The White Paper argued that its proposed enhancement of copyright owner’s rights was without question in the public interest, because it was a necessary first step in the creation of the Information Superhighway. This was the central justification for further enhancing the rights in the copyright bundle: without strong copyright protection, there would be no National Information Infrastructure. The public might believe that what it wanted was unfettered access to copyrighted works in return for reasonable royalty payments to authors, but, if we let the public set the freight charges, we would risk underproduction of freight. If authors and publishers could not reliably control their works, they would decline to make them available at all. The working group put it this way:

Thus, the full potential of the NII will not be realized if the education, information and entertainment products protected by intellectual property laws are not protected effectively when disseminated via the NII. Creators and other owners of intellectual property rights will not be willing to put their interests at risk if appropriate systems—both in the U.S. and internationally—are not in place to permit them to set and enforce the terms and conditions under which their works are made available in the NII environment. Likewise, the public will not use the services available on the NII and generate the market necessary for its success unless a wide variety of works are available under equitable and reasonable terms and conditions, and the integrity of those works is assured. All the computers, telephones, fax machines, scanners, cameras, keyboards, televisions, monitors, printers, switches, routers, wires, cables, networks and satellites in the world will not create a successful NII, if there is no content. What will drive the NII is the content moving through it.\(^2\)

If the public wished an NII, the argument went, it must offer strong copyright protection as a bribe to those it hoped to persuade to create enough
stuff to make an NII worthwhile. Relying on a hope that if the public only built the infrastructure, the information to travel it would come was said to be naive; of course the owners of protectible works would refuse to permit those works to be exploited unless their ownership rights were secure.

To the extent that authors were willing to make content available on the Internet under existing law, the argument continued, it was because the material was so low in quality as to have little value except to its author. We would need to ensure that the authors of the future had control over the uses of their creations, so that they would feel secure in distributing their works over the Information Infrastructure—that’s why so much of the content that was already there was material that nobody would want to steal.³

Only a few years later, that assertion seems incredible. Well before the enactment of the Digital Millennium Copyright Act, there was plenty of professionally created and formatted commercial content out there on the World Wide Web. The New York Times, the Washington Post, and the Wall Street Journal launched hypertext versions of their newspapers.⁴ CNN and ABC news both opened Web sites that allowed browsers to read material that had been broadcast earlier.⁵ Wired magazine and c|net did them one better with news sites on the Web that were updated continuously.⁶ It still isn’t clear to me whether all these businesses will end up making money from their sites, but it seems evident that they think there’s a good possibility that they will figure out a way to do so.⁷ The fact that a wealth of commercial content flooded the Web, even as the Lehman Working Group insisted that commercial content producers would withhold their material, suggests that the argument was based on flawed assumptions. Still, the fact that there were some daring entrepreneurs who were willing to take big risks in the interest of gaining market share, on the theory they would worry about making a profit later, is not necessarily news. That’s our history: it happened with radio, television, and cable television; why not the Internet? What’s more damaging to the Lehman Working Group’s account is the extraordinary variety and innovativeness of the expression available over the Net that isn’t professionally created and formatted commercial content, but that explores some of the new possibilities of the medium.

Before the deployment of the World Wide Web, the Internet contained a wealth of useful and entertaining material. Individuals posted files containing interesting information, data, software, or text. Gopher software enabled others to search the Internet for those files and retrieve them. Usenet news, a free-floating collection of more than twenty thousand sub-
ject-specific online discussion groups, offered virtual conversation on any imaginable topic. A second-year law student put together a six-part FAQ (collection of frequently asked questions) about copyright law that was superior to all study aids I’ve seen and to most of the copyright treatises. I recommend it to my students—and it’s free. A software design professor I ran into amused himself for a time by writing reviews of classic science-fiction books and posting them to Usenet news. Now, I would buy a book of these reviews just to have it on my shelf. They are elegantly written, perceptive, clever, worth reading in their own right. I’m embarrassed to admit that early in our electronic acquaintance, I suggested that he write such reviews professionally. Silly me—after all, he was a software design professor who was doing this for fun.

