

THE RESPONSE OF COPYRIGHT TO THE ENFORCEMENT STRAIN OF INEXPENSIVE COPYING TECHNOLOGY

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INTRODUCTION

Advances in reprographic technology have spawned inexpensive photocopiers, videotape recorders (VTRs), modems, computers, networks, and tape recorders capable of making high-quality copies.¹ These inexpensive devices have improved the dissemination of information to all of society's members. Unfortunately, however, the cheap pricing and wide availability of such devices have also caused a drastic increase in the unauthorized reproduction of copyrighted works.

For example, home video today is a \$14 billion a year business, and it accounts for almost three times the profit of United States box office sales.² Technologically reproduced videocassettes annually cost this flourishing home video business an estimated \$600 million domestically³ and "millions more worldwide."⁴ In fact, the Motion Picture Association of America estimates that five to ten percent of the nation's video inventory is pirated.⁵ Video copiers even make and sell bootlegged copies of movies that have not yet been released for videotape distribution.⁶

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¹ See generally Note, *Toward a Unified Theory of Copyright Infringement for an Advanced Technological Era*, 96 Harv. L. Rev. 450, 451-52 (1982) (describing different types of new reprographic technology).

² See Alan Deutschman, *Scramble on the Information Highway*, *Fortune*, Feb. 7, 1994, at 129, 131.

³ See *Motion Picture Anti-Piracy Act of 1991: Joint Hearing on S. 1096 Before the Subcomm. on Technology and the Law and the Subcomm. on Patents, Copyrights, and Trademarks of the Senate Comm. on the Judiciary*, 102d Cong., 1st Sess. 16 (1991) (statement of Rep. Howard L. Berman).

⁴ David Bollier, *Pirate Busters: Targeting the Producers of Illegal VCR Tapes*, *Chi. Trib.*, Apr. 10, 1988, § 13, at 34 (remarking that pirating videocassettes is "a flourishing white-collar crime that costs Hollywood an estimated \$700 million a year in revenues—and millions more worldwide").

⁵ See *id.* at 35.

⁶ See Alison Carper, *Film Fakes on Streets Before Screens*, *Newsday* (Long Island), Sept. 21, 1990, § 2, at 2 ("People were . . . selling pirated copies of movies that were currently in the theaters but not yet available on videotape . . .") (quoting Joe Valiquette, Spokesman, Federal Bureau of Investigation)); see also Nicholas E. Sciorra, *Self-Help &*

Such unauthorized copying occurs in the publishing industry as well. The proliferation of high-quality printers exacerbates the publishing industry's current problems by enabling book consumers to print copies of costly books inexpensively at their neighborhood copy stores.⁷ Despite the millions of dollars of losses sustained by publishers, however, both authors and book consumers fail to perceive the photocopying of a commercially available book as posing an ethical or legal problem.⁸ For instance, in his book *Marketing Yourself With Technical Writing: A Guide for Today's Professionals*,⁹ William Vatavuk, a writer, unabashedly advises new scientific writers to consider the inevitability of widespread photocopying in evaluating the success of their articles in reaching a large reader audience.¹⁰

The computer software industry complains of even greater losses than the publishing industry. Business software publishers lose approximately \$7 to \$12 billion to software bootleggers every year, and industry trade groups estimate that one-third of all software in use in United States business is pirated.¹¹ Software publishers lose even more money as a result of home software piracy: "For every legally purchased software disc designed for family use, an estimated three to seven illegal copies are passed along to friends and neighbors."¹² Software publishers are especially vulnerable to these losses because in order to make a profit they typically must recover huge research and development costs through product sales. The video game industry estimates, for example, that "a good video game can have as much

Contributory Infringement: The Law and Legal Thought Behind a Little 'Black Box,' 11 *Cardozo Arts & Ent. L.J.* 905, 908 (1993) (observing that "[w]orks embodied in the video medium are particularly susceptible to unauthorized copying").

This Note's analysis assumes that at least some of the consumers of pirated videos would purchase the original videos if the illegal videos were removed from the market.

⁷ See Deutschman, *supra* note 2, at 131 (stating that Information Superhighway will give rise to books, CDs, and videos being available on demand through virtual bookstores using high-speed printers that bind while they print). The market for college textbooks is currently \$2.6 billion per year. See *id.*

⁸ A *Washington Post* writer observes: "The crux of the problem, . . . publishers feel, is that the photocopier is such an ubiquitous part of life. Photocopiers are so inexpensive and accessible that people don't think twice about the ethics or legality of copying someone else's work without reimbursement or fee." Michael Schrage, *Everyman's Printing Press*, *Wash. Post*, July 31, 1978, at D8.

⁹ William M. Vatavuk, *Marketing Yourself with Technical Writing: A Guide for Today's Professionals* (1992).

¹⁰ See *id.* at 33.

¹¹ See Mike Meyers, *Software Hard Liners*, *Star Trib. (Minneapolis-St. Paul)*, Nov. 18, 1994, at 1D.

¹² *Id.*

as half a million dollars in [research and development] behind it that eventually must be paid by the buyer."¹³

The growth of the Information Superhighway only adds to publishers' woes.¹⁴ The Internet connects more than two million computers and over twenty million users worldwide.¹⁵ The Internet's electronic population, moreover, "is expected to double each year for the foreseeable future."¹⁶ Internet users have access not only to electronic mail (e-mail) and other services but also to the 100,000 electronic bulletin boards scattered throughout the globe.¹⁷

Although the Internet involves new technology, the nature of copyright infringement associated with the Internet is fundamentally similar to that connected with the photocopier or videotape recorder: users take advantage of technological advancements to copy both quickly and cheaply. Any computer user can create a bulletin board with just a personal computer, a modem, bulletin board software, and an easily obtainable connection to the Internet. Bulletin board operators and users may then upload virtually unlimited amounts of copyrighted information—including sound records, publications, and software—which subsequently can be downloaded by Internet users free of cost. For example, a University of Minnesota student bulletin board operator recently uploaded the latest versions of business, home, and game software packages onto his bulletin board, enabling downloaders to make hundreds of free copies of the software.¹⁸ Such

¹³ Carol Pogash, *The Latest Video Game: Electronic Rip-Off*, Wash. Post, July 4, 1981, at D7.

¹⁴ The Information Superhighway refers to the technology and networking used to effect telecommunication between people through computer networks. The Internet is a public, governmentally operated network which, in addition to several private networks, comprises the network portion of the Information Superhighway. See generally Jonathon D. Blake & Lee J. Tiedrich, *The National Information Infrastructure Initiative and the Emergence of the Electronic Superhighway*, 46 Fed. Comm. L.J. 397 (1994) (providing overview of technical and legislative events that will pave path for further expansion of Information Superhighway).

¹⁵ See Mary Holden, *Intellectual-Property Disputes Flare on the Electronic Frontier*, Chi. Daily L. Bull., Apr. 22, 1995, at 1; see also Pamela Samuelson & Robert J. Glushko, *Intellectual Property Rights for Digital Library and Hypertext Publishing Systems*, 6 Harv. J.L. & Tech. 237, 243-46 (1993) (containing general predictions about Internet capabilities, use, and growth); Orrin G. Hatch, *Digital Pirates*, Conn. L. Trib., Dec. 18, 1995, at 19 (observing that "[a]s of January 1994, 2,217,000 host computers were connected to the Internet"); Rex S. Heinke & Heather D. Rafter, *Rough Justice in Cyberspace: Liability on the Electronic Frontier*, Computer Law., July 1994, at 1, 2.

¹⁶ Heinke & Rafter, *supra* note 15, at 2.

¹⁷ See *id.* (explaining that these bulletin board systems form minicommunities on Internet).

¹⁸ See Meyers, *supra* note 11, at 1D.

bulletin board piracy accounted for \$1.5 billion in potential software sales in 1993 alone.¹⁹

The copying behavior enabled by such modern technologies encompasses copying by both individual copiers (private copying) and larger nonprofit or commercial entities (commercial copying). Furthermore, not only have advents in technology caused an increase in the amount of copying by existing private and commercial copiers, but also the steadily decreasing cost of technological devices fosters copyright infringement by individuals who previously were unable to afford reprographic technology.

In addition to facilitating copying that is quick and inexpensive, these new technologies enable individual and commercial copiers to behave in a virtually undetectable manner. Internet users, for example, can anonymously send hundreds of copies of a copyrighted work to family and friends by creating e-mail aliases.²⁰ Similarly, private copiers can effortlessly photocopy hundreds of copies of particular books in the privacy of their own home.

On first impression, the current copyright system may seem to face the threat of obsolescence due to the strain that new technology such as the Internet or photocopy machines places on copyright owners' ability to detect and enforce their rights.²¹ Closer analysis reveals, however, that the system is both effectively responding to the strains

¹⁹ See Barbara Carton, *Man Charged in Software Piracy*, *Boston Globe*, Sept. 1, 1994, at 41.

²⁰ See Holden, *supra* note 15, at 1 (observing that "[b]ecause Internet users often use 'handles' or nicknames, like CB operators, and can conceal their locations, it can be difficult to trace the point of origin for a particular computer transmission").

²¹ Commentators have urged a change in copyright law to accommodate the strain of new copying technology. See, e.g., Laurie Schuster, *Home Use of Videotape Recorders (VTRs): Infringement or Fair Use?*, 59 *Chi.-Kent L. Rev.* 209, 241 (1982) (stating that "[c]urrent copyright law is clearly incapable of meeting the challenges confronting it: challenges under the guise of new forms of media technology"); Holden, *supra* note 15, at 1 (quoting Brad Lyerla, an intellectual property lawyer at Jenner & Block who also writes the ABA newsletter on intellectual property law, as stating that "'there should be changes in [copyright law] . . . [I]t's a body of law that evolved really to protect literary works in the true sense of literary works. It's a poor fit with software and it doesn't work very well.'" (alteration in original)); Ken Kay & Steve Metalitz, *Copyright Act Needs Digital Expansion*, *Legal Times*, Apr. 8, 1996, *Special Report on Intellectual Property*, at 38 (stating that "[a]n update in copyright law protecting creative works in cyberspace is critical now if the full potential of digital formats is to be realized"); David G. Post, *Proposals Would Make Unsettling Changes*, *Legal Times*, Apr. 8, 1996, *Special Report on Intellectual Property*, at 39 (characterizing Clinton Administration's proposed copyright law changes as "far more" than minor alterations to existing law); Mark F. Radcliffe, *Debate Persists on Rights to Online Components*, *Nat'l L.J.*, Feb. 12, 1996, at C6 (stating that "[b]ecause the ease of copying works stored in digital forms places them at much greater risk of unauthorized use than works in analog form," amendment of the copyright laws is required).

that such technology places on copyright enforcement and maintaining a desirable level of copyright enforcement.²²

Part I of this Note sets the stage for an analysis of the copyright system's reaction to new technology by describing the history, structure, and economics of existing copyright law. Part I further explains that the existing copyright structure is one that provides only a low level of enforcement. This Part also describes the nature of the strain that new copying technologies place on copyright enforcement. Part II argues that the manner in which the current copyright system has responded to these enforcement problems—through industry-oriented solutions and judicial flexibility—compensates for the enforcement gap created by new technology.²³ Part III concludes by critiquing various alternative approaches to resolving the enforcement problem created by the strain of cheaper copying technology. Part III also closely examines the Clinton Administration's proposed changes to copyright law in response to the enforcement threat created by the Information Superhighway. The Note concludes that the current copyright system compensates for the threat of undetectable and inexpensive copying enabled by new reproduction technologies.

I

THE COPYRIGHT STRUCTURE

This Part sets the backdrop for a determination of whether the copyright system adequately compensates for its enforcement deficiencies. This Part first describes the policy basis and economic rationale of copyright law. It then analyzes the factors that affect copyright enforcement levels. It concludes by describing the strain that new copying technology places on the current structure's ability to enforce copyright law.

²² This Note does not consider the effect of altering the definition of either copyright owners' rights or what constitutes infringement, but focuses on determining how best to solve the enforcement and detection problems created by new technology. Notably, any alteration of the copyright laws in defining what is copyrightable necessarily would have an effect on copyright enforcement; however, such analysis is outside the scope of this Note. For a discussion of the copyrightability of works created without human intervention, see generally Evan H. Farr, *Copyrightability of Computer-Created Works*, 15 *Rutgers Computer & Tech. L.J.* 63 (1989) (examining copyrightability of computer-generated art, music, and literature).

²³ This Note only considers exact copying of entire works (literal copying). Issues surrounding derivative works, partial copying, and nonidentical copies are beyond the scope of this Note.

A. *The Historical and Constitutional Basis of Copyright Law*

The British Crown initially introduced copyright law to regulate the threat to the Crown created by the advent of the printing press in 1476.²⁴ Because publishers owned exclusive rights to their works, the Crown completely lacked control over the contents or distribution of various potentially controversial works.²⁵ Consequently, the Crown imposed a regulatory licensing system designed to limit the exclusive rights of publishers.²⁶

In the early eighteenth century, with the Statute of Anne,²⁷ the focus of copyright law turned toward the twin aims of enhancing the public welfare by encouraging the dissemination of knowledge²⁸ and encouraging "learned men to compose and write useful books."²⁹ The two-pronged policy basis of the Statute of Anne constitutes the overriding justification for American copyright law today.³⁰

Article I, Section 8, Clause 8 of the United States Constitution enables Congress to promulgate copyright law statutes "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."³¹ Like the wording of the Statute of Anne, the language of the constitutional grant indicates that the main purpose of copyright protection is to promote the general welfare by encouraging creativity and increasing the dissemination of new knowledge.³²

The current copyright law protects literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial, graphic, and sculptural works, motion pictures and other audio/visual works, sound recordings, and architectural work.³³ Under copyright law, "[c]opyright protection subsists . . . in original works of author-

²⁴ See Marshall A. Leaffer, *Understanding Copyright Law* 3-4 (2d ed. 1995).

²⁵ See *id.* (suggesting that Crown adopted first copyright law to quell success of newly invented printing press, which it feared would be used to spread religious heresy and political dissent).

²⁶ See *id.* at 4 (referring to 1534 decree prohibiting publishing without license and without approval by official censors).

²⁷ Act for the Encouragement of Learning, 1709, 8 Anne, ch. 19.

²⁸ See Leaffer, *supra* note 24, at 4.

²⁹ *Id.*

³⁰ See *id.* at 5 (discussing Statute of Anne as model for copyright law in United States). See generally Lyman R. Patterson, *Copyright in Historical Perspective* (1968) (surveying history of copyright law).

³¹ U.S. Const. art. I, § 8, cl. 8.

³² See Leaffer, *supra* note 24, at 4; see also William C. Walker, Jr., *Fair Use: The Adjustable Tool for Maintaining Copyright Equilibrium*, 43 *La. L. Rev.* 735, 736-37 (1983) (describing constitutional copyright compromise between dissemination and encouragement of authors).

³³ 17 U.S.C. § 102(a) (1994).

ship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."³⁴ Moreover, copyright protection extends from the point of creation until fifty years after the author's death.³⁵

B. *The Economic Rationale of Copyright Law*

Copyright law seeks to achieve the policy balance between encouragement and dissemination by fostering and maintaining a market for creative works. Creative works are different in nature from other goods sold on the market. Unlike tangible products like soap or cereal, once produced, creative works are inexhaustible.³⁶ In addition, freeloading copiers cannot readily be prevented from consuming creative works without legal intervention.³⁷ Freeloading reduces incentives for creators by hindering their recovery of even their initial production costs.³⁸

³⁴ *Id.*

³⁵ See *id.* § 302(a). In order to secure all of the advantages of copyright protection, a creator must affix notice of copyright law to her work, fulfill deposit requirements, and register with the Copyright Office. Notice of copyright generally consists of "affixing the name of the copyright owner, the date of first publication of the work and a symbol (©, copr. or copyright) in a reasonably noticeable location on the work." Leaffer, *supra* note 24, at 119. Although copyright law no longer strictly requires copyright owners to affix notice after the Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (codified as amended at 17 U.S.C.A. § 101 (West 1996)), notice is still highly recommended. See Leaffer, *supra* note 24, at 104. The deposit requirement consists of depositing two copies of the copyrighted work at the Library of Congress within three months after publication. See 17 U.S.C. § 407(a) (1994). The third requirement, registration with the Copyright Office, is a necessity if the copyright holder wishes to fully enforce her copyright in court. See, e.g., *id.* § 410(c) (stating that registration with Copyright Office constitutes prima facie evidence of validity of copyright in litigation).

