performance may occur only between two individual computers (what the law used to deem private).[76]

71. *See* Loren, *supra* note 68, at 696-702. The argument that any Internet appearance of a work should be treated as an invasion of multiple copyright rights appears to have been first publicly articulated by Bruce Lehman's Information Infrastructure Task Force, *see supra* note 8, and accompanying text, in an effort to settle the dispute between composers and music publishers over whether Internet transmissions of music should be deemed public performances (licensed by ASCAP, BMI & SESAC) or distributions (licensed by the Harry Fox Agency, a subsidiary of the National Music Publishers Association). The Task Force's answer was both. *See* Information Infrastructure Task Force, *supra* note 8, at 213-25; Lemley, *supra* note 68, at 550-59.

72. *See, e.g.*, Michael W. Carroll, *A Primer on U.S. Intellectual Property Rights Applicable to Music Information Retrieval Systems*, ILL. J. OF LAW, TECH. & POL. (forthcoming Winter 2004); Loren, *supra* note 68, at 696-98.

73. *See* Carroll, *supra* note 72.

74. *See* Intellectual Reserve v. Utah Lighthouse Ministry, 75 F. Supp. 2d 1290 (D.Utah 1999); Gorman & Ginsburg, *supra* note 58, at 416-20. Unfixed reproductions don't infringe the copyright owner's right "to reproduce the copyrighted work in copies or phonorecords." *See* 17 U.S.C. § 106(1).

75. *See* Playboy v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993); Gorman & Ginsburg, *supra* note 58, at 544-47.

76. *See* A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001). Private performances and displays don't infringe the copyright owner's rights to perform and display the copyrighted work publicly. See 17 U.S.C. §§ 106(4), 106(5); *see, e.g.*, Columbia Pictures v. Professional Real Estate Investors, 866 F.2d 278 (9th Cir. 1989).

Indeed, there's some indication in the case law that making a hyperlink to material available over the Internet may be deemed to be a reproduction, public distribution, and public performance or public display, requiring the permission of the owners of the reproduction, distribution and public performance and display rights in the material on the other end of the link.[77] Moreover, the theory underlying the recording industry's recent service of more than a thousand subpoenas[78] on Internet service providers and universities appears to be that merely possessing an unauthorized digital copy of a protected work, in circumstances in which a member of the public could download a copy of the work from the possessor's hard disk, may itself be infringing distribution.[79] A bill introduced in the 108th Congress extends that argument further. Under Congressman Conyers's *Author, Consumer, and Computer Owner Protection and Security Act*, possessing an unauthorized digital copy could constitute felony distribution.[80]

And (as if that weren't troubling enough) largely because of the adoption of divisibility of copyright, in many if not most cases, it can be difficult and sometimes impossible to discover who the copyright owners of all of those rights are.[81] One of the more disturbing revelations of the *Napster* litigation was that record companies insisted that they were unable

77. Kelly v. Arriba Soft Corp., 280 F.3d 934 (9th Cir., 2002), *withdrawn* 336 F.3d 811, 2003 (9th Cir. 2003); *Cf.* Intellectual Reserve v. Utah Lighthouse Ministry, 75 F. Supp. 2d 1290 (D.Utah 1999)(posting URL of infringing material on the web is contributory infringement). *See generally* Stacey L. Dogan, *Infringement Once Removed: The Perils of Hyperlinking to Infringing Content*, 87 IOWA L. REV. 829 (2002).

78. *See* Electronic Frontier Foundation, RIAA Subpoena Database Query Tool, *at* http://www.eff.org/IP/P2P/riaasubpoenas/. Or you could rely on the proprietary "RIAA Case Activity" service from Lexis/Nexis Courtlink *at* http://www.lexisnexis.com/trial/nalm100181clinkriaa.asp, which, as of November 2, 2003, was significantly out of date. The recording industry claimed that section 512(h) of the copyright law, which requires Internet service providers to identify subscribers responsible for posting infringing material on the ISP's servers, also required ISPs to name subscribers the RIAA had identified as maintaining allegedly infringing copies on their personal computers. See Recording Industry of America v. Verizon, Inc., 351 F.3d 1229 (D.C. Cir. 2004).

79. The theory of liability appears to be based on the idea that the 106(3) distribution right in the U.S. copyright statute should be read expansively to encompass the equivalent of the European right, under article 3 of the EU Directive, to make a work available or communicate it to the public. *See Council Directive 2001/29/EC*, art. 3 (2001). That makes little sense given the overall structure of the US copyright statute, which separates public performance and public display from distribution to the public, and specifies distinct privileges and exceptions for each of them. *See* 17 U.S.C. §§ 109, 110, 111, 112, 118 (2000)

80. H.R. 2752, 108th Cong.. (2003). The Bill would define "placing of a copyrighted work . . . on a computer network accessible to the public" as criminal copyright infringement unless the copyright owner had authorized it. A conventional home or WiFi network without firewall protection is accessible to the public in the sense the bill defines it.

81. *See* O'Brien, *supra* note 47, at 31.

to generate a list of the copyrighted works they claimed to own.[82] (This is particularly disquieting because one would assume they kept records in order to send out those royalty checks they're supposed to be sending out, but apparently not.) Some of the problem, apparently, is record keeping, but not most of it. In addition to difficulties caused by lost or misfiled records, there is significant legal uncertainty about the ownership of rights to control digital exploitation of works that are subject to contracts contemplating conventional exploitation.[83] Record companies, for example, have claimed to own all copyright rights in the recorded music they distribute under the work-made-for-hire doctrine, but most experts agree that those claims are unpersuasive.[84] A successful effort to amend the copyright law to strengthen the record labels' work-made-for-hire arguments excited so much outrage among musicians that the recording industry persuaded Congress to repeal the amendment the following year.[85] Without the benefit of a work-made-for-hire claim, though, the record labels' claims to own the digital rights to the recordings they produce requires a work-by-work, contract-by-contract analysis. *New York Times v. Tasini*[86] and *Random House v. Rosetta Books*[87] teach us that contractual assignments of copyright may not necessarily include the electronic rights. We'd have to examine the contracts to be sure. We might need to know whether the case would be coming up on the east coast or the west coast.[88] We'd also need to see the contract between the composer and the music publisher for each song on the recording, and the contracts between each of the music publishers and the record company that recorded each song. Those contracts aren't publicly available. One suspects that a large number of them are no longer in anyone's file cabinets either. Bottom line: we don't know with any certainty who owns the digital rights in any number of recorded musical performances. That may be why record companies have scrambled to settle cases when their ownership of sound recordings is

82. *See* A & M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 925 (N.D. Cal. 2000) (plaintiffs claim "it would be burdensome or even impossible to identify all of the copyrighted music they own" but have made a minimal effort to describe the works involved in the lawsuit), aff'd in part, rev'd in part, 239 F.3d 1004 (9th Cir. 2001).

83. *See, e.g.,* Schwartz, *supra* note 68.

84. *See, e.g.*, Marci Hamilton, *The Constitution and Your CDs*, Findlaw's Writ, 2000, *at* http://writ.news.findlaw.com/hamilton/20000919.html.

85. *See Sound Recordings As Works Made For Hire: Hearing Before the Subcomm. On Courts and Intellectual Property of the House Comm. on the Judiciary*, 106th Cong.(May 25, 2000) (Statement of Marybeth Peters, Register of Copyrights).

86. New York Times v. Tasini, 533 U.S. 483 (2001).

87. Random House v. Rosetta Books, 150 F. Supp. 2d 613 (S.D.N.Y. 2001) , aff'd, 283 F.3d 490 (2d Cir. 2002). *See also* Greenberg v. National Geographic, 244 F.3d 1267 (11th Cir. 2001).

88. *Compare* Boosey & Hawkes Music Publishers, Ltd. v. Walt Disney Co., 145 F.3d 481 (2d Cir. 1998), *with* Cohen v. Paramount Pictures Corp., 845 F.2d 851 (9th Cir. 1988).

actually put in issue.[89] If I want to share my music collection with my newfound friend who was able to tell me that the "Fuct of Pepsiman" is a promotional toy released in Japan by the Pepsi Cola Company, there isn't any way for me to figure out whose permission I need to ask.

Today, in short, everything is protected by copyright and it is almost impossible to figure out whom to ask for permission. Just as we built a communications network that would permit us, if we chose to, to dispense with a complicated and expensive distribution infrastructure, we ditched the legal rules that would have permitted us to do so.[90]

III. Digression: The Music of Room A-9

What are the lyrics to "The Syncopated Clock?"[91]

When my son was in the third grade, one of his assignments required him to conduct research on the flora, fauna, and climate of the alpine tundra. His teacher didn't send him to look it up in books – indeed, the school library didn't have a lot of information to offer on the alpine tundra. My son's teacher sent him to look it up on the Web. She gave him a list of URLs for some websites that were likely to lead him to the information he needed, and sat him down in front of a computer to do his research. At the end of the school year, this teacher said goodbye to the class and presented all of the students with a souvenir: A home-burned CD full of Room A-9's favorite songs. Where did the songs come from? My son's elementary school teacher had downloaded them from the Internet herself so the class could enjoy them. Room A-9 apparently especially liked the Sugar Beats' rendition of "Put A Little Love in Your Heart."[92]

When an elementary school teacher helps her class to download information about the animals that inhabit the tundra, we all agree that that's admirable. When she teaches the class to download "Put a Little Love in Your Heart," at least some of us would argue that that's

89. *See* Marci Hamilton, *The Story Behind the MP3.com Judgment*, Findlaw's Writ, 2000, *at* http://writ.news.findlaw.com/hamilton/20001123.html.