These are just two examples of work that, in my judgment, is of better quality than I already pay cash for in stores. In addition to that kind of material, there is the whole-is-greater-than-the-sum-of-its-parts stuff—the works that have enormous value precisely because they’re collaborative. As a middle-aged parent, I feel as if I have acquired a lot of expertise on the usefulness of many of the sources of “How-to-be-a-parent” advice out there. All my friends gave me their favorite parenting books, and I’ve spent a lot of time in the childcare sections of a large number of bookstores. Perhaps the most useful collection of parenting advice I’ve ever run into, though, is a series of assemblages, without evaluative editorial comment, of wisdom on any parenting topic you could name from subscribers to the Usenet newsgroup misc.kids. It isn’t that any of the individual posters to misc.kids is so wise a parent, as that the online dialogue among many parents (and some of their children) allows a great deal of common wisdom to emerge.

Usenet news and gopher services had undeniably clunky interfaces, and their audiences were accordingly small. The World Wide Web enabled the transformation of the Internet into a mass medium. The siren call of e-commerce should not obscure the fact that much of the most compelling content available on the Web today was originally created by volunteers who made it freely available. Yahoo! is rated the second most popular site on the Web by Neilsen/Netratings, with reported net revenues of $270,116,000 for the second quarter of 2000. The service originated with a directory created in 1994 by two Stanford graduate students, who posted it on Stanford University’s Web server. Traffic was overwhelming, and the following year Yahoo! moved to a commercial Web server. The Internet Movie Database (IMDB) at <www.imdb.com> is a highly rated (and highly
addictive) advertising-supported Web site that offers comprehensive information on movies, video, and television shows. It began in 1990 as lists of FAQs assembled through collaboration among movie fans and posted to the Usenet news group rec.arts.movies. The individual who went on to found the Web site created a computer program that permitted the lists to be searched. Volunteers created enhanced search software and added items and categories to the database. In 1993, the database was posted on the Web, again hosted on a university server. In 1996, IMDB incorporated and began to sell advertising. Two years later, Amazon.com saw an opportunity to market videotapes, and purchased the company.\(^{14}\)

Both of these applications, like much of the content on the Internet, began as someone’s hobby before evolving into significant businesses, and were initially made freely available without any notion of an ultimate business plan. Napster is a system that allows individual Internet users to search one another’s computers for music files, and to copy music files directly from other people’s hard drives. Napster began when a college freshman designed the software and posted a beta version on the Internet for free downloading. The application’s popularity was nearly instantaneous, and its creator dropped out of college to pursue the project full time.\(^{15}\) It accumulated forty million subscribers in less than a year. Napster itself provides no content. Its forty million subscribers sign on to take advantage of its software, which permits them to share content with each other. Indeed the World Wide Web itself was developed to enable high energy physicists to share information.\(^{16}\) That design was and continues to be freely available to anyone with an Internet connection. Most fundamentally, lots of people continue to make material available on the Internet because they enjoy sharing it. The Internet makes collaboration and sharing easy.\(^{17}\)

The fact that authors are willing to create new works in the absence of strong copyright protection should hardly be surprising. Of course many authors write much of what they write because they will get paid for it. If payment were the most important consideration, though, most of them would probably not write anything at all—they’d be doing something more remunerative with their talents and their time. We have always needed copyright, rather, because publishers and distributors publish and distribute to make money. We have needed copyright as an incentive to bribe publishers to invest in finding the authors, and their works, and printing, reprinting, publishing, and vending that work to end users.

But one of the miracles of modern technology is that publishing over
a digital network needn’t be expensive. The ease of copying that poses the threat to copyright also makes it possible for works to be widely distributed at very low cost. People who have created, or wish to create, works that for one reason or another would not be likely to find a conventional publisher are able to make those works available very cheaply via the Internet, and less incentive is needed to inspire such distributions, since the cost and trouble involved in distributing is nominal.

Imagine for a moment that some upstart revolutionary proposed that we eliminate all intellectual property protection for fashion design. No longer could a designer secure federal copyright protection for the cut of a dress or the sleeve of a blouse. Unscrupulous mass-marketers could run off thousands of knock-off copies of any designer’s evening ensemble, and flood the marketplace with cheap imitations of haute couture. In the short run, perhaps, clothing prices would come down as legitimate designers tried to meet the prices of their free-riding competitors. In the long run, though, as we know all too well, the diminution in the incentives for designing new fashions would take its toll. Designers would still wish to design, at least initially, but clothing manufacturers with no exclusive rights to rely on would be reluctant to make the investment involved in manufacturing those designs and distributing them to the public. The dynamic American fashion industry would wither, and its most talented designers would forsake clothing design for some more remunerative calling like litigation. All of us would be forced either to wear last year’s garments year in and year out, or to import our clothing from abroad.