Congress has also enacted legislation to bring new technology under copyright protection. See Semiconductor Chip Protection Act, Pub. L. No. 98-620, 98 Stat. 3347 (1984) (codified at 17 U.S.C. § 901).

³⁶ See Wendy J. Gordon, Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors, 82 Colum. L. Rev. 1600, 1610-11 (1982) (noting that intellectual property, having public good characteristics, is virtually inexhaustible once produced).

³⁷ See *id.* at 1610 (noting that absent legal ownership and control rights, creators of intellectual property would receive little revenue for their works). In contrast, manufactured consumer items are not inexhaustible once produced and do not lend themselves to freeloading. For example, a soap manufacturer only produces a limited number of bars of soap. Imitators could not easily freeload off of the manufacturer's production without the formula of the soap. Even if an imitator is able to exactly copy the soap, moreover, it would likely be unable to market the product as identical to the original manufacturer's product.

³⁸ See Leaffer, *supra* note 24, at 12. Notably, the original creator's head start over copiers alone is usually not large enough to enable her to adequately recoup creation costs. See *id.*

A copyright, however, confers a temporary monopoly on a copyright holder. The copyright monopoly is, in effect, a legally created economic construct which supplants the normal functioning of the market. By granting monopolies to creators, copyright law effectively limits the distribution of creative works, thus compensating for the inexhaustibility problem. Copyright law solves the freeloading problem by enabling copyright holders to enforce legally their monopoly rights against freeloaders.³⁹

Thus, although free market economics normally discourages monopolies because they create artificially inflated prices for customers,⁴⁰ congressional copyright legislation is premised on the assumption that the issuance of a limited monopoly best achieves the desired balance between disseminating creative works and fostering the authoring of such works.⁴¹ As the Supreme Court observed in *Mazer v. Stein*,⁴² “[t]he economic philosophy behind the [constitutional] 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 the public welfare through the talents of authors and inventors in Science and useful Arts.”⁴³ Under this philosophy, the monopoly’s exclusive nature in granting authors rights over their works encourages authors to create.⁴⁴ Moreover, the lim-

³⁹ As Professor Gordon observes, “[e]conomists ordinarily characterize intellectual property law as an effort to cure a form of market failure stemming from the presence of ‘public goods’ characteristics.” Gordon, *supra* note 36, at 1610.

⁴⁰ However, neither taxation nor centralized purchasing—both of which are alternative methods of dealing with public goods problems—can be applied to intellectual property because our “democratic society demands decentralized and diverse creation in the intellectual sphere.” *Id.* at 1612.

⁴¹ See H.R. Rep. No. 2222, 60th Cong., 2d Sess. 7-9 (1909), reprinted in Robert A. Gorman & Jane C. Ginsburg, *Copyright for the Nineties: Cases and Materials* 14 (1989); see also *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (stating that limited copyright grant is not designed to “provide a special private benefit” but rather constitutes “means by which an important public purpose may be achieved”); 1 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 1.03[A], at 1-44.28 (1995) (“[T]he authorization to grant to individual authors the limited monopoly of copyright is predicated upon the dual premises that the public benefits from the creative activities of authors, and that the copyright monopoly is a necessary condition to the full realization of such creative activities.” (footnote omitted)); cf. David Ladd, *The Harm of the Concept of Harm in Copyright: The Thirteenth Donald C. Brace Memorial Lecture*, 30 *J. Copyright Soc’y* 421 (1983), reprinted in *Modern Copyright Fundamentals* 206 (Ben H. Weil & Barbara F. Polansky eds., 1985) (asserting that copyright protection should be premised on notions of private property ownership and natural rights and not on ideal of public benefit).

⁴² 347 U.S. 201 (1954).

⁴³ *Id.* at 219.

⁴⁴ See Leaffer, *supra* note 24, at 11-13 (“[C]opyright law provides the incentive to create information and a shelter to develop and protect it.”); see also David H. Kramer, *Who Can Use Yesterday’s News?: Video Monitoring and the Fair Use Doctrine*, 81 *Geo. L.J.* 2345, 2352 (1993) (stating that “[g]overnment intervention is therefore required to induce

ited nature of the copyright monopoly, which extends only to authors who meet statutory requirements and lasts for only the statutorily fixed amount of time, ensures that the public has some access to creative works despite the copyright monopoly.⁴⁵

C. *Methods and Problems of Copyright Enforcement*

Copyright law cannot be effective without strong copyright enforcement. Copyright enforcement protects the policy balance sought by the statutory copyright monopoly and ensures that the twin goals

production of socially desirable levels of creative work"). See generally William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. Legal Stud. 325 (1989) (developing analysis of copyright law in terms of economic efficiency). But see Tom G. Palmer, *Intellectual Property: A Non-Posnerian Law and Economics Approach*, 12 Hamline L. Rev. 261, 262-63, 277-87 (1989) (critiquing Posner's economically based rejection of copyright law).

Copyright law also works to ensure the existence of a properly functioning market for creative works. In a law review article offering her market-oriented perspective on copyright law, Professor Wendy Gordon posits that the legal system should interfere with the market for creative works when the "conditions of perfect competition" associated with individual market transactions do not result in the maximization of value. Gordon, *supra* note 36, at 1614. She identifies these conditions of perfect competition as: (1) the bearing of all costs and benefits by persons with decisionmaking power; (2) perfect consumer knowledge about all of the characteristics of particular products; (3) absence of transaction costs; and (4) sufficient market enforcement mechanisms. See *id.* at 1605-11. According to Professor Gordon, the granting of a copyright monopoly "facilitates the functioning of the consensual market" and remedies the lack of perfect competition by impacting all four of the above-mentioned factors: (1) "it creates property rights" in decisionmakers; (2) it "provides valuable information" to consumers; (3) it "lowers transaction costs"; and (4) it "contains mechanisms for enforcement." *Id.* at 1612-13.

⁴⁵ This tension between the encouragement of creative works and the enhancement of dissemination is present both in the Copyright Clause itself and in the balance between the Copyright Clause and the First Amendment interest in public access to information. See Robert O'Neil, *Intellectual Property and Intellectual Freedom*, in *The Copyright Dilemma* 119, 119-21 (Herbert S. White ed., 1978) (noting paradox between protection of individual copyrights and First Amendment interest in dissemination of information); see also L. Ray Patterson & Stanley W. Lindberg, *The Nature of Copyright* 123-32 (1991) (discussing inherent conflict between First Amendment protections of public access to copyrighted materials and copyright interest in preserving proprietary rights of authors); Harry N. Rosenfield, *The American Constitution, Free Inquiry, and the Law*, in *Fair Use and Free Inquiry: Copyright Law and the New Media* 280, 281-83 (John S. Lawrence & Bernard Timberg eds., 2d ed. 1989) (describing pull between First Amendment dissemination interest and copyright interest); Niva Elkin-Koren, *Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 *Cardozo Arts & Ent. L.J.* 345, 392 (1995) (stating that "copyright doctrine mediates public interest in the production of information and the public interest in access to information"); Raymond T. Nimmer & Patricia A. Krauthaus, *Copyright on the Information Superhighway: Requiem for a Middleweight*, 6 *Stan. L. & Pol'y Rev.* 25, 27 (1994) (explaining that there is "basic tension between public and private rights in information" in intellectual property law).

of copyright protection and the encouragement of authors and dissemination of works are achieved.⁴⁶

Copyright enforcement is shaped by the practical economics of copyright ownership.⁴⁷ Although individual creators are the initial recipients of copyright monopolies, the businesses that market the creators' work may eventually become the true beneficiaries of the copyright if creators effectively or actually sign over their copyrights to the businesses that distribute and directly profit from the sale of the creative works.⁴⁸ The profits of these copyright-holding businesses are increased when copiers are effectively deterred from freeloading on creators' efforts. Despite the fact that some actual creators may wish to encourage wide dissemination of their works by condoning copying regardless of economic loss,⁴⁹ copyright-holding businesses require the incentive of copyright protection to assume the expensive risk of producing and distributing creative works.⁵⁰ For example, suppose that the manufacturing costs for *The Little Mermaid* were \$10 per videotape. Copyright law enables the manufacturer to price the original videotapes at \$25 per copy because the manufacturer sets the market value based partially on the manufacturer's ability to exclude others from marketing *The Little Mermaid*.⁵¹ Presumably, this additional profit encourages the manufacturer to sell the works of other

⁴⁶ See Zachariah Chafee, Jr., *Reflections on the Law of Copyright* (pt. 1), 45 *Colum. L. Rev.* 503, 506-11 (1945) (describing this implicit copyright balance).

⁴⁷ See Patterson & Lindberg, *supra* note 45, at 221-22 (arguing that market forces ultimately determine exact nature of copyright enforcement).

⁴⁸ The book-publishing, movie, and software industries all function in this manner. See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 421 (1984) (stating that Universal City Studios, Inc. and Walt Disney Productions owned copyrights to various movies); *American Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1, 27 (S.D.N.Y. 1992) (noting that even if authors are willing to relinquish copyright protection in order to encourage widespread dissemination of their work, publishers may not be willing to do so), *aff'd*, 60 F.3d 913 (2d Cir. 1994), cert. dismissed, 116 S. Ct. 592 (1995).

Some commentators have argued that any private property justification for copyright protection is rendered outmoded "by the increasing dominance of new corporate entities that produce and disseminate so much copyrighted material. . . . [T]he metaphor of the painter or engraver working alone . . . has lost its cogency." John S. Lawrence & Bernard Timberg, *Fair Use and Free Inquiry: Copyright Law and the New Media* 7 (2d ed. 1989).

⁴⁹ This may especially be true with respect to academic authors, who write articles with the genuine motivation to reach as many other academicians and students as possible. See *Texaco*, 802 F. Supp. at 16 (asserting that publishers, not academic authors, require compensation through copyright monopoly).

⁵⁰ On the whole, some works will be successes and others failures. Businesses such as publishing houses assume the risk of a particular work's failure in agreeing to take on expensive production and distribution costs. If copiers could freeload after the market has determined which products are the most successful, then businesses lose incentive to promote the creation of riskier works.

⁵¹ Part of the price of *The Little Mermaid* is also determined by demand for the videotape.

creators and compensates the copyright-holding business for its initial assumption of the economic risk of marketing *The Little Mermaid*.⁵²

To fully effectuate its goal of creating incentives for artists, copyright law depends primarily on civil enforcement by copyright-holding companies.⁵³ Copyright-holding companies typically sue in three situations. First, they bring suit once they ascertain that the cost of bringing suit is outweighed by the possible nonstatutory damages or injunctive relief available to them as a result of the suit.⁵⁴ Such damages or injunctive relief typically is proportional to both the cost of the copyrighted product itself and the amount of copying involved in a

⁵² Coasian analysis, which usually provides a useful starting point for the economic analysis of legal rules, notably fails to describe adequately the reality of copyright enforcement. See Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 *Colum. L. Rev.* 2655, 2661 (1994). The Coase theorem postulates that, in the absence of transaction costs, the initial distribution of rights between two parties is of little consequence because the parties eventually move resources to their highest value use through a series of costless transactions. See generally R.H. Coase, *The Problem of Social Cost*, 3 *J.L. & Econ.* 1 (1960). Basic application of the Coase theorem to copyright law indicates that, in the absence of transaction costs, the user of a creative work and the creator of the work should bargain to the socially desirable outcome, thus leaving the person who could use the copyright entitlement most productively with the entitlement. See Kramer, *supra* note 44, at 2353. In his article, Merges notes: "Despite a few brave attempts to assume away the obvious, those who have considered the application of the Coase theorem to [intellectual property rights] have noted the pervasive presence of transaction costs." Merges, *supra*, at 2661 (footnote omitted).

Coasian analysis neglects to consider that the main struggle in copyright law is not the determination of who should own the copyright, but rather whether the transaction costs of copyright enforcement adequately balance the value of copyright protection. For example, take company *A*, a publisher of written work *Q*. If copier *B* chooses to make copies of *Q*, *A*'s concern is not the optimal price of *B*'s partial ownership of *A*'s copyright of *Q*. Instead, the reality of copyright protection indicates that *A*'s main concern is with the transaction costs associated with *B* requesting permission to use *A*'s work.

⁵³ See *Civil and Criminal Enforcement of the Copyright Laws: Hearing Before the Subcomm. on Patents, Copyrights and Trademarks of the Senate Comm. on the Judiciary, 99th Cong., 1st Sess. 3, 19 (1985)* [hereinafter *Civil and Criminal Enforcement of the Copyright Laws*] (statement of Victoria Toensing, Deputy Assistant Attorney General, Criminal Division, U.S. Department of Justice) (providing statistics that show modest number of criminal prosecutions under copyright laws, despite statement that criminal enforcement of such laws is not "on the back burner"). In *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994), for example, the court held that the reach of the criminal copyright laws does not extend to sanctioning a bulletin board operator who enabled users to download copyrighted software. See *id.* at 542-43. The court reasoned that the criminal copyright laws could not be employed against LaMacchia, the alleged infringer, because he was not operating for personal profit. See *id.* at 536-37, 540. After finding that the wire fraud statute does not extend to copyright-related conduct, the court granted LaMacchia's motion to dismiss and implied that copyright holders should pursue civil enforcement mechanisms against LaMacchia. See *id.* at 545 & n.19.

⁵⁴ The damages are calculated as either statutory damages or actual lost profits. These potential rewards result partially from the increased value of a work due to the company's ability to exclude others from selling a particular copyrighted work through the exercise of its copyright monopoly.

particular infringing incident. Thus, assuming that the cost of bringing suits remains fairly constant,⁵⁵ copyright-holding industries would bring suit if the magnitude of a particular copier's actions results in enough market loss to justify the costs of bringing suit.

Second, a copyright-holding company may sue to recover statutory damages.⁵⁶ In other words, once the company finds that the cost of bringing suit is outweighed by potential statutory damages (which in some cases may exceed nonstatutory and lost profit damages), the company may bring suit.⁵⁷

Third, the company may sue to set a precedent with in terrorem value. Even if the damages recoverable from the suit (statutory or otherwise) do not compensate such a company for the cost of bringing suit, the precedential value set by the company's victory may have the effect of deterring future copiers from engaging in the infringing conduct involved in the suit, thus ultimately saving the copyright-holding company an aggregate sum worth the cost of the suit. For example, in *Paramount Pictures Corp. v. Labus*,⁵⁸ ten large film distribution companies, including Universal City Studios, Warner Brothers, Orion Pictures, and Columbia Pictures, sued a small resort owner in Wisconsin for renting bootlegged videotapes to resort guests.⁵⁹ It is likely that neither the \$436,000 in damages that the distribution companies sought nor the \$15,500 that they actually received from the court⁶⁰ compensated each of the plaintiffs for the cost of bringing their lawsuit. In fact, the court specifically acknowledged the in terrorem value of its decision by observing that,

[a]lthough they may have sustained only a small loss of business in authorized copies and rental of their motion pictures as a result of defendant's activities, many small operations such as defendant's would eat away at plaintiffs' profits. . . . I believe that imposing the minimum amount of damages in this case will be sufficient to deter

⁵⁵ This analysis assumes that adjustments for inflation are negligible.