90. *See, e.g.*, LAWRENCE LESSIG, THE FUTURE OF IDEAS 120-202 (2001); Yochai Benkler, *A Political Economy of the Public Domain: Markets in Information versus the Marketplace of Ideas*, in ROCHELLE DREYFUSS, DIANE L ZIMMERMAN & HARRY FIRST, EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY 267 (2001).

91. *See and hear, e.g.*, K(eep) I(t) SS(imple) W(eb) D(esign), The Syncopated Clock, http://kissd.8m.com/jukebox/51-39.html.

92. *THE MUSIC OF ROOM A-9!* (2003). The CD includes three cuts by Faith Hill, three cuts by the Dixie Chicks, four cuts by Kabah, four cuts by the Sugar Beats, two songs by Sarah Evans, one each by Toby Keith and George Straight, and finally a rendition of "Chicken Cheer" by the students of Room A-9.

reprehensible. Collecting information on the Internet is "learning." Posting information on the net is "sharing." Try exactly the same thing with recorded music and it's "stealing." When my son's teacher downloads information from the Internet and shares it with her students, that's the sort of thing the law is supposed to encourage; when she downloads music from the Internet and shares it with her students, that's the sort of thing the law is supposed to prevent. The law treats the two acts differently because facts are in the public domain, while music is someone's property. Information cannot be owned, we're told, because, unlike music, facts aren't original.[93] From my son's teacher's point of view, though, what she's doing is the same: she's sharing.[94] From her point of view, there's no reason to think that it would make intuitive sense that downloading information to share with her students would be good, while downloading music to share with her students would be bad. Those of us who teach copyright know that the distinction between unprotected fact and protected expression is as elusive and counterintuitive as anything in the copyright course.[95] There's a wealth of literature challenging the rule that information is unlike music in any way that's important to whether we should give it intellectual property

93. Feist Publications, Inc. v. Rural Telephone Service Co., 499 U.S. 340, 347 (1991) ("facts do not owe their origin to an act of authorship").

94. I probably need to stop here and defend my use of the term "sharing" since it's recently come under attack. Some people argue that whatever using peer-to-peer networking involves, it shouldn't be called "sharing." Richard Parsons, the CEO of Time-Warner, told the U.S. Congress: "The popular term for trafficking in copyrighted works—"file sharing" — is a misnomer. It isn't sharing. It's online shoplifting. " *Ensuring Content Protection in the Digital Age: Hearing Before the Subcomm. On Telecommunications of the House Commerce Comm.*, 107th Cong. 30 (Apr. 25, 2002) (prepared statement of Richard Parsons, AOL Time-Warner). Similarly, lawyer David Kendall, who represented President Clinton during his impeachment and currently represents Hollywood on copyright issues, has said:

> The word "file-sharing" is a euphemism and a serious misnomer. . . . In fact, it's not really sharing at all, because if I share a piece of cake with you, we're each doing with a little less—I have half a piece and you have half a piece. This doesn't hold true for digital distribution since I don't lose anything by "sharing" with you. . .

David Kendall, *Copyright in Cyberspace*, (March 25, 2002) (Brigance lecture to Wabash College) *available at* http://www.copyrightassembly.org/briefing/DEKWabash Speech4.htm. Kendall is talking about sharing cake or cookies. That's the wrong metaphor. Sharing digital objects is less like sharing cookies and more like sharing ideas – when I share my ideas, I don't lose anything. Of course, it's precisely the difference between cookies and ideas that causes us to treat the first as tangible property and the second as intellectual property. Cookies have to be allocated. Ideas need not. Indeed, the purpose of the intellectual property regime is to achieve widespread sharing by temporarily endowing IP with some – and only some—of the attributes of tangible property. If we can achieve widespread sharing without endowing IP with those attributes, then we ought at least to question whether the attributes of tangible property are the tools we need.

95. *See, e.g.*, Justin Hughes, COPYRIGHT AND THE COLLAPSE OF THE FACT/VALUE DISTINCTION (2002) (manuscript on file with author).

protection.[96] Any originality-based distinction between facts and notes is untenable, we're told, since unearthing and assembling facts takes at least as much creativity and often lots more money than writing a song.[97] Scholar after scholar has deconstructed the supposed rationales for giving factual information different treatment from fiction, and concluded that the asserted differences can't be defended. The inescapable conclusion, they've told us, is that we need to give comparable intellectual property protection to information.[98] There's a perennial bill pending in the U.S. Congress that threatens to do just that;[99] it's even passed the House of Representatives once or twice.[100]

Copyright scholars never seem to reverse the syllogism. You never run into an argument that says: if facts and music are equivalent in the respects that matter, and we have an ample, readily accessible and diverse supply of facts when the law gives them no protection, shouldn't we at least investigate what sort of musical smorgasbord we might develop if we treated music comparably?

IV. Resetting the Default Rules

Who are the Sugar Beats?[101]

We have a mature information market on the Internet that allows almost anyone with a net connection to find the answer to almost any question by consulting what would a generation ago have been an unimaginable wealth of information resources. This information space has sprung up not despite but *because of* the absence of any copyright

96. See, e.g., Michael Steven Green, *Copyrighting Facts*, 78 IND. L. J. 919 (2003); Hartwell Harris Beall, Comment; *Can Anyone Own A Piece Of The Clock?: The Troublesome Application Of Copyright Law To Works Of Historical Fiction, Interpretation, And Theory*, 42 EMORY L. J. 253 (1993); Anant S. Narayanan, Note*; Standards Of Protection For Databases In The European Community And The United States: Feist And The Myth Of Creative Originality*, 27 GEO. WASH. J. INT'L L. & ECON. 457 (1993).

97. *E.g.*, Jane C. Ginsburg, *Sabotaging and Reconstructing History: A Comment on the Scope of Copyright Protection in Works of History after Hoehling v. Universal City Studios*, 29 J. COPYRIGHT SOC'Y 647 (1982); Robert Gorman, *Fact or Fancy? The Implications for Copyright*, 29 J. *COPYRIGHT SOC'Y 560 (1982); Beryl Jones, Copyright*: *Factual Compilations and the Second Circuit*, 52 BROOK. L. REV. 679 (1986).

98. *See, e.g.*, Jane C. Ginsburg, *"No Sweat" Copyright*, 92 COLUM. L. REV. 338 (1992).

99. The current version is H.R. 3261, 108th Cong. (2003).

100. *See* H.R. 2652, 105th Cong. (1998).

101. The Sugar Beats' website *at* http://www.sugar-beats.com/about/ explains that the musicians are thirty-something parents who wondered why kids and parents didn't like to listen to the same music and hit on the idea of recording "hip" and "funky" tunes from the 60s, 70s and 80s in children's voices, to entice kids to sing along. I wouldn't have thought it would work either, but Room A-9's experience suggests that I don't have a good handle on what sells.

protection for facts. (If you doubt me, stop a moment for a thought experiment, and imagine what this information space would look like if we adopted and enforced a legal rule that no fact could be posted without the permission of the originator of that fact or his employer or assignee.) At worst, this information space is an invaluable adjunct to the library of reference books, and at best it's a superior alternative for retrieving and disseminating information. If consumer-to-consumer dissemination can create a superior information marketplace, shouldn't we give serious consideration to the idea that it would create a superior music marketplace? The digital information space is compelling at least as much because of the variety and ecology of shared information as because of the convenience and speed that might be supplied by an online "encyclopedia world," containing the digitized text of the Encyclopedia Britannica and a dozen of its competitors. Consumer-to-consumer dissemination of music might enable the evolution of a music space with comparable variety. That potential is more exciting than the advantages of instant gratification that accompany the ability to download whatever music the record labels are currently selling. Just as we wouldn't want to get all of our facts from some giant Encyclopedia Britannica in the sky, there's no need to cabin our musical tastes to reflect what's currently selling in online or offline stores.

How old is the recording industry?[102]

At this point, the vast majority of the copyright specialists who stuck with me through part III have stopped reading. They've decided that this is just another rant by one of those copyright-hating academics.[103] There's no rush to reassure them that I'm not seriously suggesting anything so radical as treating music exactly the way we treat facts, or dumping all recorded music into the public domain. They are no longer paying attention. We

102. Early phonographs were marketed as dictation machines. Historians date the release of the first commercial recordings to 1889, when both the Edison Company and the Columbia Phonograph company sold wax cylinders containing musical recordings. *See, e.g.*, Steven E. Schoenherr, *Charles Sumner Tainter and the Gramophone* (1999), http://history.acusd.edu/gen/recording/graphophone.html; Steven E. Schoenherr, Recording Technology History (revised Feb. 16, 2004), *at* http://history.sandiego.edu/gen/recording/notes.html#cylinder; Washington Area Music Association, D.C. Music Timeline (2003), *available at* http://www.wamadc.com/wama/dc_music_timeline.html.

103. *See* Andrea L. Foster, *Scholars Rally to Online Magazine's Defense Over Publishing Software Code*, CHRONICLE OF HIGHER EDUCATION, Feb. 16, 2001, *available at* http://www-2.cs.cmu.edu/~dst/DeCSS/Gallery/chronicle-16-feb-2001.html (quoting a film industry lawyer's complaints about "a group of anti-copyright professors" who "represent a small extremist wing of the academic community"). *See also* Jonathan Zittrain, *The Copyright Cage*, LEGAL AFFAIRS, July-August 2003, *available at* http://www.legalaffairs.org/issues/July-August-2003/feature_zittrain_julaug03.html (reporting that a colleague asked him why all law professors who specialize in Internet law "hate copyright").

can take some time to reflect on what the music world might look like if we did.