Or, perhaps, imagine that Congress suddenly repealed federal intellectual-property protection for food creations. Recipes would become common property. Downscale restaurants could freely recreate the signature chocolate desserts of their upscale sisters. Uncle Ben’s® would market Minute® Risotto (microwavable!); the Ladies’ Home Journal would reprint recipes it had stolen from Gourmet magazine. Great chefs would be unable to find book publishers willing to buy their cookbooks. Then, expensive gourmet restaurants would reduce their prices to meet the prices of the competition; soon they would either close or fire their chefs to cut costs; promising young cooks would either move to Europe or get a day job (perhaps the law) and cook only on weekends. Ultimately, we would all be stuck eating Uncle Ben’s Minute Risotto® (eleven yummy flavors!!) for every meal.
But, you’ve heard all of this before. It’s the same argument motion picture producers make about why we needed to extend the duration of copyright protection another twenty years; the same argument software publishers make about what will happen if we permit other software publishers to decompile and reverse-engineer their software products; the same argument database proprietors make about the huge social cost of a failure to protect their rights in their data. Perhaps the most important reason why we have intellectual property protection is our conclusion that incentives are required to spur the creation and dissemination of a sufficient number and variety of intellectual creations like films, software, databases, fashions, and food.

Of course, we don’t give copyright protection to fashions or food. We never have.

The link between production and dissemination of valuable, protectible works and the degree of available intellectual property protection is equivocal. History teaches that whenever we have discovered or enacted a copyright exception, an industry has grown up within its shelter. Player piano rolls became ubiquitous after courts ruled that they did not infringe the copyright in the underlying musical compositions; phonograph records superseded both piano rolls and sheet music with the aid of the compulsory license for mechanical reproductions; the jukebox industry arose to take advantage of the copyright exemption accorded to “the reproduction or rendition of a musical composition by or upon coin-operated machines.” Composers continued to write music and found ways to exploit these new media for their works.

The videotape rental business swept the nation shielded from copyright liability by the first sale doctrine. The motion picture industry predicted that if Congress failed to rush in to correct the problems posed by the invention and marketing of the videocassette recorder, American television would slowly be destroyed, and American motion picture production would sustain grave injury. In 1982, Howard Wayne Oliver, Executive Secretary of the American Federation of Television and Radio Artists (AFTRA), told a House subcommittee:

Unless we do something to ensure that the creators of the material are not exploited by the electronics revolution, that same revolution which will make it possible for almost every household to have an audio and video
Notwithstanding all of the gloom and doom, however, both the motion picture and television industries discovered that the videocassette recorder generated new markets for prerecorded versions of their material.

Cable television began spreading across America with the aid of a copyright exemption; it eclipsed broadcast television while sheltered by the cable compulsory license. Yet, there is no dearth of television programming: indeed, as recently as the early 1990s, the popular media image of the “Information Superhighway” included five hundred television channels to accommodate it all.

Even an erroneous assumption of copyright immunity can stimulate a nascent industry. The commercial photocopy shop prospered in part because of the university course-pack business made possible by a supposed fair use privilege. Commercial and noncommercial subscriptions to services providing access to the Internet increased geometrically in the early 1990s, when much of the activity on the net seemed to take place on the (false) assumption that any material on the Internet was free from copyright unless expressly declared to be otherwise. Nonetheless, there were scores of electronic magazines and news services developed specifically for electronic distribution, even then, and many commercial publishers had begun to release their works over the Internet despite the absence of effective coercive means of protection.

Without regard to legal rules, there is already a wealth of incentives that seem to suffice for the production and distribution of a great deal of authorship over the Internet. I find some of that authorship to be of extraordinary quality. Lots of it I would pay cash for in stores if I could find it in stores. That suggests that even without any improvement in the incentives for authors or the control authors have over their works, there will be many interesting things available over the Information Infrastructure—but that those things may not come to us from the entities who have been supplying content to the conventional media. This last fact, while of crucial importance to the folks who have been supplying content to the conventional media, is not really a problem for the rest of us. Indeed, it may be a positive good from our perspective. The new players who are entering the game now are exploring the possibilities and idiosyncrasies of the new dig-
ital medium and inventing new sorts of copyrightable authorship leading
to works not currently available in stores.