⁵⁶ Under 17 U.S.C. § 504(c)(1) (1994), the copyright owner may elect, at any time before final judgment is rendered, to recover, instead of actual damages and profits, an award of statutory damages for all infringements involved in the action, with respect to any one work, for which any one infringer is liable individually, or for which any two or more infringers are liable jointly and severally, in a sum of not less than \$500 or more than \$20,000 as the court considers just.

Id.

⁵⁷ "Substantial monetary relief is available, either based on proof of actual damages and profits attributable to the infringement or in the form of statutory damages, absent that proof." Civil and Criminal Enforcement of the Copyright Laws, *supra* note 53, at 24, 34-35 (statement of Donald C. Curran, Acting Register of Copyrights).

⁵⁸ 16 U.S.P.Q.2d (BNA) 1142 (W.D. Wis. 1990).

⁵⁹ See *id.* at 1143-44.

⁶⁰ See *id.* at 1143, 1148.

defendant and others like him from committing further infringements in the future.⁶¹

Copyright owners will only assert their rights when it is economically advantageous for them to do so. Copyright enforcement, therefore, is bounded on one side by the economics of enforcement and on the other by the problems of underenforcement.⁶² Realistically, given the private, market-driven nature of copyright enforcement, the copyright laws will never be fully enforced. A copyright structure with no enforcement element to implement the copyright balance, however, would offer no incentives to authors to create.⁶³ In such a system, public welfare would decrease despite increased dissemination.

Current copyright law depends on private businesses for enforcement, and private enforcement is limited by the practical economics of the marketplace. New reprographic technology, however, could hamper enforcement by reducing business's ability to detect and deter infringement. The remainder of this Note is devoted to understanding whether the current copyright enforcement structure can accommodate the strain of such technology.

⁶¹ *Id.* at 1147-48; see also Richard A. Posner, *Economic Analysis of Law* 491-507 (3d ed. 1986) (arguing that judges guide development of common law toward maximization of economic efficiency and social utility). Because parties consider economic implications before litigating, the common law judge has an obligation to consider economics in resolving disputes between the parties and maintaining the status of the courts as ultimate dispute resolvers. See *id.* at 491-96, 505-07.

⁶² The existence of only a low level of copyright enforcement is supported by statistics. For example, in 1991, although 600,000 works were registered, only 2000 suits were filed. See Library of Congress Committee Issues Report on Registration and Deposits, Pat. Trademark & Copyright L. Daily (BNA), Sept. 27, 1993, at 6 (on file with the *New York University Law Review*).

The government is equally successful when it chooses to prosecute criminal copyright cases. Like big business, however, the government only brings suit when the criminal copyright laws have been egregiously violated. In 1984, for example, only 34 criminal cases were filed. See *Civil and Criminal Enforcement of the Copyright Laws*, *supra* note 53, at 19 (statement of Victoria Toensing, Deputy Assistant Attorney General, Criminal Division, U.S. Department of Justice).

⁶³ A system with no copyright enforcement would represent the extension and implementation of ideas expressed by Justice Breyer in his controversial article, which argued that the case for copyright protection is weak and that copyright should be limited in its scope. See Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 *Harv. L. Rev.* 281, 284 (1970) (stating that "the evidence now available suggests that, although we should hesitate to abolish copyright protection, we should equally hesitate to extend or strengthen it"); cf. Barry W. Tyerman, *The Economic Rationale for Copyright Protection for Published Works: A Reply to Professor Breyer*, 18 *UCLA L. Rev.* 1100, 1119-25 (1971) (arguing that any major decrease in copyright protection would result in "significant decline in publisher revenue, author royalties and overall book production" while failing to significantly reduce prices and increase distribution of books, reduce transactions costs in obtaining permission to reproduce, and decrease market power of publishers).

D. The Strain of New Technology on the Ideal Amount of Copyright Enforcement

The growth and proliferation of cheap reprographic technology reduces the effectiveness of the enforcement behavior of copyright-holding companies. Recent advances in copying technology create two main enforcement problems: increased volume and undetectability.

The volume of infringing copying by copiers who already possess access to reprographic technology will only increase as copying technology becomes cheaper. For example, a company that previously paid \$5000 for one photocopy machine that today costs only \$1000 is now able to purchase five copy machines and thus make five times as many copies at the same cost. The low price of new technology also permits individuals and small companies that were previously unable to afford reprographic technology to enter into the copyright equation by allowing them to buy cheap copying technologies such as Internet access or VTRs.⁶⁴

Perhaps the most difficult problem posed by new technology, however, is undetectability. As the volume of copying increases, copyright holders will be increasingly unable to monitor the copies being made, for example, on private photocopiers or VTRs. Without such monitoring, copyright holders may find it difficult to determine when and against whom to bring suit. The monitoring problem is only exacerbated by the Internet, with its myriad of pathways and anonymous users.⁶⁵

The technology of the Internet allows users to download and distribute copies of software by pressing a few keys. The widespread nature of such copying, the ability of users to cloak their infringing actions through technology, and the economic infeasibility of de-

⁶⁴ See Kenneth R. Buys et al., *Infojacking: Crimes on the Information Superhighway*, N.J. L.J., May 22, 1995, at S-2 (stating that "[s]ince the 1980s, digitization and cheap and widely available personal computers have made copying easy, perfect, and fast" and that "quickly making thousands of perfect copies is possible for anyone with a PC").

⁶⁵ See Information Infrastructure Task Force, *Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights 7-18* (1995) [hereinafter *White Paper*] (acknowledging that it is possible to deliver copies of digitized works to scores of individuals with just a few key strokes); Holden, *supra* note 15, at 3 (describing extent of information and users on Internet); see also Nimmer & Krauthaus, *supra* note 45, at 32 (quoting statement of Office of Technology Assessment that electronic dissemination alters balance between copyright owners' rights and public rights); I. Trotter Hardy, *Contracts, Copyright and Preemption in a Digital World*, 1 U. Rich. J.L. & Tech. 2, ¶ 12 (Apr. 17, 1995) <<http://www.urich.edu/~jolt/v11/hardy.html>> (asserting that "[t]hese improvements in the state of the copying art in the digital age mean that, all things being equal, the overall amount of protection a publisher can expect for digital materials relative to print materials will be dramatically less").

tecting the thousands of instances of copying occurring at each home computer in the country render it difficult for copyright owners to enforce their rights against such copiers. The inability of owners to enforce their rights in this new technological framework effectively skews the copyright balance in favor of public dissemination (and against copyright owners).

The copyright system can respond to this enforcement crisis and ensure that copyright enforcement achieves the desired policy balance in one of two ways. First, copyright owners and courts could work within the current framework to attempt to achieve an enforcement level that continues to effectuate a proper copyright balance. Second, if the legislature believes that the enforcement problems cannot be solved within the present legal system, Congress could drastically alter the copyright system.⁶⁶ This Note argues that the first option, working within the present structure, best achieves an enforcement level consistent with the copyright balance—thus rendering changes in copyright law unnecessary.

II

THE RESPONSE OF THE COPYRIGHT STRUCTURE TO NEW TECHNOLOGY

This Note now progresses to an analysis of the current copyright system's ability to handle the enforcement problem created by cheaper copying technology. The Note concludes that solutions within the current system enable copyright law to be enforced in a way that sufficiently protects the copyright balance between the granting of incentives to authors and increased dissemination of information to the public. These enforcement mechanisms—by the industry and the courts—compensate for the multimillion dollar enforcement crisis in copyright created by inexpensive reprographic technology.⁶⁷

A. *Industry Response*

Copyright holders may respond to the increased volume of copying created by new technology by bringing additional suits against potential infringers. Indeed, as the incidence of copying increases, the number of suits, both in *terrorem* and otherwise, will likely increase as well. A simple increase in the number of suits does not solve all of the problems of newer technology, however, and the problem of monitor-

⁶⁶ As stated previously, several commentators argue that copyright laws must change in order to respond to the strain of new technology. See *supra* note 21.

⁶⁷ For examples of inexpensive copying technology, see *supra* text accompanying notes 18-19.

ing cannot be solved simply by an increase in the number of suits.⁶⁸ To develop creative solutions to the problem of new reprographic technology, both copyright-holding industries and the judiciary are taking further action.

Copying behavior typically occurs in two situations. First, in the institutional context, large companies or research institutions may routinely engage in photocopying or Internet mail forwarding, either for profit or as a part of their normal business operations. Second, individual copiers may privately make a smaller number of copies for the personal use of their family and friends. Because of the difference in magnitude and nature between institutional and individual copying, this Note analyzes each behavior separately.

1. *Institutional Copying*

The class action suit is one effective method of combating copying by smaller institutions: even if one copyright-holding company is economically incapable of bringing suit because its legal costs far outweigh any potential award (statutory or otherwise), it may surmount the economic hurdle of litigation costs by joining with other such companies. By combining to bring suit, such companies are able to sue over smaller instances of copying because their combined litigation ability makes bringing suit economically feasible. Examples of successful copyright class actions abound.⁶⁹

⁶⁸ Although an extremely large increase in the number of copyright suits would clog our already overworked federal judiciary, some increase in the number of suits is required to handle the increased volume of copying created by new technology. An intuitive response to the problem of new copying technology may be to prompt the government for legislation. The government tends, however, to adopt a wait-and-see attitude with regard to new copying technology. See National Comm'n on New Technological Uses of Copyrighted Works. Final Report 195-97 (1978) (noting that "present and prospective technological developments for the creation, storage and distribution of copyrighted materials do not in themselves call for any change in the copyright law" and emphasizing that review of copyright law every five years will allow for necessary changes). After determining the market effect of the technology over time, Congress may choose to legislate. As of yet, however, congressional action with respect to photocopiers, which have been around since the 1950s, is limited to just a few provisions. See, e.g., 17 U.S.C. § 107 (1994) (specifying that reproduction for teaching, "including multiple copies for classroom use," is not infringement); id. § 108 (regarding reproduction by libraries and archives). But see White Paper, *supra* note 65, at 230-31, 229-58 (noting that Copyright Act "needs to be amended to take proper account of the current technology" and recommending amendments to copyright law).

⁶⁹ See, e.g., *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913 (2d Cir. 1994), cert. dismissed, 116 S. Ct. 592 (1995); *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522, 1526 (S.D.N.Y. 1991) (granting damages and injunctive relief to book publishers in suit against duplication business); Complaint, *Frank Music Corp. v. Compuserve, Inc.*, No. 93 Civ. 8153 (JFK) (S.D.N.Y. filed Nov. 29, 1993), excerpted in *Music Publishers File Class-Action Against Compuserve for Infringement, Pat. Trademark & Copyright L.*

Class actions are an especially effective method of fighting copiers because companies that infringe usually violate more than one copyright. In *American Geophysical Union v. Texaco Inc.*,⁷⁰ a recent Second Circuit opinion about institutional copying, researchers at Texaco routinely obtained copies of several different trade journals from Texaco's on-site library.⁷¹ To fight Texaco's copying policy effectively, all of the various journal publishers joined together in one suit.⁷² The Second Circuit rejected Texaco's fair use defense, and held that the copying by Texaco researchers constituted infringement.⁷³

Copyright-holding enterprises are further aided by intermediate entities such as the Copyright Clearance Center (CCC). The CCC acts as an agent for publishers and "grants blanket advance permission for a fee to photocopy copyrighted material registered with CCC, and forwards the fees collected to copyright owners, net of service charge."⁷⁴ The purpose of the CCC is to facilitate communication between copyright holders and institutional copiers so that the cost to copiers of obtaining permission from copyright holders is reduced. The CCC's analogue in the music industry is the American Society of Composers, Authors, and Publishers (ASCAP).⁷⁵ "ASCAP is an unincorporated membership association consisting of over 50,000 music composers, lyric writers, and publishers to which its members have assigned the nonexclusive right to license the nondramatic performing rights to their copyrighted compositions."⁷⁶ As with the CCC, television stations, radio stations, nightclubs, restaurants, and other entities which play a variety of music can obtain licenses to perform any of the

Daily (BNA), Dec. 27, 1993 (on file with the *New York University Law Review*); Settlement Agreement, Addison-Wesley Pub. Co. v. New York Univ., No. 82 Civ. 8333 (S.D.N.Y. filed Dec. 14, 1982), reprinted in Jon A. Baumgarten, *Copyright Litigation and New Technology*, in *Copyright Litigation* 181, 191 (PLI Patents, Copyrights, Trademarks, & Literary Property Course Handbook Series No. 167, 1983). The *Frank Music* case has since settled: "Compuserve ultimately settled, paying Frank Music Corp. \$568,000. [It] also agreed to require forum managers to obtain licenses for works posted to their forums, and guaranteed to pay royalties if the managers did not." Dan Goodin, *Scientology Case Helps Define On-Line Liability*, *The Recorder* (San Francisco), Aug. 26, 1996, at 1, available in LEXIS, News Library, Newspapers File.

⁷⁰ 60 F.3d 913 (2d Cir. 1994), cert. dismissed, 116 S. Ct. 592 (1995).

⁷¹ See *id.* at 915.

⁷² See *id.* at 914 (stating that 83 publishers joined litigation).

⁷³ See *id.* at 931.

⁷⁴ *American Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1, 7 (S.D.N.Y. 1992), *aff'd*, 60 F.3d 913 (2d Cir. 1994), cert. dismissed, 116 S. Ct. 592 (1995). "As of 1990, approximately 8,000 domestic and foreign publishers had registered approximately 1.5 million publications with CCC." *Id.*

⁷⁵ Broadcast Music Institute is ASCAP's competitor in the music industry and provides similar services.

⁷⁶ *United States v. American Soc'y of Composers, Authors & Publishers*, 157 F.R.D. 173, 177 (S.D.N.Y. 1994).

over three million compositions in ASCAP's repertory by paying a fixed yearly fee.⁷⁷

Collective agency analogues to the CCC and ASCAP are already forming on the Internet. For instance, Folio Corporation and the CCC are developing a system that would allow for electronic access to copyrighted works and serve "as the clearinghouse for aggregating and maintaining the confidentiality of usage and royalty information."⁷⁸ Through such collectives, authors on the Internet and their publishers may pool their copyrights for copyright licensing and enforcement and thus achieve the same effective enforcement as the CCC.⁷⁹

In addition to easing communication between copyright holders and copiers, the existence of entities such as the CCC and ASCAP creates incentives for copyright-holding enterprises and infringing companies to settle their disagreements. These organizations facilitate settlement because they provide a mutually agreeable bargaining point between individual agreements for every copied item (as desired by the copyright-holding companies) and free-for-all copying (as advocated by infringing companies). Indeed, use of the CCC was a condition of settlement in at least one of the few published settlement agreements between a publisher and an infringing company.⁸⁰

The *Texaco* court, moreover, pioneered the use of the CCC as a method to deny infringing companies victory in court. In *Texaco*, the Second Circuit measured the adverse market impact on the plaintiff journal publishers from *Texaco's* copying practices by predicting lost CCC revenues.⁸¹ The court also observed that the CCC provided an effective alternate method for companies such as *Texaco* to photocopy

⁷⁷ See *id.* at 177-78. Because licenses with ASCAP are not exclusive, users may choose to obtain permission directly from the copyright holder as well.

⁷⁸ Larry Loeb, Folio and Copyright Clearance Center Developing Copyright Protection, *WebWeek*, May 1995, at 3.

⁷⁹ See generally Jane C. Ginsburg, Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace, 95 *Colum. L. Rev.* 1466, 1488-92 (1995) (discussing collective licensing in Internet context).