Imagine a world in which consumers were free to copy and transmit any and all recorded musical they wished to. Someone who wants to avoid shelling out $18.98 plus tax for Norah Jones's *Feels Like Home*[104] could download it from the hard drive of a price-insensitive fan who lives down the block. Someone searching for a track from the 1960s that she hasn't heard in 40 years could find it in the collection of another music lover half way around the world. If one considers only the universe of existing recordings, the promise of copyright-free consumer-to-consumer distribution of music seems boundless. If one were able to prevent – or at least prohibit – spoofing and other well-poisoning,[105] we would have a highly efficient, cheap distribution network. The potential range of the marketplace, including music too marginal to market, too obscure to clear, too unusual to fit into conventional marketing niches, would allow us to find music to scratch almost any itch in our minds' ears as easily as we have become able to satisfy both idle and abiding curiosity with a few clicks of a mouse. Moreover, our experience with nascent peer-to-peer file sharing thus far suggests a strong likelihood that a variety of mechanisms would arise for sorting music and directing the attention of people likely to want it to the appropriate files, and that those mechanisms would prove at least as effective as the current marketing devices.[106]

The story for music not-yet-written or not-yet-recorded is more complex. Reasonable people differ vehemently about whether composers would compose songs or performers perform or record them absent the incentives supplied by the current copyright system.[107] We have little

104. Billboard reports that Jones' *Feels Like Home* is the top selling album as of March 15, 2004. *See* Billboard.com, Billboard Album Charts (Mar. 15, 2004), *available at* http://www.billboard.com/bb/charts/bb200.jsp.

105. In an effort to make peer-to-peer file trading less attractive, some copyright owners have engaged in technological self help measures, "spoofing" files by flooding peer–to-peer networks with files that do not contain what their name would indicate. *See* Catherine Greenman, *Taking Sides in the Napster War; With Copyright Law at Issue, Sites Battle for the Ears and Minds of Music Lovers*, N.Y. TIMES, Aug. 31, 2000, at G1.

106. *See, e.g.*, Webjay: *Listener Created Radio*, *available at* http://www.webjay.org/; Katie Dean, *Music Gurus Scout Out Free Tunes*, WIRED News, April 9, 2004, *available at* http://www.wired.com/news/digiwood/0,1412,62982,00.html. In the late 1990s, a number of search engines for music popped up on the web, only to be shut down by litigation claiming that the services facilitated copyright infringement. *See* Arista Records v. MP3Board.com, 2002 U.S. DIST LEXIS 16165 (S.D.N.Y. 2002); Twentieth Century Fox v. Scour, Inc., No. (S.D.N.Y. filed July 20, 2000); Steven Musil, *Scour to End File-Swapping Service*, C|NET NEWS.COM, Nov. 14, 2000, *at* http://news.com.com/2100-1023-248631.html.

107. *Compare*, *e.g.*, Stephen Manes, *Full Disclosure: Copyright Law Ignore at Your Peril*, P.C. WORLD, Sept. 2003 ("if pilfering persists and pirated content drives out the real thing, expect hardworking artists to look for vocations that pay. Classic content will be free for the swiping, but

empirical data to test theories seeking to explain why musicians make music.[108] Some people have suggested that, at least in some genres, musicians are motivated less by the fact that music is what they love and do best and more by the possibility of hitting it big as the next mega hit rock star. Others argue that the most important role in supplying music to a music-loving public is finding the good stuff. The hard, expensive, crucial task that all the recording industry's bookkeeping tricks are barely managing to subsidize is searching for and identifying the musicians whose work will prove to be worth listening to. These are both completely plausible stories; we don't yet have the tools to allow us to evaluate whether they're more true than not.

Perhaps treating recorded music as if it were in the public domain would usher in an era of enhanced creativity and boundless profit; perhaps songwriters and musicians would choose to become lawyers and investment bankers. We don't have the tools to make a confident prediction. Fortunately, we don't need so extreme a prescription in order to capture the benefits of consumer-to-consumer digital distribution. There's no need to jettison copyright protection for music if, instead, we can apply some of the insight that we've gained from watching the expanding exchange of information over the Internet. Creation and dissemination may flourish without the incentives supposedly supplied by producer control.[109] Even if we believe that copyright-like incentives are sometimes essential to

most new stuff will be the product of well-meaning amateurs . . ."), *available at* http://www.pcworld.com/howto/article/0,aid,111657,00.asp; Mike Stoller, *Songs That Won't Be Written*, N.Y. TIMES, October 7, 2000, at A15 ("by taking the incentive out of songwriting, Napster may be pushing itself closer to a time when there won't be any songs for its users to swap"), *with* Rodger Walters Online, Interview with Everett True, April 5, 2002, http://www.rogerwatersonline.com/the_age_interview.htm;

Felix Oberholzer and Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis* (March 2004), *available at:* http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf ("the financial incentives for creating recorded music are quite weak" and therefore reducing payments to recording artists "should have very little influence on entry into popular music"); Eben Moglen, *Anarchism Triumphant: Free Software and the Death of Copyright*, 4 First Monday (1999), *available at* http://www.firstmonday.dk/issues/issue4_8/moglen/; and Michael Pfahl, *Giving Away Music to Make Money: Independent Musicians on the Internet*, 8 First Monday (2001), *available at* http://www.firstmonday.dk/issues/issue6_8/pfahl/. *See also* Courtney Love, *Courtney Love Does the Math*, Salon.com, June 14, 2000, *available at* http://www.salon.com

108. *See* Michael W. Carroll, *Whose Music Is It Anyway?: How We Came To View Musical Expression As A Form of Property*, 72 U. CIN. L. REV.__ (forthcoming 2004); Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 306-311 (2002).

109. *See* Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 305 (2002).

encourage composers and musicians to create music,[110] it doesn't follow that those precise incentives are necessary to induce dissemination.

When will the song "Happy Birthday to You" enter the public domain?[111]

Can we design a system that preserves copyright incentives for creators who rely on them while reducing unnecessary barriers hampering wide consumer-to-consumer dissemination? Our experience with digital information works suggests that we can. The flourishing information space on the Internet includes proprietary content sitting alongside material that is freely shared. Because facts are in the public domain, but the prose used to communicate those facts is fully protected by copyright, proprietors of fact-heavy works have sued, successfully, when their prose is appropriated.[112] Those successful lawsuits don't seem to have impeded the free flow of information significantly. The information ecology continues to function when some information sources prohibit free exchange of their material, not because sharers are scrupulous about sharing only facts and not prose (which they surely are not), but because the proprietors of information-rich content who insist on controlling the dissemination of their stuff mark their content and enclose it in electronic envelopes that give notice of their claims and make it clear that they have opted out of the prevailing norm of sharing. By and large, people appear to respect that choice. The coexistence of proprietary and shared information suggests that we can design a workable shared music space without taking the drastic step of dumping music into the public domain. Another of the lessons we can take from the vibrant commerce in facts that goes on over the Internet is that allowing, indeed encouraging individuals to share music, trade music—engage in non-commercial "stealing" of music if you prefer – without legal liability is not necessarily going to bring the progress of science and the

110. The degree to which U.S. copyright law has sought to motivate creators rather than distributors is open to question. *See, e.g.*, Kaplan, *supra* note 1, at 75:

> I have spoken of encouraging "creation" as well as "dissemination," but copyright has evidently more to do today with mobilizing the profit-propelled apparatus of dissemination – publication and distribution – than with calling the signals into first unpublished existence; the latter process must be to a considerable extent self-generated.

111. That's hard to tell. Some people insist that it is in the public domain already. *See, e.g.*, J. Byron, Exposing the Happy Birthday Story (June 2003), *available at* http://www.kuro5hin.org/story/2003/7/5/112441/6280; Wikipedia Fact Index, Happy Birthday, *available at* http://www.fact-index.com/h/ha/happy_birthday.html; Urban Legends Reference Pages: Happy Birthday, We'll Sue, *available at* http://www.snopes.com/music/songs/birthday.htm. The melody appears to have been written in 1893, and the lyrics some years later.

112. *See* New York Times Co. v. Tasini, 533 U.S. 483 (2001); L.A. Times v. Free Republic, 54 U.S.P.Q.2D 1453 (C.D. Cal. 2000).

useful arts to a crashing halt, and it has lots of advantages over the distribution system that preceded it.[113]

What's the name of that song that keeps going through my head?[114]

There are vast differences between music and information, but outside of the fact that the owners of music and sound recording copyrights have a lot more brute political clout than, say, Reed Elsevier, I'm not sure that any of those differences undercut the basic insight: If music in a digital world shares many of the attributes of information, it may be useful to apply some of the wisdom IP law has developed over the protection and distribution of information. In particular, we should remember that widespread dissemination is as central to the goals of copyright as initial creation; facilitating the sale of copies is only the means the law has adopted to further those goals.[115] If sharing is a more effective method of dissemination than selling copies, then prohibiting sharing to protect the market for copy sales is exactly backward.[116]

If we can agree on that, I think it's relatively easy to work out the details of a compromise we can live with.[117] A growing consensus has

113. *See, e.g.*, Chris Nelson, *Upstart Labels See File Sharing as Ally, Not Foe*, N. Y. TIMES, Sept. 22, 2003 (cataloging ways that unauthorized file sharing helps independent record companies compete against conglomerates).