The narrow focus on threats to copyright owners’ control of their works
can lose sight of the potential value, to authors as well as to readers, of a
digital network permitting high-speed transmission of a variety of material
with few constraints. That network can both encourage creation and dis-
semination by reducing the costs associated with it, and can enhance the
value of material made available over the network because of the ease with
which it can be linked to other valuable material.

The most exciting possibilities offered by networked digital technology
aren’t its potential to allow the instant distribution of books, music, and
movies, but, rather, its capacity to generate new classes of unbooks, unmusic,
and unmovies. If we try to restructure this market to impose the pattern that
has worked so well for the purveyors of current books, music, and movies,
we risk driving the new unbooks out. That would be a terrible loss.

NOTES

1. Portions of this chapter are adapted from two previously published articles:
The Exclusive Right to Read, 13 Cardozo Arts & Entertainment Law Journal 29 (1994),
and Copyright Noncompliance (or Why We Can’t “Just Say Yes” to Licensing), in Symposium:
The Culture and Economics of Participation in an International Intellectual Property Regime,
2. Information Infrastructure Task Force, Intellectual Property and the National
3. See, e.g., Copyright Protection on the Internet: Hearing Before the Courts and
Intellectual Property Subcommittee of the House Committee on the Judiciary, 104th
Cong., 2d sess. (February 7, 1996) (testimony of Barbara A. Munder, McGraw Hill
Co., for the Information Industry Association); see also Bruce A. Lehman, Copyright
Fair Use and the National Information Infrastructure (address delivered at George
Mason University, February 23, 1996).
com/>; URL: <http://interactive.wsj.com/>; See also, e.g., URL: <http://www.epicurious.
com> (Gourmet and Bon Appetit magazines).
5. See URL: <http://www.cnn.com>; URL: <http://www.abcnocews.com>; see
also URL: <http://www.npr.org> (National Public Radio).
7. Many Web sites sell advertising, although the value of (and appropriate
price for) Web advertising is still unclear. Other sites sell subscriptions, see, e.g., URL: <http://interactive.wsj.com/subinfo.html> (Wall Street Journal).

8. “FAQ” stands for “answers to Frequently Asked Questions” and is a common format for reference works disseminated through Usenet news or over the World Wide Web.

9. See Terry Carroll, Copyright F.A.Q., URL: <http://www.tjc.com/copyright/>. 10. See Dani Zweig, Belated Reviews, URL: <http://sf.www.lysator.liu.se/sf_archive/sub/belated.html>. Dr. Zweig is the source of the turns of phrase used by the imaginary client in chapter 4. He has given up the joys of academia for a private-sector job in the software industry.


17. Another whole realm of content on the Internet is represented by works that explore the features of the new media in ways that lead to works of authorship that are different from conventional works in fundamental ways. Authors have only begun to exploit the ways that hypertext linking can transform the ways people write and the ways that they read. The variety of hypertext-enhanced compilations on the World Wide Web is mind-boggling. Hypertext fiction challenges conventional notions of plot progression. See, e.g., Isabel Chang (aspergillum gently), URL: <http://doxa.net/168/> (2000); Judd Morrissey, w.i.p., URL: <http://www.the-jewsdaughter.com/> (2000). Hypertext markup language makes possible new species of visual puns. Such puns are easy to find on the World Wide Web, but tend to be fleeting. One of my favorite examples was the mock Bob Dole for President Home Page, which once existed at URL: <http://www.dole96.org/>, and was probably removed in response to a protest from the Dole Pineapple Company. The parody superimposed the candidate’s image over the Dole Company’s logo, and the slogan “the ripe man for the job!” The site included links to real and mock Web pages for other politicians and other fruits and vegetables.

18. See, e.g., Malla A. Pollack, Note, Copyright Protection for the Creative Chef, or How to Copyright a Cake: A Modest Proposal, 12 Cardozo Law Review 1477 (1991);


22. See 17 U.S.C. § 109. The first sale doctrine allows the owner of any lawful copy of most works to dispose of that copy as she pleases.


27. “Course packs” are photocopied collections of reading materials assigned for particular courses. Instructors frequently assemble course packs comprising journal articles and excerpts from published books to use in university courses in lieu of anthologies. Commercial photocopying services began in the 1980s to duplicate and bind course packs and then sell them to students.