⁸⁰ See Settlement Agreement, *Harper & Row Publishers, Inc. v. E.R. Squibb & Sons, Inc.*, No. 82 Civ. 2363 (S.D.N.Y. filed Apr. 14, 1982), reprinted in Baumgarten, *supra* note 69, at 219. In the settlement agreement, the defendant infringer, E.R. Squibb & Sons, agreed to register with the CCC as a user and to pay copying fees to the CCC as a condition to the plaintiff Harper & Row's agreement to drop the suit and settle. See *id.* at 223-26.

⁸¹ See *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 930 (2d Cir. 1994) (stating that copyright-holding publisher created, "through the CCC, a workable market for institutional users to obtain licenses for the right to produce their own copies of individual articles via photocopying"), cert. dismissed, 116 S. Ct. 592 (1995).

legally various scientific journals.⁸² The Second Circuit subsequently held Texaco liable for copyright infringement.⁸³

2. *Individual Copiers*

Although class action suits aid copyright-holding industries in reducing commercial copying, they are not very useful against individual copiers. Individuals typically copy so little that it is extremely cost-ineffective for even a group of industries to bring suit against them. Although in *terrorem* suits may partially solve the problems posed by individual copiers, such suits do not adequately address the undetectable nature of individual copying, which adds to the already impractical cost of bringing suits against individuals. These problems are further exacerbated by the increased individual access to copyrighted information created by the Information Superhighway. As more individuals access various bulletin boards or other information sources on the Internet, the number of private copiers is bound to increase.⁸⁴

In *Sega Enterprises Ltd. v. MAPHIA*⁸⁵ and *Playboy Enterprises, Inc. v. Frena*,⁸⁶ the courts considered the situation of an Internet bulletin board operator who knowingly uploads copyrighted software onto her board while charging a fee to board users.⁸⁷ Copyright owners are generally able to respond to such copying behavior because its high-volume nature makes copying easy to detect and cost-effective to prosecute.⁸⁸ If such operators knowingly engage in infringement themselves, they are liable under direct infringement doctrine; if they are aware of the infringement of their subscribers, but do not participate, they may still be liable under contributory liability doctrine.⁸⁹

⁸² See *id.* at 931.

⁸³ See *id.* at 931-32.

⁸⁴ Some on-line services, such as Compuserve, fear that they will be held increasingly liable for infringing uses of their users because copyright-holding industries find it more cost-effective to sue a wealthy company like Compuserve and because individual copying is very difficult to trace on the net. See Susan Orenstein, *The Law of the Highway*, *The Recorder* (San Francisco), Aug. 26, 1994, at 1, available in LEXIS, News Library, Newspapers File (discussing liability of bulletin board operators for infringing uses by their subscribers). The problem of whether on-line services such as Compuserve qualify as contributory infringers under copyright law is a subject for another Note.

⁸⁵ 857 F. Supp. 679 (N.D. Cal. 1994).

⁸⁶ 839 F. Supp. 1552 (M.D. Fla. 1993).

⁸⁷ See *Sega*, 857 F. Supp. at 682-83; *Playboy*, 839 F. Supp. at 1552.

⁸⁸ Such infringing behavior typically involves at least hundreds of thousands of dollars of software. See *An Information-Age First: FBI Arrests Bulletin-Board Operator*, *Wash. Telecom News* (Phillips Business Info., Potomac, Md.), Sept. 12, 1994, at 2, available in LEXIS, News Library, Newsletters File (discussing \$100,000 civil suit).

⁸⁹ See *Religious Technology Ctr. v. Netcom On-Line Communication Servs., Inc.*, 907 F. Supp. 1361, 1373 (N.D. Cal. 1995) (asserting that Internet service provider "is not free

The contributory infringement doctrine allows plaintiffs to hold third parties liable if those parties, "with knowledge of the infringing activity, induce[], cause[] or materially contribute[] to the infringing conduct of another."⁹⁰ In order for a third party to be held contributorily liable, there must be an underlying finding of infringement against the defendant.⁹¹ Under present copyright law, a third party with either actual or constructive knowledge of the infringing activity may be held liable for contributory infringement.⁹² The doctrine has been applied to hold third parties who are involved in a copying venture liable,⁹³ but withholds liability from manufacturers of copying technology.⁹⁴ Because a bulletin board operator is not directly involved in the copying activity of either the bulletin board users or the manufacturer of the bulletin board, the issue of contributory liability for bulletin board operators presents courts with a novel question of law.⁹⁵

In *Sony Corp. of America v. Universal City Studios, Inc.*,⁹⁶ the Supreme Court considered whether Sony, a manufacturer of VTRs, should be held contributorily liable for the copyright infringing activities of VTR consumers. The Supreme Court held that, as long as a product is capable of "substantial noninfringing uses," the manufacturer of that product cannot be held contributorily liable for the in-

from liability just because it did not directly infringe plaintiffs' works; it may still be liable as a contributory infringer").

⁹⁰ *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

⁹¹ See *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 483 (1964) (holding that respondent could only be held liable for contributory infringement by replacing worn-out fabric element of patented convertible top if original manufacturer had violated patent).

⁹² See *Screen Gems-Columbia Music, Inc. v. Mark-Fi Records, Inc.*, 256 F. Supp. 399, 403 (S.D.N.Y. 1966) (holding that suspiciously low price of album was sufficient to impute constructive knowledge of infringer's misdeeds to advertising agency for purpose of establishing agency's participation in copyright violation).

⁹³ See, e.g., *Childress v. Taylor*, 20 U.S.P.Q.2d (BNA) 1181, 1189-90 (S.D.N.Y. 1990) (discussing theater owner's contributory infringement liability for allowing infringing performance in his theater); *Mark-Fi*, 256 F. Supp. at 404 (involving contributory liability of advertising agency that created advertisements promoting sale of infringing records).

⁹⁴ See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 439 (1984) (discussing contributory liability of Sony for manufacture of videocassette recorders).

⁹⁵ For a thorough discussion of the issues revolving around contributory infringement of bulletin board operators, see generally A. Samuel Oddi, *Contributory Copyright Infringement: The Tort and Technological Tensions*, 64 *Notre Dame L. Rev.* 47 (1989) (applying contributory liability theories from trademark and patent law to copyright); M. David Robbins, *Computer Bulletin Board Operator Liability for Users' Infringing Acts*, 94 *Mich. L. Rev.* 217 (1995) (arguing that computer bulletin board operators should not be held to strict contributory liability standard).

⁹⁶ 464 U.S. 417 (1984).

fringement of consumers.⁹⁷ Consequently, after determining that consumers may employ VTRs for the noninfringing use of taping television programs for later viewing, the Court found Sony not contributorily liable.⁹⁸

In *Religious Technology Center v. Netcom On-Line Communication Services, Inc.*,⁹⁹ Judge Whyte considered whether the Sony holding should be extended to bulletin board operators. Specifically, he analyzed the issue of whether a bulletin board operator and network service provider should be held contributorily liable for the infringing activities of one of the subscribers to the bulletin board service. Rather than altering the copyright laws, Judge Whyte's approach demonstrates how the current copyright system's contributory infringement laws can be employed to hold third parties contributorily liable, thus further deterring individual copying.¹⁰⁰ To be held contributorily liable, the judge required the bulletin board operator and service provider to have either actual or constructive knowledge of the specific copying in question.¹⁰¹ Judge Whyte engaged in a factual inquiry in order to determine whether the operator and provider had such knowledge.¹⁰² He considered whether the provider or operator had received complaints about the specific infringing behavior, as well as whether the provider or operator had responded to any complaints by investigating.¹⁰³

Assuming that the *Netcom* analysis is correct and consequently that bulletin board operators will not be held to the high standard of third parties involved in specific copying ventures, contributory liabil-

⁹⁷ Id. at 418.

⁹⁸ See id. at 456.

⁹⁹ 907 F. Supp. 1361, 1373 (N.D. Cal. 1995).

¹⁰⁰ For a detailed discussion of the level of knowledge required to hold bulletin board operators contributorily liable, see generally Robbins, *supra* note 95, at 231-35.

¹⁰¹ See *Netcom*, 907 F. Supp. at 1373 (asserting that "[l]iability for participation in the infringement will be established where the defendant, 'with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another'" (quoting *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971))). If a service provider does not act with knowledge, then it is not liable for infringement (either direct or contributory) and neither the fair use defense nor any other defense is triggered. If the provider is a contributory infringer, then fair use may be one of its defenses. See id. at 1378-81 (applying fair use factors to service provider to determine whether there is enough of a question of fact to defeat summary judgment motion). In order to discourage knowing distribution of infringing works by service providers, the courts may (and, considering current trends, probably will) choose to apply the fair use factors strictly to disallow such use by these providers. See also Robbins, *supra* note 95, at 237-38 (describing four issues of fact that judges should consider in determining whether bulletin board operator had constructive knowledge of infringement).

¹⁰² See *Netcom*, 907 F. Supp. at 1373-75.

¹⁰³ See id.

ity will only arise in the rare case where bulletin board operators detect and obtain knowledge of the infringing activity. Because most service providers and operators act reasonably to prevent infringement, and because individual copying generally involves undetectable infringement by individual copiers, the question of contributory infringement is bound to arise rather infrequently.¹⁰⁴

Although the contributory infringement doctrine may not play a large role in deterring individuals from copying, the copyright structure has acted in other ways to solve the problem of such copying. First, information industries are learning to develop copy-prevention technology.¹⁰⁵ For example, the movie industry is exploring the encoding of all movie videotapes with an electrical signal that inhibits or prevents the reproducing process.¹⁰⁶ In fact, one technology company's anticopy protection technology has been employed by movie studios on approximately forty percent of all prerecorded videocassettes produced in the United States; use of such technology has saved the home video industry an estimated \$168 million per year.¹⁰⁷ Internet service providers are also exploring encryption technology that would protect the copyrights of creators and publishers on the Internet.¹⁰⁸ For instance, the Association of American Publishers has funded research into a technology that would imprint a digital signature onto electronic works.¹⁰⁹ Such self-help, as industry anticopy technological development is termed, frees copyright-owning companies from the often slow legislative process and empowers such companies to fight copying where the economic equation disfavors bringing a lawsuit.¹¹⁰

¹⁰⁴ For a discussion of whether bulletin board operators and network service providers should be held responsible for direct copyright infringement when their consumers engage in infringing activity, see *infra* Part III.A.

¹⁰⁵ See Hardy, *supra* note 65, at 9 (discussing special technical devices to limit reproduction). The *White Paper* also emphasizes copy-prevention technology as a solution to copying. See *White Paper*, *supra* note 65, at 192 n.505.

¹⁰⁶ See Sciorra, *supra* note 6, at 917.

¹⁰⁷ See *id.* at 925.

¹⁰⁸ See Holden, *supra* note 15, at 1 (describing efforts of Corporation for National Research Initiatives to create "protection [that] follows the object as it is transmitted down the Internet").

¹⁰⁹ See AAP Seeks Copyright Control System, *Publisher's Wkly.*, Jan. 9, 1995, at 18, 18.

¹¹⁰ In its recent *White Paper*, the National Information Infrastructure (NII) Working Group recognized the importance of self-help technology in combating Internet copyright violations by recommending that

the Copyright Act be amended . . . to prohibit the importation, manufacture or distribution of any device, product, or component incorporated into a device or product, or the provision of any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate or otherwise circumvent . . . any

A second method of solving the problem of undetectable copying is found in collective action—copyright-holding companies are banding together to more effectively combat criminal copier behavior. One of the main costs of criminal enforcement involves overcoming the undetectability of individual copying. By joining forces to identify such copying behavior, copyright-holding companies reduce the costs associated with governmental action. One example of such cooperation by copyright-holding companies is the creation by the Motion Picture Arts Association (MPAA) (a group of movie studios) of a private investigation network force that monitors videotape copyright infringement by individuals. Upon finding an infringer, the motion picture studios usually present the Federal Bureau of Investigation or local police force with probable cause for a search and aid those authorities in conducting further investigation possibly leading to criminal sanction.¹¹¹ Such cooperation is not limited to the movie industry.

... mechanism or system which prevents or inhibits the violation of any of the exclusive rights under Section 106 [of the copyright laws].

White Paper, *supra* note 65, at 250. The NII document also proposes other civil remedies against such black box devices (technological inventions designed to thwart anticopying technology). While explicit legislative incentives may be unnecessary to encourage copyright owners to develop black box devices (because of market incentives already present in the current system), the government's approval of technology-oriented anticopying techniques indicates its approval of extralegal solutions to copyright enforcement problems.

The limits of anticopying technology as an alternative, however, are illustrated by *Vault Corp. v. Quaid Software, Ltd.*, 847 F.2d 255 (5th Cir. 1988). Vault Corporation was in the business of producing computer diskettes which were "designed to prevent the unauthorized duplication of programs placed on them by software companies" through a protective software fingerprint. *Id.* at 256. Although the Fifth Circuit conceded that Quaid invented black box technology designed to circumvent Vault's anticopy technology, it nevertheless rejected Vault's claim of contributory infringement because Quaid's technology was capable of some noninfringing uses. See *id.* at 262. Because the same spirit of innovation that creates self-help methods also engenders technology capable of circumventing copy protection techniques, such as Quaid's technology, anti-black box legislation is required to encourage the proliferation of self-help technologies. See Sciorra, *supra* note 6, at 927-56 (describing legal problems associated with black boxes, or technology-oriented solutions to industry self-help strategies).

Self-help is vulnerable to another weakness: self-help technologies usually cannot distinguish between copying that would fall into the fair use exception and infringing copying. Anticopy signals on videotapes, for instance, are unable to detect whether the copier is employing the copy in a beneficial way such as to invoke protection under the fair use doctrine or making free infringing copies for family and friends. See *id.* at 918-19; see also T.R. Reid, *Let Freedom—From Copy Protection Gimmicks—Ring*, *Wash. Post*, Apr. 28, 1986, *Business Section*, at 25 (decrying copy protection as insulting to consumers). Because the fair use doctrine is very narrow in scope with respect to such mechanical, literal copying, however, this problem is not a big one. In time, moreover, copyright-holding companies will create technologically effective solutions which are capable of differentiating between fair use and unfair copying.

¹¹¹ See Chris Moeser, *Copy Cats: 25,000 Bootlegged Tapes Seized*, *Phoenix Gazette*, Jan. 19, 1995, at B1 (describing MPAA as employing "100 field representatives who travel the country looking for bootlegs"); Craig A. Shapiro, *Video Cop*, *Virginian-Pilot*, July 4,

The Software Publishing Association, a creation of several software companies, is currently tracking 1600 potentially illegal pirate sites on the Internet.¹¹²

Copyright owners may also employ their collective clout to force users of copyrighted information to enter into contracts which restrict these users' copying rights.¹¹³ While these contracts alone may not prevent infringing copying, they add to the deterrence of the copyright system itself and anticopying technology.

A third way to combat the problem of individual, undetectable copying is education. Many copyright-owning industries, especially those that specialize in software creation and sale, are turning their focus to school-age children and, based on their belief that "children represent a significant number of the pirates using computer bulletin boards,"¹¹⁴ are launching education campaigns in public schools.¹¹⁵ As the NII Working Group responsible for the *White Paper* has recognized, effective education is the key not only to informing both adults and children about copyright law, but also to increasing public awareness of the property-like nature of copyright entitlements.¹¹⁶ Once people view copying a work as criminal behavior, their consciences may interfere and prevent them from becoming copyright infringers.¹¹⁷ Internet users, for example, have already acted to inform one another about copyright issues so as to reduce the amount of unintentional copying that occurs on the various bulletin boards and Web sites.¹¹⁸

Finally, in the Internet context, a CCC-type entity may be able to collect dues for even the personal copying of copyrighted works because of the ease of electronic transmission of a request to copy on the part of the user and the concomitant granting of permission by the

1994, at E1 (explaining that "PAA receives 1,500 to 2,000 calls a year on its anti-piracy hotline and cases are opened on 75 percent of these cases").