114. *See* Pamela Licalzi O'Connell, *Online Diary: Virtual Cemetery Visits And Naming That Tune*, N. Y. TIMES, Jan. 29, 2004. *See, e.g.*, *LetsSingIt.com (your lyrics engine on the Internet)* (visited March 4, 2004), at *http://www.letssingit.com* ("The lyrics on this site are not only submitted by visitors, but also maintained by the visitors. You as visitor can submit and correct lyrics. These submissions are reviewed by other visitor [sic] whereafter they are placed in the archive. With this, LetsSingIt.com always has the newest lyrics."). *See also, e.g.*, Musicnotes.com at *http://www.musicnotes.com* (a licensed commercial sheet music sales site with a lyrics search engine) .

115. If musicians create music primarily because of the control-based incentives supplied by copyright law, one might argue that any encouragement of sharing will reduce the incentives that inspire musicians to produce music. Whether musicians will make music if the copyright regime is altered is an empirical question, but the fact that so many musicians have complained so bitterly at their treatment at the hands of record companies without withholding their music suggests that musicians' motivations are more complex than the simple copyright-incentive model captures. *See* Ku, *supra* note 109, at 300-11. In addition, history indicates that the absence of enforceable proprietary rights in music has not dissuaded musicians from creating and performing new works. *See* Michael W. Carroll, *Whose Music Is It Anyway?: How We Came To View Musical Expression As A Form of Property*, 72 U. CINN. L. REV. (forthcoming 2004). I nonetheless suggest in part V that we adopt a collective license to pay the creators of music for peer to peer file trading.

116. *See* Ku, *supra* note 109, at 305 (on the Internet, "copyright serves no purpose other than to transfer wealth from the public and, as we shall see, artists to distributors. In this case, the use of Napster is not theft—copyright is theft.")

117. I'd probably be comfortable if we found ourselves in a world in which noncommercial consumer-to-consumer file sharing was not illegal. Period. No quid pro quo. I'm confident that we'd figure out ways to ensure that creators of music and the businesses that market them earn

emerged that P2P is exciting technology with one serious flaw – creators aren't getting paid.[118] (That flaw characterizes much conventional distribution as well.[119]) The current conventional system of music distribution has been successful in disseminating a broad range of music to consumers and less successful in compensating the individuals who create that music. Peer-to-peer file trading has so far proved to be a far more effective distribution mechanism for a broader range of music, but is even worse than the conventional system at compensating creators.[120] Tweaking peer-to-peer file trading to incorporate a mechanism for compensating creators is a sensible response to that problem, and there are a host of recent thoughtful suggestions outlining ways to do that.[121] If the only reason we care about compensation for composers and musicians is to induce them to make music, the most efficient option is probably to legalize peer-to-peer file trading, prohibit well-poisoning[122] and leave

money. I recognize that most people don't share my confidence, and I'm willing to look hard for a middle ground.

118. *See, e.g.*, Diane Leenheer Zimmerman, *Authorship Without Ownership: Reconsidering Incentives In A Digital Age*, 52 DEPAUL L. REV. 1121(2003); Fred Goldring, *Taking Issue: Abandon The 'Shock And Awe' Tactics*, BILLBOARD, Oct. 25, 2003 (available on LEXIS); Xeni Jardin, *Creative License: Some analysts are proposing compulsory licenses as the answer to digital piracy*, GRAMMY MAGAZINE, July 25, 2003, *available at* http://www.grammy.com/features/2003/0725_complicenses.html; *Editorial: End to File-Swapping Wars Demands Ideas, Not Threats*, USA TODAY, July 20, 2003, at 10A, *available at* http://www.usatoday.com/news/opinion/editorials/2003-07-20-our-view_x.htm; Electronic Frontier Foundation, *Let the Music Play*, *available at* http://www.eff.org/share.

119. *See* Future of Music Coalition, *Major Label Contract Clause Critique* (Oct. 3, 2001), *available at* http://www.futureofmusic.org/contractcrit.cfm.

120. *But see* a variety of reports indicating that peer-to-peer file sharing leads to increased CD sales. *E.g.*, Katie Dean, *Record Stores: We're Fine Thanks*, WIRED NEWS, March 20, 2004, *available at* http://www.wired.com/news/digiwood/0,1412,62742,00.html; Kevin Featherly, *Long-Time File-Swappers Buy More Music, Not Less – Update*, NEWSBYTES, April 25, 2002, *available at* www.bizreport.com/news/3337 (summarizing study by Jupiter Media Metrix). *See also* Janis Ian, *The Internet Debacle: An Alternative View*, *May*, 2002, *available at* http://www.janisian.com/articles.html ("every time we make a few songs available on my website, sales of all the CDs go up. A lot").

121. *See, e.g.*, William W. Fisher III, PROMISES TO KEEP: TECHNOLOGY, LAW AND THE FUTURE OF ENTERTAINMENT 199-258 (2004); Ku, *supra* note 109, at 312-21; Glynn S. Lunney, *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 852-69, 886-920 (2001); Neil W. Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J. L. & TECH. 1 (2003). *See also* Zimmerman, *supra* note 118 ("street performer protocol"); EFF, *Making P2P Pay Artists*, *available at* http://www.eff.org/share/compensation.php (summarizing various proposals).

122. Some copyright owners have fought back against peer-to-peer file trading by "spoofing", see supra note 105, and launching denial-of-service attacks against individuals perceived to be particularly active file traders. Their cumulative efforts have apparently succeeded in significantly reducing the reliability of peer-to-peer file trading. The Recording Industry Association sought legislation that would have immunized copyright owners from suit or criminal prosecution for damage caused by "disabling, interfering with, blocking, diverting, or

creator compensation untouched – the recording industry has demonstrated that artists make music even when money is not forthcoming. If our sense of fairness impels us to compensate creators because they deserve to be paid, then extracting creator compensation from peer-to-peer file trading would probably be an easier route than reforming the recording and broadcast industries.

Consumer-to-consumer distribution, after all, is a lot less costly than conventional commercial distribution, and may allow us to free up resources now spent on CD stamping, shipping, storage, shelf space and radio payola, not to mention the huge cost of legal efforts to eradicate what is commonly called "piracy." That money could be used to pay the people who create the music – something the record companies insist they can't really afford to do very well under the current system.[123]

A number of scholars have floated proposals urging the adoption of systems that would permit peer-to-peer file sharing, charge money to the people who enjoy it (or the businesses that profit from it), and use those funds to compensate creators and copyright owners.[124] Professor Neil Netanel suggests allowing consumers to engage in unrestricted noncommercial use, adaptation, and peer-to-peer exchange of all types of communicative expression, and imposing a noncommercial use levy to compensate copyright owners. Netanel would impose the levy on the sale of products and services whose value is enhanced by peer-to-peer file sharing. Organizations representing copyright owners would divide the levy proceeds among their members using both sampling and digital tracking technologies.[125] Professor Terry Fisher proposes a slightly

otherwise impairing the unauthorized distribution, display, performance, or reproduction of his or her copyrighted work on a publicly accessible peer-to-peer file trading network.. . ." *See* H. R. 5211, 107th Cong. (2002). The legislation proved controversial and failed to make it out of the Judiciary Committee.

123. *See, e.g.*, *Music on the Internet: Is There an Upside to Downloading?: Hearing Before the Senate Judiciary Comm*., 106th Cong. (2000) (testimony of Fred Ehrlich, Recording Industry Association of America), *available at*http://www.riaa.com/news/newsletter/press2000/071100_2.asp.

124. See sources cited supra note 121; Daniel Gervais, *Copyright, Money and the Internet*, (Mar.3, 2004), *available at* http://www.commonlaw.uottawa.ca/ faculty/prof/dgervais/CopyrightMoneyAndTheInternet.pdf *See also* Zimmerman, *supra* note 118 ("street performer protocol"); EFF, *Making P2P Pay Artists*, *available at* http://www.eff.org/share/compensation.php (summarizing various proposals). This is not the first time such proposals have been made; Richard Stallman made a similar proposal more than a decade ago. *See* Richard Stallman, *Copywrong*, WIRED 1.03 (July 1993), *at* www.wired.com/wired/archive/1.03/1.3_stallman.copyright.html (proposing a tax in return for unrestricted digital copying). What is surprising is the growing consensus supporting payment or licensing systems designed to compensate copyright owners in return for legalizing consumer digital copying.

125. *See* Netanel, *supra* note 121, at 35-59.

different solution. Fisher would encourage copyright owners of music recordings and films to register their works with the Copyright Office, which would assign every registered music recording or film a unique registration number. Copyright owners would incorporate the registration numbers into the names of the digital files containing the registered works. The Copyright Office would be responsible for administering a tax on digital recording devices, digital storage media and Internet access services, and would divide the proceeds of the tax among owners of the copyright in registered works by tracking downloads of files by registration number and using sampling to estimate offline consumption. Anyone would be permitted to reproduce, distribute or perform audio and video recordings over the Internet. Professor Fisher suggests that the initial deployment of his proposal be completely voluntary, but he envisions that it would ultimately replace the current copyright law.[126]

Professor Raymond Ku argues that the current copyright law makes no sense in the context of digital distribution. Ku would retain the current law for analog distribution, but would replace copyright in the Internet context with a privilege allowing consumers to engage in noncommercial online distribution. If the revenue from analog sources proved insufficient to support the creation and distribution of music, Ku recommends the enactment of a statute imposing levies on sales of Internet service and on computer, audio, and video equipment.[127] Professor Glynn Lunny argues that private digital copying probably does more good than harm, but suggests that if that harm must be redressed, a levy imposed on devices and blank storage media is the best available solution.[128] Professor Daniel Gervais, analyzing the problem from the Canadian vantage point, where a court has recently concluded that peer-to-peer file sharing is often lawful,[129] suggests modifying existing collective licensing to extend to peer-to-peer file trading.[130] Professor Larry Lessig has weighed in with a modified version of Fisher's proposal, designed to compensate copyright owners temporarily until ubiquitous licensed music streaming replaces peer-to-peer file sharing as consumers' preferred means of gaining access to music.[131] The Electronic Frontier Foundation recently suggested that the best

126. *See* Fisher, *supra* note 121, at 9-10, 199-258.

127. *See* Ku, *supra* note 109, at 311-24. Ku suggests such a license as a last resort only if revenue from the sales of albums augmented by voluntary "tipping" should prove insufficient.

128. Lunney, *supra* note 109, at 911-20.

129. *See* BMG Canada v. Doe [2004] F.C. 88 (Can.)

130. Daniel J. Gervais, *Copyright, Money and the Internet* (March 3, 2004), *available at* http://www.commonlaw.uottawa.ca/faculty/prof/dgervais/CopyrightMoneyAndTheInternet.pdf.

131. *See* Lessig, *supra* note 51, at 300-04.

solution would be for the music industry simply to agree to offer music fans a license to engage in file sharing for a small monthly fee.[132]

The music industry's response to all of these proposals[133] has been chilly. Despite a spirited recent defense of the recording industry's need to rely on the copyright compulsory license crafted for its benefit,[134] a recording industry spokesman explained that any compulsory license benefiting the public would be unacceptable because it would involve the government in setting the price for music.[135] Voluntary collective licensing, he insisted, would either be unfair because the few consumers who participated would subsidize the many who continued to rely on free downloads, or it would be voluntary only in name.[136] Instead, the

132. Electronic Frontier Foundation, *A Better Way Forward: Voluntary Collective Licensing of Music File Sharing* (Feb. 2004), *available at* http://www.eff.org/share/collective_lic_wp.pdf.

133. The differences between these proposals are not, in fact, that large. Netanel's plan would permit unrestricted noncommercial use of most copyrighted material, *see* Netanel, *supra* note 121, at 37-43, while Fisher limits his proposal to audio and video recordings, but would allow commercial as well as noncommercial uses. *See* Fisher, *supra* note 121, at 203-05, 234-36. Lessig believes that P2P will become less desirable once enhanced Internet access makes ubiquitous licensed streaming an attractive alternative, and would therefore make the system a temporary stopgap. *See* LESSIG, *supra* note 51 at 297-303. Netanel, Fisher, Gervais and Lessig would direct their alternative compensation to copyright owners, while Ku would reserve it for musicians and songwriters. Netanel, Fisher and Ku all, however, rely on a government-imposed, Copyright Office-administered fee on the sale of digital goods and services to provide compensation for missed sales and royalties. Netanel would leave the current copyright law untouched except for his noncommercial user privilege and levy. *See* Netanel, *supra* note 121, at 37-59. Ku would retain the current law for analog distribution so long as works were distributed in the analog as well as the digital channel. Ku, *supra* note 109, at 321-24. Fisher envisions his system's ultimately superseding the current statutory copyright. Fisher, *supra* note 121, at 9-10, 246-51. Despite these differences, however, the core of all of the proposals is to permit, indeed encourage, consumers to engage in consumer-to-consumer distribution while compensating creators from a fund financed by the sales of related equipment and services. Gervais and the Electronic Frontier Foundation rely on similar mechanisms but argue that rights holders should adopt the mechanisms voluntarily and administer them collectively rather than relying on government-administered licensing. As a practical matter, the adoption of any compulsory license would require the endorsement of music and recording industry copyright owners. The differences between the compulsory license proposals and the voluntary collective license proposals are, thus, more formal than fundamental.

134. *Section 115 of the Copyright Act: In Need of Update?: Hearing Before the Subcomm. On Courts and Intellectual Property of the House Judiciary Comm.*, 108th Cong. (2004) (statement of RIAA President Cary H. Sherman), *available at* http://www.house.gov/judiciary/sherman031104.htm.

135. Lindsay Martell, *A License to Share: Group Proposes Music Licensing Scheme for Music File Networks*, ABCNews.com, March 1, 2004, *at* http://abcnews.go.com/sections/scitech/TechTV/music_download_license_techtv_040301.html (quoting RIAA Vice President David Sutphen: "I don't want the federal government deciding the value of things like music.").

136. *See id.*; Drew Clark, *Intellectual Property: Music Software Officials Debate Merits of Licenses, Filters*, National Journal's Technology Daily, (Feb. 27, 2004), (available on LEXIS);

recording industry, which has recently licensed services that permit consumers to buy the opportunity to listen to or download music recorded in copy-protected digital files, claims that if peer-to-peer file sharing services would simply prevent any exchange of unlicensed content, copyright owners would have an opportunity to sell consumers the music they want.[137] The market can work only if the recording industry doesn't have to compete with free.

At its best, though, letting the market work promises to perpetuate and extend the already vexing problems that have engendered today's music environment, in which rights are difficult or impossible to clear and the majority of creators go unpaid. Nothing in the music and recording industry's promises suggests that they have an interest in solving these problems, much less a plan to do so. Instead, the recording and music industry seem determined to exacerbate the difficulties imposed by a multiplicity of conflicting rights holders, by imposing obligations on hardware manufacturers, software publishers and Internet access services to implement a variety of maddening digital rights management formats and incompatible files and devices.[138] Surely we can do better. Adopting solutions designed to support the current music market structure, and export its anomalies to a digital marketplace, saddles us with undesirable and unnecessary artifacts that arose from problems particular to conventional distribution. Under our current system, immensely talented and hard working composers and musicians, who create great stuff that people would want to buy if they knew about it, are often unable to make a living making music, because the system we rely on to encourage the creation and dissemination of music works best when its products are scarce. As a necessary corollary of a distribution mechanism that requires significant investment of capital in order to deliver music to consumers, that fact may be a regrettable but a reasonable sacrifice at the altar of great music. Extending the lottery-like nature of today's conventional music market to a digital world, though, where maintaining scarcity is more expensive than tolerating ubiquity, is profoundly dysfunctional.

From the viewpoint of the individuals who make the music, moreover, the reform proposals to legitimize peer-to-peer file sharing rely on mechanisms that are remarkably similar to the devices we rely on today to

EFF Voluntary License Plan Brings RIAA 'Thanks But No Thanks', Washington Internet Daily, Feb. 26, 2004.

137. *See, e.g.*, Tom Spring, *Three Minutes with RIAA Chief Cary Sherman*, PC WORLD, Oct. 30, 2003, *at* http://yahoo.pcworld.com/yahoo/article /0,aid,113133,00.asp; sources cited *supra* notes 131-133.

138. *See* Roy Mark, *RIAA v. P2P: Same Old Song*, InternetNews.com, Feb. 27, 2004, *at* http://www.internetnews.com/bus-news/article.php/3318901.

pay money to composers and musicians.[139] In Canada, Europe and Japan, musicians and composers rely heavily on collecting societies.[140] In the United States, a patchwork combination of compulsory licenses,[141] blanket licenses,[142] standard trade practices[143] and rate courts[144] add up to much the same thing. The proposals to enact a new license to permit peer-to-peer file sharing and compensate creators through a levy, tax, or uniform royalty have inspired heated philosophical and economic debates over the flaws in any compulsory or collective licensing system.[145] The objections tend to

139. Considered in the context of music, the changes envisioned by proponents of blanket licensing for peer-to-peer file sharing are hardly extreme. Consumers already have a privilege to make non-commercial digital copies of musical recordings, and the right to distribute those copies to members of the public. *See* 17 U.S.C. §§ 1008, 109 (2000). The scope of the copying privilege is contested. The statute prohibits copyright infringement actions "based on the manufacture, importation, or distribution of a digital audio recording device, a digital audio recording medium, an analog recording device, or an analog recording medium, or based on the noncommercial use by a consumer of such a device or medium for making digital musical recordings or analog musical recordings." *Id.* Digital musical recordings are defined to exclude material objects "in which one or more computer programs are fixed." *Id.* § 1001. That has led some to argue and at least one court to conclude that section 1008 shields non-commercial recordings burned to music CDs (on which a royalty has been paid), or recorded on analog or digital audiotape, but excludes recordings saved to a computer hard disk. *See* A&M Records v. Napster, Inc., 239 F.3d 1004, 1024 (9th Cir. 2001). *See also* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys, 180 F.3d 1072, 1076-81 (9th Cir. 1999)(computers are not "digital audio recording devices" within the meaning of the statute). Under 17 U.S.C. § 109, "the owner of a particular copy or phonorecord lawfully made under this title. . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord." So long as the copy is made lawfully, whether under the fair use privilege or under the section 1008 shelter for consumers' noncommercial copies of music recordings, the owner of the copy is entitled to sell it or give it away. Accord M. Nimmer & D. Nimmer, NIMMER ON COPYRIGHT §8.12 [B][3][c]; U.S. Copyright Office, Report of the Register of Copyrights Pursuant to § 104 of the Digital Millennium Copyright Act 155-157 (2001). Consumers, moreover, already pay a levy intended to compensate composers, musicians and record companies for the sales lost through private consumer copying. *See* 17 U.S.C. §§ 1003, 1004 (2002). Netanel, Fisher, Lunney and Ku would extend both the privilege and the levy to copying and dissemination over digital networks.

140. *See* Daniel Gervais, *Application of an Extended Collective Licensing Regime in Canada: Principles and Issues Related to Implementation* (2003); Daniel Gervais, *Collective Management of Copyright and Neighbouring Rights in Canada: An International Perspective*, 1 CANADIAN JOURNAL OF LAW & TECHNOLOGY 21-50 (2002).