¹¹² See Heinke & Rafter, *supra* note 15, at 8.

¹¹³ See, e.g., Hardy, *supra* note 65, at 17-21 (discussing use of contracts in digital world to discourage copyright infringement).

¹¹⁴ Meyers, *supra* note 11, at 1D.

¹¹⁵ See *id.*; see also White Paper, *supra* note 65, at 222-27 (proposing that certain core concepts should be introduced at elementary school and integrated into children's education).

¹¹⁶ See White Paper, *supra* note 65, at 217-21 (suggesting that prohibitions against unauthorized use of intellectual property should be cast in terms of right to control one's property).

¹¹⁷ See Nicholas A. Veliotis, Don't Lose Creators' Rights in Cyberspace, *USA Today*, Aug. 16, 1994, at 11A (comparing criminal behavior and copying copyrighted material).

¹¹⁸ See Pamela Samuelson, Legally Speaking: The NII Intellectual Property Report, 37 *Comm. ACM* 21, 26 (1994) (observing that "[i]nformal exchanges about copyright issues also occur in electronic newsletters, listservs, and on bbs's on the Net").

CCC analogue.¹¹⁹ The same electronic technology that enables easy copying also allows for monitoring of the copying, rapid and free transmission of requests from users, and responses from copyright clearinghouses.¹²⁰

B. *Judicial Response: The Fair Use Doctrine*

Under the judicially created and enforced fair use doctrine, courts can excuse copyright infringement when the public's interest in access and dissemination outweighs the public benefit accruing from the enforcement of the copyright owner's rights.¹²¹ The fair use doctrine affects the level of copyright enforcement by preventing enforcement when the copyright balance tilts in favor of public dissemination. Courts employ the doctrine judiciously at the margin between enforcement and nonenforcement to ensure that the economics of the copyright structure do not overwhelm the public interest in dissemination. This Note limits its consideration of fair use to an analysis of the doctrine as applied to literal, technologically enabled copying by both private and commercial copiers.¹²² Only two Supreme Court decisions, *Williams & Wilkins Co. v. United States*¹²³ and *Sony Corp. of America v. Universal City Studios, Inc.*,¹²⁴ have analyzed the fair use

¹¹⁹ In the Internet context, then, the transactional requirements of a CCC analogue can be met even with regards to personal copying. These transactional activities include: "identifying the representatives of the protected work, licensing, monitoring use, collecting and accounting for use, and enforcing rights." Carolina Saez, *Enforcing Copyrights in the Age of Multimedia*, 21 Rutgers Computer & Tech. L.J. 351, 390 (1995); cf. Ginsburg, *supra* note 79, at 1492 (asserting that "it could still be impractical" for collectives to "seek out and contract with individual users").

¹²⁰ See Multimedia Developments of Note, *Multimedia Strategist*, June 1995, at 9, 9 (describing CCC joint venture to develop "electronic 'envelope[s]'" that contain information about ownership and pricing for copying of particular electronically transmitted works).

¹²¹ See Robert A. Gorman, *Copyright Law* 94 (1991) (observing that "[t]he fair use doctrine comes into play when a too literal enforcement of the copyright owner's rights would operate to the detriment of the public interest in access to and dissemination of knowledge"); see also O'Neil, *supra* note 45, at 124 (describing fair use as accommodation between copyright protection and public interest in free dissemination of information); Nimmer & Krauthaus, *supra* note 45, at 30 (explaining that fair use is applicable when use has "only a limited effect on the incentives created for the author, while [being] . . . important to the well-being and lifestyle of [a] third party").

¹²² The fair use doctrine is relevant in many other types of copyright cases. See, e.g., *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 554-55 (1985) (applying fair use to unpublished works); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) (applying fair use to works of parody).

¹²³ 487 F.2d 1345, 1352-57 (Ct. Cl. 1973), *aff'd per curiam* by an equally divided court, 420 U.S. 376 (1975).

¹²⁴ 464 U.S. 417, 447-56 (1984).

doctrine from this perspective.¹²⁵ Both cases accepted fair use as a defense to copyright infringement. Contrary to these cases, however, this section concludes that the fair use doctrine should not be applied by judges to excuse literal copying by either institutions or individuals.

1. *Background of the Fair Use Doctrine*

Fair use is often referred to as an "equitable rule of reason, as it must be flexible in order to allow judges, on a case-by-case basis, to make individual determinations of the copyright balance."¹²⁶ Indeed, Congress has recognized this need for flexibility, and when it codified the fair use doctrine in 17 U.S.C. § 107, it specifically left prior fair use jurisprudence unaltered and encouraged the courts to continue to develop fair use law.¹²⁷ Congress did, however, enumerate several illustrative examples of fair use, including "criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research."¹²⁸ Section 107 does not require an infringing use to fall within Congress's categories in order to be considered fair. In *Sony*, for example, the Supreme Court held that private videotaping of television programs constituted fair use even though the copying was not motivated by any of the activities listed in the preamble to 17 U.S.C. § 107.¹²⁹

¹²⁵ In fact, in *Williams & Wilkins*, the Supreme Court merely affirmed, by an equally divided court, a court of claims decision. See *Williams & Wilkins Co. v. United States*, 420 U.S. 376 (1975) (per curiam). In *Sony*, the Supreme Court focused much of its attention on the issue of whether Sony, a manufacturer of VTRs, could be held liable for the infringement of its users based on a contributory infringement theory. See *Sony*, 464 U.S. at 417.

¹²⁶ *Meeropol v. Nizer*, 560 F.2d 1061, 1068 (2d Cir. 1977), cert. denied, 434 U.S. 1013 (1978). The fair use doctrine has been referred to as "the most troublesome in the whole law of copyright." *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661, 662 (2d Cir. 1939).

¹²⁷ See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 66 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5678 (discussing 17 U.S.C. § 107); see also *Williams & Wilkins*, 487 F.2d at 1352 (noting that "[p]recisely because a determination that a use is 'fair,' or 'unfair,' depends on an evaluation of the complex of individual and varying factors bearing upon the particular use, there has been no exact or detailed definition of the doctrine" (citation omitted)).

¹²⁸ 17 U.S.C. § 107. These categories, however, are "meant to be illustrative, not exhaustive." Leaffer, *supra* note 24, at 296.

¹²⁹ See *Sony*, 464 U.S. at 421. The fair use doctrine recognizes that "all intellectual creative activity is in part derivative." Pierre N. Leval, *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105, 1109 (1990); see also *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994) (stating that "[e]very book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known and used before" (quoting Emerson v. Davies, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845) (No. 4,436))). For a history of the fair use doctrine, see William F. Patry, *The Fair Use Privilege in Copyright Law* 6-17 (1985).

In order to guide judges in achieving this case-by-case copyright balance, both prior case law and 17 U.S.C. § 107 delineate four nonexclusive fair use factors.¹³⁰ Congress instructs the courts to consider:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.¹³¹

The first fair use factor invites judges to consider the purpose and character of the infringer's use. Until recently, courts decided this first factor by focusing primarily on the extent of a copier's commercial gain.¹³² Courts generally define a commercial use as a profit-making infringing use that retains its commercial character even if the use ultimately serves an educational or scientific purpose.¹³³ The strongest statement of the relation between the first factor and the commerciality of an infringing use came in *Sony*, when the Supreme Court explained that commercial uses are "presumptively unfair."¹³⁴ In *Sony*, several film studios sued Sony, a manufacturer of VTRs, for contributory infringement because VTR consumers engaged in unauthorized copying of television broadcasts.¹³⁵ The *Sony* Court reasoned that because the VTR consumers' time-shifting uses only enabled consumers to see televised programs that they had been invited to view free of charge by television studios, the VTR consumers' use should be characterized as a noncommercial, nonprofit activity.¹³⁶ The Court thus held that the first fair use factor weighed in favor of the VTR consumers.¹³⁷

¹³⁰ Justice Story was the first to explicitly describe the four fair use factors. See *Folsom v. Marsh*, 9 F. Cas. 342, 345 (C.C.D. Mass. 1841) (No. 4901). His factors were later codified without substantial change in 17 U.S.C. § 107. For a recent application of these factors, see *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 547 n.2 (1985). Commentators such as Judge Leval describe these factors as a detailed recasting of the copyright balance between dissemination of information and encouragement of creativity. See Leval, *supra* note 129, at 1110.

¹³¹ 17 U.S.C. § 107.

¹³² This emphasis on the commercial nature of the infringing use is linked to a determination of the market effects of the use, and therefore, to the fourth fair use factor.

¹³³ See, e.g., *Association of Am. Medical Colleges v. Mikaelian*, 571 F. Supp. 144, 152-53 (E.D. Pa. 1983) (concluding that use of materials in test-preparation course was highly commercial use because it was profit making even though such use might serve educational purpose), *aff'd*, 734 F.2d 3 (3d Cir. 1984).

¹³⁴ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 449 (1984).

¹³⁵ See *id.* at 420-25.

¹³⁶ See *id.* at 447-49.

¹³⁷ See *id.* at 447.

Similarly, in *Williams & Wilkins*, the Court considered the photocopying practice of the National Institutes of Health (NIH) and the National Library of Medicine. Both of these nonprofit entities routinely photocopied various journals for the use of their scientists.¹³⁸ In deciding the first factor in NIH's favor, the Court stressed that "scientific progress, untainted by any commercial gain from the reproduction, is the hallmark of the whole enterprise of duplication."¹³⁹

In the recent decision of *Campbell v. Acuff-Rose Music, Inc.*,¹⁴⁰ however, the Supreme Court refocused the first factor inquiry as one concerned with the "transformative" nature of the infringing use.¹⁴¹ *Campbell* presented the issue of whether a rap group's parody of the Roy Orbison song *Oh, Pretty Woman* constituted fair use.¹⁴² The Court specifically asserted that "[t]he language of [17 U.S.C. § 107] makes clear that the commercial or nonprofit educational purpose of a work is only one element of the first factor enquiry."¹⁴³ The Court observed that if "commerciality carried presumptive force against a finding of fairness, the presumption would swallow nearly all of the illustrative uses listed in the preamble paragraph of § 107 . . . since these activities 'are generally conducted for profit in this country.'"¹⁴⁴ The Court instead emphasized that the first fair use factor asks "whether and to what extent the new work is 'transformative.'"¹⁴⁵ The Court justified the recharacterization of the first factor by linking it to the central goal of copyright—"to promote science and the arts"—and explaining that such a goal "is generally furthered by the creation of transformative works."¹⁴⁶

¹³⁸ See *Williams & Wilkins Co. v. United States*, 487 F.2d 1345, 1351 (Ct. Cl. 1973), *aff'd* per curiam by an equally divided court, 420 U.S. 376 (1975).

¹³⁹ *Id.* at 1354.

¹⁴⁰ 510 U.S. 569 (1994).

¹⁴¹ *Id.* at 579.

¹⁴² See *id.* at 573-74.

¹⁴³ *Id.* at 584.

¹⁴⁴ *Id.* (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 592 (1985)).

¹⁴⁵ *Id.* at 579 (citation omitted); see also *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 481 (1984) (Blackmun, J., dissenting) (arguing that fair use is applicable depending upon whether use is productive or unproductive).

¹⁴⁶ *Campbell*, 510 U.S. at 579. This recasting of the first factor in no way diminishes its interrelationship with the fourth fair use factor. As Judge Leval has observed, "the more the appropriator is using the material for new transformed purposes, the less likely it is that the appropriative use will be a substitute for the original, and therefore the less impact it is likely to have on the protected market opportunities of the original." Pierre N. Leval, *Campbell v. Acuff-Rose: Justice Souter's Rescue of Fair Use*, 13 *Cardozo Arts & Ent. L.J.* 19, 22-23 (1994). But see Laura G. Lape, *Transforming Fair Use: The Productive Use Factor in Fair Use Doctrine*, 58 *Alb. L. Rev.* 677, 699-710 (1995) (criticizing Supreme Court's focus on transformative use as unsupported by legislative history, already incorporated into fourth factor inquiry, and difficult to apply).

The second fair use factor asks courts to examine the nature of a copyrighted work. If the work is societally valuable, the second factor weighs in favor of fair use copying despite the reduction of economic incentives for creators.¹⁴⁷ In *Harper & Row, Publishers, Inc. v. Nation Enterprises*,¹⁴⁸ the Supreme Court specified that “[t]he law generally recognizes a greater need to disseminate factual works than works of fiction or fantasy.”¹⁴⁹ Even in *Sony*, where the Supreme Court ultimately ruled that the VTR consumer plaintiffs’ infringing videotape copying constituted fair use, the Court conceded that “[c]opying a news broadcast may have a stronger claim to fair use than copying a motion picture.”¹⁵⁰

The third fair use factor encourages judges to weigh the substantiality of the portion of the copyrighted work used and asks whether the infringer has used more than was necessary for her fair use. As Professor Nimmer has observed, if an infringer copies an entire work, she is likely to lose the third factor of the fair use test.¹⁵¹ The *Campbell* Court noted, however, that “the extent of permissible copying [under the third factor] varies with the purpose and character of the use.”¹⁵² In general, “the fact that a substantial portion of the infringing work was copied verbatim is evidence of the qualitative value of the copied material.”¹⁵³

If a copier’s work is extremely transformative or has little adverse market impact for the copyright holder, however, copying of an entire work may be allowed under fair use.¹⁵⁴ In *Sony*, for example, the

¹⁴⁷ In *Campbell* the Supreme Court observed that “this factor calls for recognition that some works are closer to the core of intended copyright protection than others.” *Campbell*, 510 U.S. at 586. This factor appears to create contrary incentives for creators: if they produce societally valueless works, then their copyright incentives are maintained; however, if they write valuable treatises (on current news, for example), their incentives are eliminated. This curious incentive structure is mitigated, however, by the existence of three other fair use factors.

¹⁴⁸ 471 U.S. 539 (1985).

¹⁴⁹ *Id.* at 563 (citation omitted).

¹⁵⁰ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 455 (1984). The Court nevertheless went on to hold that, even though all time-shifting copying may not be of societally beneficial scientific or factual works, the second factor alone did not shift the fair use balance in favor of the plaintiff film studios. See *id.* at 448-50, 456.

¹⁵¹ See Melville B. Nimmer, *Copyright Liability for Audio Home Recording: Dispelling the Betamax Myth*, 68 Va. L. Rev. 1505, 1522-23 (1982) (concluding that application of third factor argues against permitting audio home recorders to invoke fair use defense because such use almost always involves reproduction of entire work).

¹⁵² *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586-87 (1994).

¹⁵³ *Harper & Row*, 471 U.S. at 565.