141. *See* 17 U.S.C. §§ 112(e), 114(d), 115, 118, 119 (2000).

142. *See* Broadcast Music Inc. v. CBS, 441 U.S. 1, 4-14 (1979).

143. *See, e.g.*, DONALD S. PASSMAN, ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS 70-79, 210-22 (5th ed. 2003)

144. *See* U.S. v. Broadcast Music, Inc., 316 F.3d 189 (2d Cir. 2003); U.S. v. ASCAP, 902 F. Supp. 411 (S.D.N.Y. 1995).

145. *See, e.g.*, *Music on The Internet: Hearing Before the House Judiciary Comm. Subcomm. On Courts, the Internet, and Intellectual Property*, 107th Cong. 2-3 (2001) (statement of Rep. Howard Berman), *available at* http://www.house.gov
/judiciary/72613.pdf; *id*. at 17-18 (statement of the National Music Publishers Association); *id*. at 52 (statement of Lyle Lovett, ASCAP); Rachna Dhamija & Frederik Wallenberg, *A Framework*

ignore the fact that to the extent that composers and performers currently earn income from the sale and performance of recorded music, they collect most of that income through a combination of standardized, compulsory and collective licenses administered by intermediaries (music publishers, record companies, performing rights societies) in return for payment. From the vantage point of music creators, replacing the theoretical control they enjoy under the copyright law with an enforceable promise of payment makes them no worse off, and makes most of them better off.

The intermediaries who hold control over musical works and recordings are also in it for the money, and one might expect them to be delighted to hand over their control in return for more cash. Not a bit of it.[146] The current dominant forces in the music and recording business may no longer need record pressing plants, CD stamping plants, warehouses and trucks to distribute music, but they have a huge stake in ensuring that digital distributors be limited to those who used to rely on record pressing plants, CD stamping plants, warehouses and trucks. The rest of us, however, don't share that stake. Indeed, new distributors who never assumed those expenses may be in a position to experiment with new variations on digital distribution and still pay a larger percentage of proceeds to the creators of the material.

The proposals advanced by Netanel, Fisher, Ku, Lunney, Gervais and Lessig would improve the law by allowing frictionless, consumer-to-consumer dissemination, and collecting royalties to compensate creators from those who in a broad sense may be described as commercially exploiting copyrighted works.[147] Moreover, when their schemes are limited to music, currently the most vexing case of consumer-to-consumer dissemination, the proposals are modest extensions of devices contained in current law and business practice. In drawing on their analyses, I end up suggesting a variant solution pegged at least initially only to music sharing, but my pursuit of some different choices shouldn't obscure the importance of their work. The politics of copyright legislation will likely prevent us from adopting any of the proposals they advance, but our copyright law would be much improved if we did.

for Evaluating Digital Rights Management Proposals, *at* http://sims.berkeley.edu/~fredrik/research/papers/EvaluatingDRM.html.

146. *See* Jon Healy, *New Napster to Play by Music Industry's Rules*, LOS ANGELES TIMES-MIRROR, Oct. 7, 2003, at C1; Martin LaMonica, *Debating Digital Media's Future*, c|net News.com, , *at* http://news.com.com/2100-1025-5079007.html. (Sept. 18, 2003).

147. *See* Litman, *supra* note 1, at 178-86; Loren, *supra* note 68, at 716-19.

V. Sharing and Hoarding

How violent is next week's episode of Dragonball Z?[148]

If I'm persuaded that politics would prevent the adoption of the sort of peer-to-peer licensing solutions scholars have proposed, why am I bothering to articulate my own variation?[149] As consensus builds around the idea of paid peer-to-peer, it seems increasingly plausible that some legislation will emerge with enough support from the music, recording, computer, and consumer electronic industries to have a fair chance of enactment. I expect that that legislation will include both consumer downloads of music and collective licenses to pay for them. Such a bill is less likely to resemble the proposals advanced by Netanel, Fisher, Lunney, Ku, Gervais, or Lessig, however, than it is to be designed to maintain the current recording and music industry distributors in their market dominant position. Most importantly, it is less likely to incorporate a privilege for consumer-to-consumer dissemination than it is to include measures designed to prevent it. If we are willing to give up consumer-to-consumer dissemination in return for the instant gratification of licensed direct downloads, the recording industry is probably willing to sell us copy-protected files replicating much of the music it makes available in stores.

The prospect of downloading copy-protected versions of music otherwise available in stores is not particularly enticing. This is the music version of the online "Encyclopedia World," and we can do better. The promise of being able to find music that is not available in stores, and to share it with other consumers, in contrast, is compelling. Lots of music is

148. *See* Molikidan Tunksuu, *Dragonball Z a Titles and AirDates Guide*, *at* http://epguides.com/DragonballZ/. Dragonball Z is a violent and modestly homoerotic product of Japanese animation derived from a manga (comic book) authored by Akira Toriyama. The original manga and animated series appear to have been intended for an audience of grownups, but Funimation has edited them to make them more nearly suitable for children and licensed them to the Cartoon Network. *See* Usenet News Groups, alt.fan.dragonball, *at* http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&oe=UTF-8&group=alt.fan.dragonball, and Usenet News Groups, alt.fan.dragonball, *at* http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&oe=UTF-8&group=alt.fan.dragonball.us. The original manga have been translated into English and published by Viz Communications; the original Japanese television episodes can be viewed (in Japanese) on the International cable channel.

149. In 1995, I published an article suggesting that copyright law should be reformulated as an exclusive right to exploit works commercially. *See* Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 40-48 (1995). If that proposal were adopted, consumers would be free to engage in peer-to-peer file sharing, while commercial peer-to-peer file sharing software and services would face liability. That result seems to accord with many people's instincts about what makes sense. I don't mean by offering this reform plan to repudiate that proposal, which I continue to support. *See* Litman, *supra* note 1, at 180-85.

not available in any store, because it's old, it's obscure, it has little commercial potential, or the rights can't be cleared without a statutory license or privilege because it's just too difficult to figure out who owns them. Consumer-to-consumer music dissemination makes it possible to find and share that music.

The fact that more than sixty million consumers are currently exchanging music over peer-to-peer networks in the U.S. gives them a stake in the building consensus, and a political claim to a seat at the copyright bargaining table as well as a moral one. The details of any proposal for an online music system will determine the extent to which it promotes unfettered consumer-to-consumer exchange, allows untethered consumer use, encourages the broad dissemination of a wide variety of music of disparate types, takes advantage of the economies made possible by digital distribution, and pays composers and musicians. The details of such a system will also determine whether and to what extent it requires copyright police to enforce its rules. The more conversations that people who are not copyright lobbyists can have about the details of a revised copyright bargain, the better positioned they will be to shape the law Congress may enact.[150] The devil will be in the details, and focusing on the details allows us to figure out which ones are most important.

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

150. *See* Jessica Litman, *Ethical Disobedience*, 5 ETHICS AND INFORMATION TECHNOLOGY 217 (2003).

So, should I have a drink with that guy or not?[151]

One important goal of online music copyright reform, I would argue, should be to encourage music file sharing, as distinguished from merely tolerating it. To do that, it should incorporate some licensing mechanism that can cut through the thicket of overlapping and conflicting rights. In addition, the legal defaults of such a system need to be reset to "share" rather than "hoard." So long as shareable is the legal default, we don't need to make sharing compulsory. We can allow creators who would like to prevent their music from being shared to make that election, without encouraging them to do so. The system should allow consumers, computers and software to ascertain, easily, whether music is hoarded or shareable, and thus encourage the design of computer software allowing the sharing of shareable music while making it difficult to share hoarded music. Another equally important goal is to generate and actually distribute payments to the creators of music. Moreover, music copyright reform should be cast so as to avoid unnecessarily entrenching the intermediaries who dominate the current bricks-and-mortar distribution system, and should provide opportunities for the generation of new digital intermediaries who can explore different ways of adding value to music and promoting it to its audience. Finally, a reform proposal should in the best of worlds accomplish all of this without abrogating any international copyright treaties.

With those goals to guide us, we can envision a legal architecture that would encourage but not compel copyright owners to make their works available for widespread sharing over digital networks. Although a variety of different licensing mechanisms would be suitable, I favor a blanket license that would be both statutory and voluntary. By statutory, I mean that the copyright law would prescribe the terms and conditions of the license. By voluntary, I mean that the law would provide an opportunity to designate works as ineligible for the blanket license. Critics of compulsory license proposals have complained about government involvement in music price regulation, and suggested that collective licensing using a copyright owner member organization, rather than the government, to collect and disburse royalties would be a superior alternative.[152] Our experience of collective licensing, however, indicates that royalty collectives may

151. *See* Randy Cohen, *The Ethicist: Is it Ethical to Google After A Blind Date?*, N.Y. TIMES MAGAZINE, Dec. 15, 2002, *at* 50; Neil Swidery, *A Nation of Voyeurs: How the Internet Search Engine Google is Changing What We Can Find Out About One Another – And Raising Questions About Whether We Should*, BOSTON GLOBE MAGAZINE, Feb. 2, 2003, *at* 10.