¹⁵⁴ See Leval, *supra* note 129, at 1123. Judge Leval also notes that “[t]oo mechanical a rule . . . can be dangerously misleading. One can imagine secondary works that quote 100% of the copyrighted work without affecting market potential [and thus, constituting fair use].” *Id.*

Court allowed copying of entire televised works because, according to the Court, the VTR consumers' time-shifting use had little adverse market impact for the film industries as it merely allowed viewers to vary the time at which they viewed free television broadcasts.¹⁵⁵

The fourth factor has been regarded by both commentators and courts as the most significant fair use factor. This factor invites judges to consider the effect of a use on the copyright owner's potential market.¹⁵⁶ The incentives for creativity that the copyright monopoly is designed to encourage are most threatened when the infringing use diminishes potential sales of the original work, interferes with the marketability of the copyrighted work, or reduces demand for the original. In these situations, the fourth factor acts most strongly to prohibit infringement and disallow application of the fair use doctrine.¹⁵⁷ As the *Campbell* Court observed, "when a commercial use amounts to mere duplication of the entirety of an original, it clearly 'supersede[s] the objects' of the original and serves as a market replacement for it, making it likely that cognizable market harm to the original will occur."¹⁵⁸

Because even attenuated market loss may reduce incentives for creation, courts typically require very little evidence of actual or potential market loss from copyright holders in order to rule against infringers on the fourth factor.¹⁵⁹ For example, in *Sega Enterprises Ltd. v. MAPHIA*,¹⁶⁰ the plaintiff software company sued the operator of a bulletin board for copyright infringement because the operator charged users to download copies of copyrighted software.¹⁶¹ The copyright-holding company, Sega, offered an unsubstantiated prediction that, because 45,000 bulletin boards like MAPHIA exist in this country, the potential for widespread infringement, and therefore sub-

¹⁵⁵ See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 449-50 (1984).

¹⁵⁶ See *id.* at 450 ("The purpose of copyright is to create incentives for creative effort."). See generally Walker, *supra* note 32, at 751-53.

¹⁵⁷ See, e.g., *Williams & Wilkins Co. v. United States*, 487 F.2d 1345, 1354 (Ct. Cl. 1973) (ruling against copyright holder partially because "there is inadequate reason to believe[] that it is being or will be harmed substantially by" copying), *aff'd per curiam* by an equally divided court, 420 U.S. 376 (1975).

¹⁵⁸ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 591 (1994) (alteration in original) (quoting *Folsom v. Marsh*, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (No. 4901)).

¹⁵⁹ See generally Walker, *supra* note 32, at 752-53. But see *Williams & Wilkins*, 487 F.2d at 1357 (allowing fair use defense partially because journal publisher plaintiffs did not produce particularized evidence of market failure). Because every fair use by definition involves some loss of royalty, however, market impairment should be at least reasonably substantial in order to result in denial of the fair use defense. See Leval, *supra* note 129, at 1124.

¹⁶⁰ 857 F. Supp. 679 (N.D. Cal. 1994).

¹⁶¹ See *id.* at 679-83.

stantial market loss, was great.¹⁶² This unsubstantiated prediction persuaded the *Sega* district court to grant the fourth factor in favor of *Sega*.

2. *Fair Use and New Technology*

In the case of literal copying due to new technology, this Note argues that the fair use doctrine rarely, if ever, should allow for the denial of copyright holders' rights. As previously discussed, new technology has the effect of allowing for increased dissemination by allowing both private and commercial copiers to make easy and undetectable copies.¹⁶³ If the courts were to use the fair use doctrine to allow such copying, it would stymie the efforts of the current copy-

¹⁶² See *id.* at 687-88; see also *Playboy Enters., Inc. v. Frena*, 839 F. Supp. 1552, 1559 (M.D. Fla. 1993) (holding against bulletin board infringer in fair use analysis by stating "[o]bviously, if this type of conduct became widespread, it would adversely affect the potential market for the copyrighted work").

Professor Walker identifies additional fair use factors, including the public's interest in free dissemination of information, the good faith nature of the use, and whether the reproduction was for intrinsic or productive use. See Walker, *supra* note 32, at 754-55. However, these factors, which do impact the copyright balance, are accounted for in the four existing fair use factors. For example, a court must consider the public's interest in free dissemination of information as part of determining the public's benefit from the fair use.

Commentators either have attempted to refine the fair use doctrine or have rejected the doctrine altogether. Professor Raskind, for example, applies the antitrust model to copyright fair use law by describing the fair use determination as the judicial analysis of the following question: Does the infringing use impede the future revenue of the copyright holder in the same relevant market, as defined by the plaintiff copyright holder at the beginning of an infringement suit? See Leo J. Raskind, *A Functional Interpretation of Fair Use: The Fourteenth Donald C. Brace Memorial Lecture*, 31 *J. Copyright Soc'y* 601, 626-38 (1984).

Most notably, Professor Gordon describes the fair use doctrine in terms of market failure. See Gordon, *supra* note 36, at 1614-15. She defines market failure as occurring when the possibility of consensual transfer has broken down. See *id.* at 1615. According to Professor Gordon, after determining if market failure has occurred, courts must balance the injury to the copyright holder against the benefit to society by determining whether the use is more beneficial to the copyright holder or the infringer. See *id.* Professor Gordon's analysis sheds light on the correlation between the fair use doctrine and market failure, and accounts for the strong link between market economics and copyright law. Professor Gordon's definition of market failure, however, is so broad as to have little value as a classification. For example, Professor Gordon defines high transaction costs as one symptom of market failure. See *id.*; see also Kramer, *supra* note 44, at 2353 (discussing costs incurred in copyright transactions). Most modern copyright infringers would be able to assert that their infringement occurred as a result of market failure under Professor Gordon's definition since high transaction costs are the norm in the current copyright structure. For example, both small-time photocopiers and home video copiers could argue that the costs of obtaining permission from publishers and movie distributors for each item copied encourage them to infringe. Under Professor Gordon's model, the incidence of copying by such people, who account for most people asserting claims of fair use, qualifies as market failure.

¹⁶³ See *supra* text accompanying notes 17-19.

right system to compensate for new technology through more effective enforcement. As this Note will demonstrate, however, the application of current fair use law to the case of either the commercial or private copier who is enabled by technology to make direct copies rarely, if ever, results in allowing the copier to evade enforcement. This Note analyzes commercial copying first and then extrapolates to the situation of fair use and private, individual copying.

a. Commercial Copying. A factor-by-factor discussion of literal copying by commercial entities clarifies that few or no incidents of commercial copying satisfy the fair use doctrine. Consequently, the enforcement of the copyright balance should rarely, if ever, be disturbed by judges applying the four fair use factors. Commercial infringers are unlikely to win the first fair use factor in court because literal commercial copying is rarely transformative, and it generally has some commercial impact on the copyright-holding industry.¹⁶⁴ In *American Geophysical Union v. Texaco Inc.*,¹⁶⁵ although the court conceded that Texaco's copying was not commercial in that it was not performed for "direct or immediate commercial advantage,"¹⁶⁶ the court focused on the nontransformative nature of Texaco's copying and ruled that the first fair use factor weighed in the publishers' favor.¹⁶⁷ According to the *Texaco* court, because the copying of journals was purely mechanical in nature, in that the researchers did not transform the journal articles during their photocopying, copying of the journals for archival purposes was nontransformative in nature.¹⁶⁸

In addition to refocusing on the use's "transformative use," the courts look at the impact of the copying rather than the nature of the organization. For example, in *Television Digest, Inc. v. United States Telephone Ass'n*,¹⁶⁹ the D.C. District Court held that the United States Telephone Association's (USTA) daily practice of making cop-

¹⁶⁴ Nontransformative commercial copiers who copy for direct commercial profit, of course, lose under the fair use doctrine. See *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522, 1530-31 (S.D.N.Y. 1991); see also *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 855 F. Supp. 905, 910 (E.D. Mich. 1994) (explaining that defendants lost because their use was purely "commercial and for their own gain"). Notably, although the *Princeton University Press* case was reversed on appeal, see *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 74 F.3d 1512 (6th Cir. 1996), a rehearing of the appeal en banc was granted and the reversal was vacated, see *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 74 F.3d 1528 (6th Cir. 1996).

¹⁶⁵ 60 F.3d 913 (2d Cir. 1994), cert. dismissed, 116 S. Ct. 592 (1995).

¹⁶⁶ *Id.* at 921.

¹⁶⁷ See *id.* at 922-25. As the court observed, its analysis of the first fair use factor, and its focus on the transformative nature of the use, is consistent with the Supreme Court's ruling in *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994). See *Texaco*, 60 F.3d at 922-25.

¹⁶⁸ See *Texaco*, 60 F.3d at 923-24.

¹⁶⁹ 841 F. Supp. 5 (D.D.C. 1993).

ies of the publication *Television Digest* for distribution to its research staff failed to satisfy the requirements of the fair use defense despite USTA's status as a nonprofit organization that monitors and participates in congressional and regulatory activities.¹⁷⁰ Thus, if a case such as *Williams & Wilkins* were tried today, the first fair use factor might weigh against the NIH despite its nonprofit status: the NIH's photocopying practice was wholly nonproductive in nature, and it only served to allow NIH researchers to maintain individual copies of various journal articles.¹⁷¹ The new focusing of the first factor on transformative use makes it more difficult for institutions making rote, literal copies to pass the fair use test.

The second fair use factor—which considers the nature of the copyrighted document—does not uniformly weigh on either the commercial copier's or the copyright owner's side. Because this factor varies with the type of copyrighted work, with more factual works getting less protection, a scientific commercial copier like Texaco would likely win this factor, whereas an arts-oriented commercial copier may lose because of the nonfactual nature of the work it copies.¹⁷²

The third fair use factor—which examines the amount of the copyrighted work copied—weighs almost always against the typical commercial copier. Whether the copier photocopies entire journal articles as in *Texaco* or *Williams & Wilkins*, videotapes entire movies, or downloads entire software packages from the Internet, this factor weighs in the copyright holder's favor.¹⁷³

In order to win under the fourth fair use factor, copyright holders need only demonstrate some hypothetical market impact. Because most commercial copying of complete works tends in some way to have a negative impact on the copyright holder's market, copyright holders generally win. For instance, the *Television Digest* court hypothesized that the economic loss to the copyright holder equaled potential lost subscriptions without analyzing if the association would indeed replace all of their copies of *Television Digest* with purchased

¹⁷⁰ See *id.* at 7. The court issued summary judgment against the USTA in part because the USTA saved money through its photocopying practice of copying the entire *Television Digest*. Additionally, the court concluded that USTA's internal routing of *Television Digest* represented additional potential subscriptions and therefore constituted direct evidence of potential market loss. See *id.* at 10-11.

¹⁷¹ See *Williams & Wilkins Co. v. United States*, 487 F.2d 1345, 1351 (Ct. Cl. 1973), *aff'd per curiam* by an equally divided court, 420 U.S. 376 (1975).

¹⁷² See *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 925 (2d Cir. 1994) (holding that second fair use factor weighed on Texaco's side because the photocopied articles were "manifestly factual" in character and thus not "'within the core of the copyright's protective purposes'" (citation omitted)), cert. dismissed, 116 S. Ct. 592 (1995).

¹⁷³ See *Texaco*, 60 F.3d at 926 (observing that third factor weighs in favor of publishers because Texaco scientists copied entire works from scientific journals).

subscriptions.¹⁷⁴ In *Basic Books, Inc. v. Kinko's Graphics Corp.*,¹⁷⁵ the copyright-holding publishers postulated that their market share would be adversely affected if all of Kinko's 200 stores nationwide adopted Kinko's infringing anthology-making practice.¹⁷⁶ Without requiring an analysis of whether all of the 200 stores were located near universities (where the demand for such anthologies is high) or were equipped to produce such anthologies, the *Basic Books* court weighed the fourth factor in the publishers' favor.¹⁷⁷

The chances of commercial copiers prevailing under the fourth factor are further weakened by judicial consideration of alternate licensing solutions. In *Texaco*, for example, the Second Circuit based its determination of market loss on the existence of the CCC. Because companies like Texaco could easily pay the CCC to obtain the right to photocopy individual journal articles, the loss of revenue from their copying without permission constituted market loss for the journal publishers.¹⁷⁸ The *Television Digest* court also denied fair use by observing that the defendant association could have obtained additional subscriptions of *Television Digest* without significant additional transaction costs.¹⁷⁹ By considering the viability of alternate licensing possibilities, then, courts further weaken commercial copiers' chances of victory under the fourth fair use factor.

Assuming that the Supreme Court adopts the Second Circuit's reasoning in *Texaco* with respect to alternative licensing methods such as the CCC licensing scheme, the chances of victory for the commercial copier under the fair use doctrine seem nonexistent. Is this result consistent with the policy reasons behind the fair use doctrine? Perhaps the strongest case for such copying is embodied in *Williams &*

¹⁷⁴ See *Television Digest*, 841 F. Supp. at 10.

¹⁷⁵ 758 F. Supp. 1522 (S.D.N.Y. 1991).

¹⁷⁶ See id. at 1533.

¹⁷⁷ See id. at 1526; see also *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 855 F. Supp. 905, 910 (E.D. Mich. 1994). The court in *Sega Enterprises Ltd. v. MAPHIA*, 857 F. Supp. 679 (N.D. Cal. 1994), was similarly lax in its evidentiary requirements for market damage. The *Sega* court granted that the fourth factor weighed in the copyright-holding video game manufacturer's benefit even though the company's only proof of market loss was an unsupported extrapolation of losses from one bulletin board to all bulletin boards. See id. at 687-88. Like the *Sega* court, the court in *Playboy Enterprises, Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993), simply agreed with Playboy's unsupported assertion that the running of a bulletin board for profit which contained, among other things, images of *Playboy* centerfolds, adversely affected the potential market for Playboy's magazines. See id. at 1559; see also *Pacific & S. Co. v. Duncan*, 744 F.2d 1490, 1496 (11th Cir. 1984) (holding for plaintiff copyright holders on fourth fair use factor because defendant infringer "sells a significant number of copies" that plaintiff could have sold in potential market).

¹⁷⁸ See *Texaco*, 60 F.3d at 926.

¹⁷⁹ See *Television Digest, Inc. v. United States Tel. Ass'n*, 841 F. Supp. 5, 10 (D.D.C. 1993).

Wilkins, which involved a nonprofit organization copying purely for scientific research purposes. Copying by the NIH would probably fail the fair use test today, in light of the test's focus on the transformative nature of the use and the low requirements for demonstrating market loss. Indeed, although copying by the NIH does serve the public by enhancing scientific research, it also accrues to the public's detriment by reducing incentives for scientific publishers and authors. Since the fair use doctrine was designed to address the use of copyrighted works in creating other works, moreover, the application of fair use to mechanical copying by scientists is anomalous. If the government wishes to encourage scientific innovation at entities such as the NIH, perhaps additional governmental funding and not an overly strained application of the fair use doctrine in copyright law is a more appropriate solution to the problem of widely available reprographic technology.¹⁸⁰

b. Private Copying. Courts are also unlikely to allow private individual copying under the fair use doctrine.¹⁸¹ Such copying would fail under the first factor because literal, mechanical private copying, like commercial copying, is nontransformative in nature—private copiers make only exact, mechanical copies of copyrighted works through the use of newer reprographic technology.¹⁸² Even in those courts which do not adopt the transformative/nontransformative analysis and look instead to whether the use has a commercial purpose, private copying is likely to fail the first factor.¹⁸³

As Professor Nimmer observed with respect to audio home recording: "The individual who engages in audio home recording may not be seeking a commercial advantage by selling the recordings, but for fair use purposes his motivation is nevertheless commercial. By engaging in audio home recording, he avoids the cost of purchasing

¹⁸⁰ The *Texaco* court hints that the fair use doctrine's policy foundation may render it unsuitable to solve the problem of mechanical copying. See *Texaco*, 60 F.3d at 917 (stating that Second Circuit is "obliged" to apply fair use doctrine to photocopying after *Sony*).

¹⁸¹ The *Texaco* court specifically refused to answer the application of fair use to the private copier. See *id.* at 916 (stating that "[w]e do not deal with the question of copying by an individual, for personal use in research or otherwise (not for resale), recognizing that under the fair use doctrine or the *de minimis* doctrine, such a practice by an individual might well not constitute infringement").

¹⁸² See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 479 (1984) (Blackmun, J., dissenting) (contending that home videotaping constitutes direct, non-productive copying and thus "creates no public benefit sufficient to justify limiting" copyright).

¹⁸³ See *id.* at 481 (stating that unproductive uses should fail fair use test unless "permitting even unproductive use would have no effect on the author's incentive to create").

records or prerecorded tapes."¹⁸⁴ Most private copying fails the first factor because it usually entails wholesale copying of entire copyrighted works for use in place of the copyrighted works. An Internet user who downloads a software package from a bulletin board free of charge is a lost commercial opportunity to some copyright-holding software company.

As with commercial copiers, private copiers may succeed under the second fair use factor if the nature of their copied work is factual.¹⁸⁵ The third fair use factor generally weighs in favor of the copyright holder, however, because private copiers who mechanically copy through the use of new technology, like commercial copiers, typically copy entire copyrighted works.

The fourth fair use factor revisits the question of commercial impact. Although a single copying act by one private copier may not have much market impact, the potential market loss through widespread adoption of a particular private copying practice is enormous.¹⁸⁶ Since courts give credence to even attenuated evidence of market loss,¹⁸⁷ a copyright holder's prediction of potential future loss through the proliferation of a particular private copying practice is probably enough to trigger protection under the fourth fair use factor. As with the first factor, the exception to this general rule is presented by *Sony*, in which the court rejected the plaintiffs' offering of market impact data.¹⁸⁸

The fair use doctrine is, therefore, unlikely to protect literal private copying. This is consistent with the goals of copyright law because the aggregate commercial threat of widespread private copying is great, and the incentives to creators, which the fair use doctrine was designed to protect, would be greatly undermined.¹⁸⁹ The narrow ex-

¹⁸⁴ Nimmer, *supra* note 151, at 1524.

¹⁸⁵ *Sony* is illustrative of the fact, however, that, even if the work is nonfactual, and therefore more protected, the fair use doctrine may tilt toward the private copier. See generally *Sony*, 464 U.S. at 442 (declaring that private videotaping of television program for later personal viewing constitutes legitimate fair use and does not violate copyright).

¹⁸⁶ See *id.* at 482 (Blackmun, J., dissenting) (arguing that "[c]ourts should move with caution . . . in depriving authors of protection from unproductive . . . uses" because "[a]lthough such . . . use[s] may seem harmless when viewed in isolation, '[isolated] instances of minor infringements, when multiplied many times, become in the aggregate a major inroad on copyright that must be prevented'" (last alteration in original) (citation omitted)).

¹⁸⁷ See, e.g., *Television Digest, Inc. v. United States Tel. Ass'n*, 841 F. Supp. 5, 10 (D.D.C. 1993); *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522, 1526, 1545 (S.D.N.Y. 1991); see also *supra* notes 174-77 and accompanying text.

¹⁸⁸ See *Sony*, 464 U.S. at 451.

¹⁸⁹ Indeed, infringing Internet software copying, for example, already presents a multi-million dollar loss to software companies. See *supra* text accompanying note 19. If such copying were encouraged by the copyright law, it would likely increase the copying, and

ception to the denial of fair use in mechanical, technologically enabled private copying occurs when a private use has minimal commercial impact, as with the time-shifting videotaping of free television broadcasts in *Sony*.¹⁹⁰

With respect to both commercial and private copying, then, the applicability of the fair use doctrine is extremely limited. Courts should continue to apply the fair use doctrine in a manner that ensures that infringing copiers will be held liable for their copying behavior.

III

A CRITIQUE OF ALTERNATIVE PROPOSALS

Various commentators have proposed that Congress reject or change the copyright system in order to respond adequately to inexpensive copying technology.¹⁹¹ These commentators' proposals all involve displacing the copyright system to some extent in order to solve or compensate for the enforcement problems created by new copying technology.

Copyright-holding industries have depended on the copyright laws to develop their markets since the promulgation of the Statute of Anne.¹⁹² Copyright law enables these industries to exist by giving value to creative works. Before displacing the immense reliance interests in this historically entrenched copyright protection, then, commentators with alternative proposals should demonstrate that current

thus reduce incentives for creation. See *Sony*, 464 U.S. at 481-82 (Blackmun, J., dissenting) (stating that requiring proof of actual harm resulting from copying behavior enabled by new technology may stunt future copyright protection of creative works associated with that technology). But see Ginsburg, *supra* note 79, at 1492 (arguing that copyright owners would generally be unable to pursue individual copiers despite existence of collectives such as CCC, thus rendering applicability of fair use defense in this context moot).

¹⁹⁰ See *Sony*, 464 U.S. at 451. Both the Second Circuit in *Texaco* and Judge Leval imply that the fair use doctrine may not be the most appropriate home for even *Sony*-like copying. See *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 917 (2d Cir. 1994) (arguing that fair use analysis, developed to adjust competing interests of creative authors, may not be applicable to copies produced by mechanical means), cert. dismissed, 116 S. Ct. 592 (1995); Leval, *supra* note 146, at 19 (suggesting that result in *Sony* did not "require reference to fair use").

¹⁹¹ See *supra* note 21 (describing urgings of various commentators for change in copyright structure to respond to strain of new technology). Professor Wendy Gordon justifies the need for a new copyright structure by pointing to the effect of newer technologies in reducing already low copying costs, and thus increasing the frequency of copyright violations. Professor Gordon argues that new technologies create larger numbers of market flaws by increasing the transaction costs associated with gaining approval before copying. See Gordon, *supra* note 36, at 1620. According to Professor Gordon, the expected profits of the copyright holder from one instance of copyright violation become lower as technology improves. See *id.* at 1627-29.

¹⁹² See *supra* text accompanying notes 28-29.

copyright enforcement grossly fails to effectuate a desirable balance between public dissemination of creative works and protection of creator interests.

Moreover, because creative markets such as the publishing industry and the music industry have come to depend on copyright law for protection from copiers, the complete elimination of all copyright protection, or a drastic change in the nature of copyright law, would have a tremendously destabilizing effect on these industries. Simply suggesting that an alternate method would also achieve the goals of copyright law, perhaps even in a slightly better fashion, does not in and of itself justify the overthrow of years of reliance on existing copyright protection.¹⁹³

A. *The White Paper*

The alternative model most favored by both current commentators and the Clinton Administration is one that was initially advanced by the motion picture industry in *Sony*. In that case, the copyright-holding movie industry plaintiffs favored a model similar to current copyright law, with one major modification: the burden of copyright infringement falls not just on the actual infringer but also on the industry creating the new technology. The *Sony* plaintiffs argued that Sony, a manufacturer of videocassette recorders, should be charged for the infringing uses of its customers. Forcing technology providers to bear the cost of copyright infringement, however, reduces the incentives for such companies to create information-distributing technology which, when properly employed, accrue to the public benefit.¹⁹⁴

Despite such objections,¹⁹⁵ the Clinton Administration recently resurrected the *Sony* plaintiffs' argument in its *White Paper*, which proposes modifications to copyright law in response to the Internet (the latest technological advancement, which, like the videotape recorder, threatens copyright enforcement).¹⁹⁶ Through explicit lan-

¹⁹³ Justice, then Professor, Stephen Breyer recognized the value of this reliance interest in his article *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*. See Breyer, *supra* note 63. Although much of the article seems to argue that copyright law should be eliminated altogether, in the end he only argues against the further extension of copyright protection. See *id.* at 350-51.

¹⁹⁴ This only occurs if the technology company does not pass all of the compulsory licensing cost to the ultimate consumer. But note that a compulsory license is imposed on blank cassette tapes, the cost of which is passed on to cassette consumers.

¹⁹⁵ See Elkin-Koren, *supra* note 45, at 373 (arguing that holding bulletin board services directly liable for copyright infringement is inconsistent with *Sony*).

¹⁹⁶ See *White Paper*, *supra* note 65, at 229-57. Congress is currently debating whether to promulgate as law the recommendations of the *White Paper*; the act is known as the NII

guage, and by including transmission as a distribution right of the copyright owner,¹⁹⁷ the *White Paper* proposes that bulletin board operators and network service providers who provide Internet access and services be held contributorily liable for the infringing activities of their customers.¹⁹⁸ Like the manufacturers in *Sony*, these service providers merely maintain the technology that allows for copying (as well as for the functioning of the Internet); nevertheless, as in the *Sony* plaintiffs' proposal, the government seeks to hold these innocent providers liable.

The *White Paper* justifies placing on bulletin board operators and network providers the burden of policing their networks for potential infringement by pointing to the fact that "[t]echnology has altered the balance of the Copyright Act" and by asserting that "reducing the liability of service providers prematurely would choke development of marketplace tools that could be used to lessen their risk of liability and the risk to copyright owners."¹⁹⁹ In effect, the Administration believes that service providers should be forced to develop anti-infringement technological tools via the economic threat of contributory liability.

One of the strongest arguments in favor of the Administration's position is the fact that the Internet acts as a way for authors to publish without having to be selected for publication. Presumably, an author can distribute her work to millions of consumers over the Internet without using a publisher as an intermediary.²⁰⁰ The *White Paper* argues that because such an author is unable economically or technologically to protect her copyright, the burden of protection

Copyright Protection Act of 1995. See H.R. 2441, 104th Cong., 1st Sess. (1995); S. 1284, 104th Cong., 1st Sess. (1995).

¹⁹⁷ See *White Paper*, supra note 65, at 231-35. Because the bulletin board operator must transmit an author's creation in order to distribute it to its members and satisfy its function, the operator opens itself up to the constant threat of direct liability if any of its members engage in subsequent infringing activity.

¹⁹⁸ See id. at 122-33. One commentator explained that, "[a] computer bulletin board is a computer program that simulates the functions of the bulletin boards found in supermarkets, universities and other public gathering places." Jonathan Gilbert, Note, Computer Bulletin Board Operator Liability for User Misuse, 54 *Fordham L. Rev.* 439, 439 n.1 (1985). The *White Paper* also proposes several other modifications to copyright law. With the exception of the imposition of fines for the creation or use of technological devices that defeat the protections erected by a copyright, however, these modifications are directed toward defining what is infringing behavior and are thus outside the scope of this Note.

¹⁹⁹ *White Paper*, supra note 65, at 230, 132.

²⁰⁰ See Hatch, supra note 15, at 19. Notably, Senator Hatch has introduced legislation in the Senate which follows the recommendations of the *White Paper*. See also Ginsburg, supra note 79, at 1467 (asserting that, on the Internet, "every computer user can become his or her own publisher, and every terminal can become a library, bookstore, or audio and video jukebox").

should shift to wealthier and more technologically sophisticated Internet service providers (on pain of being held liable for direct copyright infringement).²⁰¹ Furthermore, one commentator has argued that, because the operation of an Internet service necessarily requires transmission and storage of users' information, the very communication of the work constitutes a "public performance"—an act recognized under current copyright laws as potentially infringing.²⁰²

What proponents of direct liability fail to appreciate, however, is that bulletin board operators and network service providers already have incentives within the current copyright structure to institute anti-infringement policies and to participate in the design of anti-infringement technology. In *Religious Technology Center v. Netcom On-Line Communication Services, Inc.*,²⁰³ Judge Whyte observed that neither Netcom (the service provider) nor Klemesrud (the bulletin board service operator) took "affirmative action that directly resulted in copying plaintiffs' works" outside of maintaining the normal functioning of their network and bulletin board, respectively.²⁰⁴ Normal maintenance of these services requires the network to automatically transmit data between subscribers. Judge Whyte applied the concept of contributory infringement to require Klemesrud and Netcom to have either actual or constructive knowledge of the infringing activity before holding them liable.²⁰⁵ Judge Whyte's approach removes the

²⁰¹ See White Paper, *supra* note 65, at 126 (noting that service providers are in better position than copyright owners to identify and stop infringement activities of their subscribers by virtue of service providers' business relationship with their subscribers).

²⁰² See Ginsburg, *supra* note 79, at 1494 (observing that necessary communication of work by Internet service provider could itself constitute public performance and thus directly infringe).

²⁰³ 907 F. Supp. 1361 (N.D. Cal. 1995).

²⁰⁴ *Id.* at 1368; see also *id.* at 1369-70 (observing that "[t]hese parties, who are liable under plaintiffs' theory, do no more than operate or implement a system that is essential if Usenet messages are to be widely distributed"). Judge Whyte further explained: "Where the BBS merely stores and passes along all messages sent by its subscribers and others, the BBS should not be seen as causing these works to be publicly distributed or displayed." *Id.* at 1372.

²⁰⁵ See *id.* at 1373 (asserting that "[l]iability for participation in the infringement will be established where the defendant, 'with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another'" (citing *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971))). If a service provider does not act with knowledge, then, it is not liable for infringement (either direct or contributory), and neither the fair use defense nor any other defense is triggered. If the provider is a contributory infringer, fair use may be one of its defenses. See *id.* at 1378-81 (applying fair use factors to service provider to determine whether there is enough of a question of fact to defeat summary judgment motion). In order to discourage knowing distribution of infringing works by service providers, the courts may (and, considering current trends, probably will) choose to apply the fair use factors strictly to disallow such use by these providers.

threat of contributory liability from innocent service providers and offers service providers who are either aware of or encourage subscriber infringement with incentives to maintain infringement-free networks and bulletin boards.²⁰⁶

Unlike Judge Whyte, one commentator, as well as an extension of the recent Ninth Circuit's decision in *Fonovisa, Inc. v. Cherry Auction*,²⁰⁷ argues that service providers should be held directly liable for copyright infringement.²⁰⁸ Under this alternate view, the *Play-*

²⁰⁶ Reliance on contributory infringement concepts assumes that courts will act to ensure that service providers who engage in willful blindness toward their subscribers' infringing activity are sanctioned. In *Netcom*, Judge Whyte suggested that, if a service provider does not check the copyright notices on works, especially after being given notice of potential infringement, then the provider is exhibiting willful blindness. See *id.* at 1374; see also Mark Walsh, *Netcom Ruling No Threat to the "Net,"* The Recorder (San Francisco), Dec. 13, 1995, at 1, available in LEXIS, News Library, Newspapers File (discussing how bulletin board or on-line service provider should respond rapidly to information indicating that one of its subscribers has infringed).

The *Netcom* court also considered whether the service provider could be held accountable for vicarious infringement. See *Netcom*, 907 F. Supp. at 1375-77. For a discussion of vicarious liability in the computer bulletin board context, see generally Kelly Tickle, *The Vicarious Liability of Electronic Bulletin Board Operators for the Copyright Infringement Occurring on Their Bulletin Boards*, 80 Iowa L. Rev. 391 (1995).

In August 1996, *Netcom* and the Religious Technology Center, a wing of the Church of Scientology, announced an out-of-court settlement of their copyright dispute. See *Internet Provider Settles Scientology Copyright Suit*, The Legal Intelligencer (Philadelphia), Aug. 6, 1996, at 4, available in LEXIS, News Library, Newspapers File. Although the Church and *Netcom* agreed not to publicly discuss details of their settlement, it was noted that *Netcom* "has posted a warning to its subscribers telling them not to use *Netcom* to 'unlawfully distribute the intellectual property of others.'" *Id.*

²⁰⁷ 76 F.3d 259 (9th Cir. 1996).

²⁰⁸ See William J. Cook, *Why Internet Service Providers Should Be Copyright Guardians*, 9 Software L. Bull. 78, 79 (1996) (arguing that Internet service providers are "uniquely well-positioned to stop the loss of intellectual property rights on the Internet" and consequently should be required to "remove copyright infringing materials from their systems upon notice from copyright owners"); see also Timothy F. Bliss, *Recent Developments: Computer Bulletin Boards and the Green Paper*, 2 J. Intell. Prop. L. 537, 546-47 (1995) (observing that, under current law, "[e]ven an innocent [systems operator] who has no knowledge of the infringements and no realistic way to discover them . . . may be held liable for infringing materials").