152. *See, e.g.*, Robert P. Merges, *Compulsory Licensing vs. the Three "Golden Oldies" Property, Contract Rights and Markets*, *CATO Institute Policy Analysis No 508*, *at* http://www.cato.org/pubs/pas/pa508.pdf (Jan. 15, 2004); sources cited *supra* notes 135 - 137.

sometimes be better at collecting money than disbursing it. A government agency that requires transparency from designated licensing agents and that can serve as the collection and disbursement agent of last resort for creators who designate no agent to represent them seems likely to encourage prospective licensing agents to compete in the representation they offer, and may diminish the possibility that any funds will be consumed by administrative and legal expenses before they can be allocated to claimants.[153]

We should build the statutory license around a payment mechanism designed to compensate creators and to bypass unnecessary intermediaries.[154] That mechanism should have sufficient flexibility to allow current and new upstart intermediaries to devise useful value-added flavors of intermediation and collect dollars accordingly. The most straightforward route to accomplish that would be to assign the right to collect the proceeds of the license directly to the individual creators of music rather than their intermediaries, but without relieving them of any contractual obligations they may have assumed to pass some portion of their receipts to others. Where extant contracts speak directly to the division of royalties for consumer-to-consumer digital dissemination, the contracts will doubtless control. Where contracts are unclear or lost, the creators and their intermediaries will need to work things out. Creators who don't wish to act as their own collection agents should be encouraged to designate agents to collect and disburse funds on their behalves. Where a composer or performer prefers to eschew representation, however, she should be able to collect her share of any fund from the government entity that will collect and disburse the money.

153. The current debates over proposals for alternative compensation systems have tended to devolve into religious disagreements over whether dividing the money up among claimants requires counting every download, as Fisher's system would, or relying on a less precise measure in order to preserve the privacy of downloaders, as Gervais and others suggest. Counting every download poses problems other than privacy. It makes little sense to require a measuring system that is so expensive that it consumes the bulk of the proceeds. As an initial matter, the law should instruct the government entity charged with disbursing the funds in very general terms, to ensure the money is distributed fairly among creators. Fine tuning, if it proves necessary, can come later.

154. Here I part company from both Netanel and Fisher, who insist that compensation under their proposed alternatives should flow to the copyright owners rather than to the creators of works. Netanel suggests that, under his system, empowered creators will no longer need to rely on intermediaries and will increasingly retain copyright ownership. *See* Netanel, *supra* note 121, at 58-59. I'm skeptical.

In the first instance, money should be disbursed to the musicians and composers who author music and recordings.[155] If musicians and composers have assigned their copyrights to intermediaries, they would be obliged to pass along their assignees' share of that money under whatever terms their contracts set.[156] There is value nonetheless in choosing to distribute the money directly to the creators. First, where contracts do not assign the copyright in its entirety and fail to speak to the rights to collect royalties for consumer-to-consumer digital dissemination, the question whether particular intermediaries have contractual rights to a portion of the fees will depend on the language of the particular contracts. If intermediaries are optional contributors to digital dissemination, it seems counterproductive to presume that they must have persuaded creative contributors to assign them any rights that would ever become remunerative. Where particular contracts don't seem to say, or simply cannot be found, the creators of the music ought to be able to keep the payments, or to find different intermediaries who may be able to administer digital rights without the inertia of bookkeeping tricks that became customary fifty or more years ago.[157] Second, directing the payments to authors and performers addresses a problem that has plagued the administration of extant compulsory licenses in the United States. The system for managing those licenses was designed by large, well-financed and legally sophisticated stakeholders, with large, well-financed and legally sophisticated stakeholders in mind, and has systematically disadvantaged stakeholders who are small, independent or poorly organized. The price of a ticket to a Copyright Arbitration Royalty Panel proceeding is beyond the means of all but the wealthiest interest groups.[158] Why not design the system so that individuals can actually use it? Finally, directing the payments to composers and musicians will pose an opportunity for new flavors of intermediary interested in providing a different package of services in return for a different percentage of receipts. Those

155. As well as encouraging creators to designate agents to collect on their behalves, we should permit them to designate percentages of any proceeds that should be disbursed directly to intermediaries under whatever contracts might call for a royalty split.

156. *Cf.* 17 U.S.C. § 114(g)(1) (2000) (providing that recording artists are entitled to receive payments from copyright owners for licensed webcasts in accordance with the terms of their recording contracts).

157. *See generally* Passman, *supra* note 143, at 72-77, 208-235.

158. *See Copyright Arbitration Royalty Panel (CARP) Structure and Process: Hearing Before the Subcomm. On Court, the Internet and Intellectual Property of the House Judiciary Comm.*, 107th Cong. (2002), *available at* http://www.house.gov/judiciary/80194.pdf (statement of MaryBeth Peters, Register of Copyrights); *id* at 150-51 (letter from Hilary Rosen, RIAA); *id*. at 167 (letter from Kevin Klose, National Public Radio).

intermediaries may introduce new value-added enhancements to digital distribution.

There are two extant models for collecting the fees to be divided among creators: the first model is a direct blanket license fee of the sort collected by performing rights organizations such as ASCAP. Subscribers wishing to engage in peer-to-peer file sharing would pay a premium that would absolve them from liability for infringement. The Electronic Frontier Foundation proposal for voluntary collective licensing endorses this model.[159] The second model is to impose a levy or tax on the sale of goods or services that are most directly involved in peer-to-peer file trading. Professors Netanel and Fisher, among others, base their proposals on this model.[160] The United States copyright statute includes examples following both models,[161] as do the copyright laws of our trading partners.[162] The levy or tax approach has the dual advantages of fairness[163] and relative ease of administration – it can be imposed on commercial activities that earn money from peer-to-peer file sharing without inflicting significant burdens on consumers. That strength may be its most important disadvantage: to the extent that license fees "feel free" to consumers they may conclude that paying creators for music is unnecessary or unimportant. Whichever model we adopt, though, we need to remember that the consumers who are engaging in this behavior are providing the valuable services that in the bricks-and-mortar world are provided by CD stamping plants, warehouses, trucks, record stores, and radio broadcasters, and they should be compensated accordingly.[164] The fees consumers pay to engage in file trading don't need to replace the income of the intermediaries they're replacing, and I think those fees shouldn't be large.

159. *See* EFF, *A Better Way Forward*, *supra* note 132, *at* http://www.eff.org/share/collective_lic_wp.php.

160. *See* Fisher, *supra* note 121, at 205-23 ; Netanel, *supra* note 121, at 35-84.

161. *See, e.g.*, 17 U.S.C. §§ 111(d)(1)(B) (1976) (cable compulsory license semiannual royalty calculated as a percentage of gross receipts); 115(c) (mechanical compulsory license monthly royalty computed by number of phonorecords made and distributed); 1004 (digital audio recording device royalty calculated as percentage of wholesale price of each device).

162. *See, e.g.*, Copyright Act, (1985) (Can.) § 66 (collective license royalty for public performance); § 82 (levy on blank audio recording media).

163. *See* Fisher, *supra* note 121, at 216-23. It makes sense to impose a fee on the commercial activities and objects most heavily involved in peer-to-peer music file trading. I include in this category commercial peer-to-peer file trading software, whether sold or advertising-supported. I'd personally also include the hardware and software that allows people to use their computers as home entertainment centers, especially those bundled into a computer by original equipment manufacturers: computer sound cards, computer speakers and software for CD ripping and music playing. It may make sense to collect a fee on broadband access, either as a broadband tax or a quasi-negotiated broadband peer-to-peer subscription fee.

164. *See* Ku, *supra* note 109, at 300-05.

If the legal architecture encourages sharing but permits what we might want to call "hoarding," then consumer-to-consumer exchange can develop without difficult legal or technological barriers.[165] Thus, I'd be willing to incorporate a limited, carefully structured, notice-based opt out for copyright owners who prefer control to payment. If hoarded music is indeed superior, it will be able to compete with the "free" stuff. (If it can't compete with the "free" stuff, then overall welfare is probably enhanced if we refuse to subsidize it with expensive legal barriers and copyright police.) To achieve a legal regime that encourages sharing but permits hoarding, we should impose a requirement that copyright owners who decide to hoard must forgo any payment for hoarded works from the common payment system, and must take affirmative but relatively modest steps to exclude their works from the network and enable consumers to quickly and painlessly ascertain that those works may not lawfully be shared.

My reasons for preferring a system that copyright owners can choose not to participate in are at least in part pragmatic. First, so long as the legal and technological architecture are optimized for sharing, allowing copyright owners to withhold their works does little harm. Paid subscription information and news sites on the Internet coexist comfortably with sites that are open to the public and free of charge; if we can duplicate that peaceful coexistence for digital music, it seems sensible to try to do so. Second, if we design an alternative compensation system to collect enough money to compensate the proprietors of mega-hits for all of their forgone income, we can expect that the expense of such a system will be unreasonably high, and that the compensation paid to the creators of more modestly successful music will be unreasonably low. Third, if such a system allows copyright owners to decline to participate, it seems more likely that it will be deemed at least arguably compliant with our treaty obligations under the *Berne Convention* and the *WIPO Copyright Treaty*.[166] Finally, my proposal is motivated in part by my conviction that composers and musicians have been ill-served by the current system. If they

165. I believe that in general outline, this solution is appropriate for copyrighted works other than music. *Cf.* Litman, *supra* note 1, at 180-86 (outlining alternative to current copyright law). I focus on music here because the differences between my proposal and current law are narrowest in the music context, and because the peer-to-peer file sharing of music recordings is perceived to be the current emergency facing copyright legislators.

166. Although desirable, the proposal's *Berne*-compatibility is optional. We could comply with our treaty obligations by limiting the application of any provision to "United States works" as defined in 17 U.S.C. § 101. United States works include all works first published in the U.S. *Cf. Public Domain Enhancement Act*, H.R. 2601, 108th Cong. § 3 (2003) (limiting the bill's provisions to "United States works"). The Berne Convention obliges us to protect the copyrights of members of Berne nations without requiring any formalities.

nonetheless prefer the dysfunction they know to a new and unproved system, and we can make the system work without including them, I see no important policies that will be served by forcing them to participate. At the same time, it makes little sense to allow copyright owners to opt out too easily. A key element of my proposal relies on consumer willingness to pay a blanket license fee to share some but not all music. I believe that consumers will be willing to pay a blanket license fee if it seems clear that they are buying something of appropriate value. The value of the system would diminish significantly if the list of unshareable music were so long it became burdensome to check it.

To enable an opt-out mechanism that won't deform the legal and technical architecture encouraging sharing, I suggest that we try to reproduce the functions that notice and indivisibility provided before we abandoned them.[167] Consumers should be able to rely on an assumption that musical works may be shared unless copies of the works indicate otherwise in some fashion that can be read by both consumers and their computers. The key to the opt-out mechanism I propose is the selection of a single digital file format or family of formats capable of conveying copyright management information as defined in section 1202 of the copyright act.[168] The format will probably incorporate digital rights

167. To the extent possible, we should do this without further undermining the United States' debatable position that it complies with the *Berne Convention*. Our argument that US law protected *droit moral*, always dubious, seems even less tenable after *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, (2003). After *Dastar* it is difficult to make a credible argument that the United States complies with our obligations under article 6 *bis* of the treaty. The WTO, further, has ruled that 17 U.S.C. § 110(5) (2000) violates our treaty obligations under articles 11, 11 *bis*, and 13 of *Berne*. *See International Developments*, 23 No. 6 ENT. L. REP. 4 (2001); *WTO, Award of the Arbitrators in United States—Section 110(5) of the US Copyright Act, at* http://www.wto.org/english/tratop_e/dispu_e/160arb_25_1_e.pdf.

168. *See* 17 U.S.C. § 1202 (2000):

> "copyright management information" means any of the following information conveyed in connection with copies or phonorecords of a work or performances or displays of a work, including in digital form, except that such term does not include any personally identifying information about a user of a work or of a copy, phonorecord, performance, or display of a work:
>
> (1) The title and other information identifying the work, including the information set forth on a notice of copyright.
>
> (2) The name of, and other identifying information about, the author of a work.
>
> (3) The name of, and other identifying information about, the copyright owner of the work, including the information set forth in a notice of copyright.
>
> (4) With the exception of public performances of works by radio and television broadcast stations, the name of, and other identifying information about, a performer whose performance is fixed in a work other than an audiovisual work.
>
> (5) With the exception of public performances of works by radio and television broadcast stations, in the case of an audiovisual work, the name of, and other

management capability because the people who will be using it will desire that feature, but there's no need for any copy-protection to be hack-proof, or even exceptionally durable. To the extent feasible, the new format should be compatible with the current generation of digital playback devices.[169] I'll call the format "*.drm" for short.[170] Any musical work or sound recording that is made available to the public, under the copyright owner's authority, only in *.drm format will be ineligible for sharing or compensation.[171] At such time as the creators or copyright owners of a work desire to participate in the revenue earned from digital sharing, they may publish the work in other formats and become eligible to collect compensation.

What about the works being traded on peer-to-peer networks today? The system can incorporate an opportunity to withdraw works from sharing, but in fairness to consumers, the process for withdrawing a work should be significantly more difficult than the initial choice to withhold it.[172] (Frankly, I'd prefer it if it were sufficiently onerous to withdraw a work from the shareable realm that it would almost never make economic sense to pursue it. Some works will doubtless be hoarded for non-economic reasons,[173] but we shouldn't encourage it.) Moreover, discouraging consumers from trading hoarded music requires that they

> identifying information about, a writer, performer, or director who is credited in the audiovisual work.
> (6) Terms and conditions for use of the work.
> (7) Identifying numbers or symbols referring to such information or links to such information.
> (8) Such other information as the Register of Copyrights may prescribe by regulation, except that the Register of Copyrights may not require the provision of any information concerning the user of a copyrighted work.

169. I've been unable to get a definitive answer to my question whether any extant file format (for example, one of the formats generated by the now moribund Secure Digital Music Initiative, *see* http://www.sdmi.org), would fit the bill, or whether a new format would need to be designed. The chief difficulty in adopting any of the proprietary formats now in use seems to be in ensuring backward-compatibility with legacy CD players.

170. Naming the format "*.drm" burdens it with baggage from the debate over the propriety of digital lock-up. *See, e.g.*, Julie E. Cohen, *DRM and Privacy*, 18 BERKELEY TECH. L.J. 575 (2003); Raymond Shih Ray Ku, *Consumers and Creative Destruction: Fair Use Beyond Market Failure*, 18 BERKELEY TECH. L.J. 539 (2003). My preference would have been to name the format *.cmi, but "cmi" has a settled inconsistent meaning.

171. Implementing the proposal would require an amendment to the mechanical compulsory license provisions in 17 U.S.C. § 115 (2000). As amended, section 115 would need to require any recording of a work issued only in *.drm format to itself be in *.drm format. *See* Loren, *supra* note 68.

172. If, as some claim, the recording and music industries are intent on protecting their hot new hits from peer-to-peer networking but are resigned to the traffic in unauthorized copies of older releases, that feature should not be too bitter to swallow.

173. I would, for example, expect composers and performers to want to consider withdrawing works upon terminating copyright transfers under section 203 or 304.

believe the division between shared and hoarded is a reasonable one. If consumers understand that hoarding applies to new works and not the stuff on their hard disks, they're more likely to go along.

For all works that have been released in any format other than *.drm, then, the law should adopt a presumption of shareability. Copyright owners may avail themselves of an opportunity to withdraw works that have already been made available to the public, but the terms of that opportunity should be sufficiently burdensome that they don't lightly undertake to withdraw a work. I'd suggest that withdrawing a work would require the copyright owner to take the following steps: All owners of the copyright in the work, as well as the work's creators, would be required to join in the decision to withdraw.[174] First, the copyright owners would need to recall copies of the work released in formats other than *.drm,[175] and offer any consumers who own authorized, commercial copies in a non-*.drm format the opportunity to swap those copies for *.drm copies at no charge. Second, the law should incorporate a 24-month grace period before any withdrawal of a work could take effect.[176] (In the meantime, withdrawn works could collect payments from the common fund.) Finally, in order to recover in an infringement suit for consumer-to-consumer dissemination of a withdrawn work, the copyright owner would need to show knowledge that the work had been withdrawn.[177]

Whatever happened to Herman's Hermits?[178]

With the exception of works released only in *.drm format, consumer-to-consumer dissemination and any reproduction, distribution or public performance or display that it entailed, would be completely legal. Any music that's already been released in other formats could be recaptured only with great difficulty, so the overwhelming majority of music currently being shared over peer-to-peer networks would not be locked back up. It would, however, be eligible for compensation. Creators of new releases could choose to make them available for sharing or they could hoard them

174. *Cf.* 17 U.S.C. § 203(a) (2000).

175. *Cf.* 17 U.S.C. § 405 (a)(2) (2000).

176. Cf 17 U.S.C. § 104 (2000).

177. Despite the Berne Convention's prohibition of formalities, it should be possible to establish an optional registry of withdrawn works, and provide that listing of a work on the registry for 24 months would allow the copyright owner to show constructive notice of withdrawal. *Cf.* 17 U.S.C. §§ 401, 408 (2000) If a voluntary registry is deemed to pose Berne compliance problems, then copyright owners suing for infringement of withdrawn works would need to prove actual notice.

178. *See Guitarsam's Ezine, at* http://www.guitarsam.com/ezine/2001.2/5.htm (Feb. 2001) (Peter Noone, the Herman of Herman's Hermits, performs to this day).

and forgo both the free distribution and the additional income that sharing would generate.

Inevitably, some noncompliant consumer will seek to trade a *.drm file over a peer-to-peer network. Copyright owners could sue, as they do now, for copyright infringement. Notwithstanding that record labels are currently pressing copyright infringement suits against individual peer-to-peer file traders, why would they settle for a system that gives them no more effective an enforcement mechanism than the one they have now? My answer is that if hoarding were reserved for new releases with significant commercial potential, I believe that consumers would be far more likely to respect the choice to hoard, and a law with broad consumer support is easier to enforce than one that lacks it.[179]

The use of a single file format will enable consumers easily to identify files they may not share and facilitate efforts of software designers to create file sharing software that blocks transfers of proprietary files. The use of a single, identified file format captures some of the public benefits of copyright notice and registration. By allowing copyright owners to opt out of file sharing so long and only so long as their work remains published in the single *.drm format, the proposal mitigates the effects of divisibility by requiring the copyright owners to coordinate with one another in exploiting their works.

My specific proposal is inspired by an impulse to see whether an architecture like the one that has permitted the Internet to flourish as an information space can define a thriving music space. The U.S. recording industry's recent enforcement campaign seems to seek to move us in a very different direction. It promises us something we would all agree is desirable if we only renounce what to many of us is crucial. The recording industry appears poised to accept a world in which we agree to allow consumer downloading (for a price) but not what the recording industry is calling "uploading" – which is the state of having on your hard disk a music file that someone else can search for and copy from you. Just as the idiosyncratic interests of large numbers of individuals who want to share is directly responsible for the wealth and incredible variety of information we can find when we go looking for it, I think that consumer-to-consumer file trading has the potential to make it economically feasible to distribute a much broader variety of music to a much larger audience. I'd hate to lose that potential just because it's strange, new, unproven, and not yet well represented by lobbyists.

179. *See* Litman, *supra* note 1, at 111-121.