In *Fonovisa*, the plaintiff copyright owners sued the operators of a swap meet, alleging that the defendants were contributorily liable for the copyright infringement of vendors at the swap meet. See *Fonovisa*, 76 F.3d at 261. The Ninth Circuit held the defendants liable for contributory copyright infringement because by providing "space, utilities, parking, advertising, plumbing, and customers," the defendant materially contributed to the infringing activity, even though the defendant did not actually participate in, or become directly aware of, the infringement. *Id.* at 264. Effectively, then, *Fonovisa* loosened the standard for contributory liability so that even a swap meet operator who had reason to know but did not know of a vendor's infringing behavior could be held liable. An extension of *Fonovisa* to the Internet context would suggest that "on-line computer BBS providers who simply furnish a user-friendly environment . . . may open themselves to contributory liability if a court finds that the BBS had a reason to know that infringing activity was occurring." David Goldberg & Robert J. Bernstein, *Contributory Liability for Swap Meets*,

*boy*²⁰⁹ and *Sega*²¹⁰ decisions, which held bulletin board operators who intentionally and knowingly aided members to engage in infringement, liable under copyright law is extended to the situation where the service provider has no knowledge of infringement under the strict liability direct infringement doctrine.²¹¹ Unfortunately, this view employs an overly mechanistic and stilted definition of infringement to ignore the fact that, in the case of an innocent service provider, it is a consumer of the service and not the provider itself who is making and distributing infringing copies. Underlying the *White Paper's* decision to transfer the burden of copyright liability to innocent service providers is the belief that holding providers liable—even if they are not the actual infringers—results in the utilitarian goal of more copyright enforcement.

Moreover, a powerful inducement already exists to encourage providers of these services to achieve more copyright enforcement: the bargaining power of copyright owners to encourage service providers to develop anti-infringement technology and to draft membership contracts that provide for punishment of copyright infringement. Although individual authors may have little clout in negotiating such anti-infringement enforcement on the part of service providers, many copyrights in the present system are owned by powerful publishing

Internet Providers, N.Y. L.J., May 17, 1996, at 3. No decision has considered the impact of *Fonovisa* on Judge Whyte's *Netcom* opinion or on Internet service provider liability in general.

Notably, other critics argue that the *Netcom* decision did not go far enough in protecting Internet service providers. These critics assert that even requiring an Internet service provider to investigate the validity of independent complaints of copyright infringement places too much of a burden on these providers. See, e.g., Jonathan Band, *Online Service Provider Liability*, Int'l Com. Litig., Apr. 1996, at 35, 36 (explaining that on-line service providers criticize contributory liability because "they have no way of assessing the validity of the copyright owner's claims" because the "owner may have transferred the rights to the subscriber, the material may have fallen into the public domain, or the subscriber may be making a fair use of the work"); Peter Brown & Richard Raysman, *Internet Copyright Developments*, N.Y. L.J., Jan. 9, 1996, at 3 (stating that *Netcom* decision has "sparked anxiety among on-line services and access providers that they may be liable for contributory infringement").

²⁰⁹ *Playboy Enters., Inc. v. Frena*, 839 F. Supp. 1552, 1558 (M.D. Fla. 1993).

²¹⁰ *Sega Enters. Ltd. v. MAPHIA*, 857 F. Supp. 678, 686-88 (N.D. Cal. 1994).

²¹¹ The *Netcom* court, however, explicitly refused to apply either *Playboy* or *Sega* to the facts of its case. See *Religious Technology Ctr. v. Netcom On-Line Communication Servs., Inc.*, 907 F. Supp. 1361, 1370-71 (N.D. Cal. 1995). According to Judge Whyte, *Playboy* was inapplicable because the *Playboy* court did not consider whether a bulletin board operator is directly liable for the infringing acts of its subscriber; rather, Judge Whyte concluded that *Playboy* found that a bulletin board operator "was liable for violating the plaintiff [copyright owner]'s right to publicly distribute and display copies of its work" by knowingly distributing the infringing pictures uploaded by a subscriber. *Id.* at 1370. According to Judge Whyte, the *Sega* decision was inapplicable on the issue of direct infringement because *Sega* was about contributory infringement, not direct infringement. See *id.* at 1371.

houses who could threaten to withdraw permission for service providers to distribute their works altogether unless the providers provided some amount of copyright enforcement. If the nature of copyright ownership changes drastically such that powerful publishing houses really are disempowered, then copyright law could be changed to ensure that Internet service providers do not freely allow infringement.²¹² The *White Paper's* decision to impose additional liability on service providers in the current climate seems destined both to drive smaller network providers out of business and to stunt the future growth of the Internet, which requires the free transmission of information to flourish.

The *White Paper* drafters' decision to impose such a punitive direct liability rule on service providers also demonstrates a poor understanding of the existing technology and structure of the Internet. First, as several commentators have observed, given the free-flowing nature of information on the Internet and the ability of Internet subscribers to alter their identifying information, bulletin board operators and service providers have only a limited ability to identify infringers and infringing behavior.²¹³ Further, requiring such access providers to monitor every transmission of information significantly hampers the efficient functioning of the network and diverts the service providers' precious resources from maintaining their networks toward copyright policing.²¹⁴ In fact, according to one commentator, "[i]ndividuals and small enterprises are likely to be discouraged by the prospects of liability, and may refrain from becoming on-line service providers. . . . A

²¹² The small author who publishes on the Internet still deserves copyright protection; however, current enforcement is sufficient given that the copying of these small authors' works is a very small fraction of total copying as compared to the copying of industry-owned works.

²¹³ See Bliss, *supra* note 208, at 554 (noting that "[c]ommercial systems like Compuserve and America Online, which may operate hundreds of individual BBSes, claim that it is virtually impossible to find a specific infringing file" and that "file names identifying copyrighted works can be changed, which makes it difficult to identify the work and determine whether it is copyrighted"); see also Gilbert, *supra* note 198, at 446, 448 (observing that benefits of prescreening bulletin board messages for potential copyright infringement come at great cost and that users can circumvent prescreening by technologically removing copyright notices); Alan J. Hartnick, *Law Changes Necessary for Information Superhighway?*, N.Y. L.J., June 9, 1995, at 5 (commenting that it is "virtually impossible to screen uploading by subscribers" to a bulletin board, and that BBSes have "no real control over content"); Orenstein, *supra* note 84, at 1 (quoting computer executive at Prodigy explaining that keeping track of all 30 million bulletin board messages would consume too much time and money and "require endless judgment calls about what [is] libelous or infringing").

²¹⁴ See Bliss, *supra* note 208, at 554 (observing that holding bulletin board operators directly liable would require them to have "working knowledge of copyright law").

liability rule is likely to have a chilling effect on the types of exchanges among people."²¹⁵

In addition, service providers and other "netizens" of the Internet are already independently taking action to educate Internet users about copyright liability and to condition bulletin board privileges on the legal use of copyrighted files.²¹⁶ In fact, the Software Publisher's Association, a vigorous enforcer of its members' copyrights, admits that "'most bulletin board systems in North America are scrupulously honest and periodically purge copyrighted software from the systems.'"²¹⁷ The *White Paper's* decision to reward Internet service providers for increasing the level of copyright awareness by punishing them with the threat of direct liability demonstrates an unswerving adherence to the concept that service providers, as potential "deep pockets," should be held liable regardless of legal and technological arguments to the contrary.²¹⁸

Placing liability on innocent noninfringing technology innovators, such as bulletin board providers or VTR manufacturers, then, is flawed in two ways. First, it skews the copyright balance against dissemination by impairing the ability of innovators to create and maintain technology that enhances information transmission.²¹⁹ Second, such liability imposes additional costs on network providers who are unable economically to alter their ability to monitor their systems for infringing behavior.²²⁰

²¹⁵ Elkin-Koren, *supra* note 45, at 406-07.

²¹⁶ See Bliss, *supra* note 208, at 553 (observing that "[m]ost bulletin boards currently require that their users agree to upload only 'legal' files" and that "[u]sers who violate this rule are generally expelled from the BBS"); see also P.J. Benedict O'Mahoney, Electronic News FAQ Internet (last modified Mar. 10, 1996) <<http://www.benedict.com/enewsfaq.htm>> (instructing Internet users about copyright law and e-mail); Samuelson, *supra* note 118, at 26 (noting that "[i]nformal exchanges about copyright issues . . . occur in electronic newsletters . . . and on bbs's on the Net").

²¹⁷ Bliss, *supra* note 208, at 556-57 (quoting Software Publisher's Association spokesperson).

²¹⁸ See Hartnick, *supra* note 213, at 5 (observing that drafters of *White Paper* must perceive that service providers have deeper pockets than their infringing subscribers).

²¹⁹ See Bliss, *supra* note 208, at 552 (predicting that effect of *White Paper's* recommendation will be to reduce dissemination of information and to shut down bulletin boards); Samuelson, *supra* note 118, at 26 (describing strength of Internet as facilitator of enhanced communication and learning "of the very sort that copyright law is supposed to promote").

²²⁰ Part of the debate surrounding the NII Copyright Protection Act of 1995 centers around the question of liability of Internet service providers. Officials in the technology industry admit that there are sharp divisions over questions of liability. See Mark Walsh, *Impasse Over Online Copyrights*, *The Recorder* (San Francisco), May 9, 1996, at 1, available in LEXIS, News Library, Newspapers File (quoting Thomas Pogar, a Viacom International, Inc. official, as stating that Internet service providers and content-providing copyright holders such as The Walt Disney Co. and Viacom International, Inc. are "still pretty far apart on key issues"). Even President Clinton admits to the enormity of the

B. *Additional Proposals*

Various other alternatives to current copyright law have been proposed by commentators. While these alternatives may seem extreme, they are useful in that they illustrate the problems with abandoning our current structure for an alternate one.

Two technologically minded commentators have argued for a complete overhaul of the very nature of the market structure for creative works. Professors Samuelson and Glushko have documented Xanadu, one scientist's vision of the future of the structure for creative works.²²¹ Samuelson and Glushko describe Xanadu as one of the most creative solutions to the problem of new technology in copyright law.²²² Xanadu argues for the creation of a comprehensive library/bookstore for all creative works.²²³ In the Xanadu structure, instead of selling their works, all authors are required to register their works with this library/bookstore.²²⁴ Whenever various users access the author's work, they are charged an access fee which is then credited to the author's account.²²⁵

The Xanadu model in fact eliminates many of the problems of the current copyright framework. For example, the traceability of copies in the Xanadu model (a result of the technologically monitored library/bookstore) reduces the enforcement problems of copyright law with respect to new technology by allowing copyright holders to charge for every copy made of their work. Xanadu relies on developments in technology to develop a structure in which purchasers would be charged for every electronic access of a creative work and disabled from making subsequent copies through technological encoding. Xanadu is drastically different from the present copyright structure in that it relies on technology and not legal supplementing of the free

impasse between content providers and access providers on the liability issue. See *id.* (quoting President Clinton as stating, "I would not characterize a full solution as being close, but people are continuing to work on it").

Since the existing copyright structure is changing to accommodate the strains of cheaper copying, legislation that seeks to overhaul the copyright system's method of protection or enforcement is largely superfluous. Nevertheless, there is a need for copyright legislation to redefine outdated words in the copyright statute to accommodate changes in the form that information is proliferated today. For example, words such as "publish" may not carry much meaning in an Information Superhighway structure because bulletin board operators, among other Internet users, rarely publish. For a discussion of Information Superhighway issues, see generally White Paper, *supra* note 65, at 191-216; Blake & Tiedrich, *supra* note 14, at 421-31 (recommending Information Superhighway legislation).

²²¹ See Samuelson & Glushko, *supra* note 15.

²²² See *id.* at 247-55.

²²³ See *id.* at 247.

²²⁴ See *id.* at 248.

²²⁵ See *id.* at 248-49.

market to limit copying behavior. Thus, it is more a prediction of the future of copyright law than a realistic solution for the current problems faced by copyright holders. Until advances in technology and the creative works market make a system like Xanadu feasible, we must employ our current structure to solve the problems of cheaper copying technology.²²⁶

A second alternative to the copyright structure is a system of compulsory licensing. In a lecture about photocopying technology in 1976, Barbara Ringer suggested that the enforcement problem of cheaper copying could be solved through the establishment of a compulsory licensing structure.²²⁷ Her proposal is equally applicable as a response to the copying strains of newer technology such as the Internet. In a compulsory licensing scheme, the government distributes statutorily fixed royalties to copyright owners. The government then reflects the costs of these royalties in a copyright product's selling price, thus spreading the costs of these royalties across the ultimate consumers of the product.²²⁸ In effect, the enforcement problem is eliminated because the balance shift against creator incentives can no longer occur: authors are compensated and motivated by governmental subsidies.

While a compulsory licensing system reduces expenditure of judicial resources in copyright disputes, it contradicts the democratic nature of our society because it relies on governmental subsidy and monitoring of infringement. Excessive governmental interference in the distribution of creative works thwarts the dual goals of copyright law by selectively encouraging only certain governmentally approved works. By awarding more value to particular works, the government both reduces the dissemination of works that it perceives to be less

²²⁶ For their own critique of Xanadu, see *id.* at 260 (observing that, under Xanadu, authors may not pay to publish works and may be reluctant to allow derivative copying; further noting that Xanadu fails to reflect user behavior and creates artificial pricing structure).

²²⁷ See generally Barbara Ringer, *Copyright in the 1980s—The Sixth Donald C. Brace Memorial Lecture*, 23 *Bull. Copyright Soc'y* 299 (1976). For an analysis of the application of a compulsory licensing scheme in the home video recording area, see Nimmer, *supra* note 151, at 1530.

²²⁸ "In certain circumstances, particularly where transaction costs are believed to dwarf per-transaction royalties, Congress has found it necessary to provide for compulsory licenses." White Paper, *supra* note 65, at 55. One example of such congressional action is 17 U.S.C. § 111 (1994). "The cable compulsory license was enacted to reduce the need for negotiations among thousands of program copyright owners and hundreds of cable systems" White Paper, *supra* note 65, at 55 n.153.

valuable to society and stunts the creativity of artists engaged in nongovernmentally sanctioned creative efforts.²²⁹

CONCLUSION

Industry action and the judiciary's narrow application of the fair use doctrine adequately compensate for the enforcement crisis in the existing copyright structure. Additional legislation designed to "fix" the current copyright system to respond to new technology is superfluous at best and harmful at worst. Hasty legislation may only work to reduce valuable dissemination of information and stymie the development of new technology at a time when the current structure compensates for its enforcement problems.

This Note predicts that, given the effectiveness of the copyright system's response to new technology, future legislation may be unwise and unnecessary. Nevertheless, the Note encourages periodic reexamination of the effectiveness of enforcement to ensure continued effectuation of the copyright balance. A reevaluation of the copyright structure's response to copying technology in a decade, for instance, would provide a valuable comparison point in ensuring that no additional, technology-specific legislation is required for effective enforcement.²³⁰ If history is any guide, however, the behavior of the copyright system in response to cheaper copying technology should be consistent with Arthur Miller's observation:

Since the birth of copyright, every age has seen the emergence of a new medium of expression or technology that has led people to express the fear and concern that it defied the boundaries of existing doctrines or that the new candidate for protection was so strikingly different that it required separate legal treatment. These apprehensions were voiced about photography, motion pictures, sound recordings, radio, television, photocopying, and various modes of telecommunication. In each instance, the copyright system has managed over time to incorporate the new medium of expression into the existing framework.²³¹

²²⁹ The *White Paper* rejects compulsory licensing in favor of marketplace solutions. See *White Paper*, supra note 65, at 55-56. The *White Paper* notes that "transaction costs—and the attendant savings from compulsory licensing—can be minimized in a digital environment." *Id.* at 55.

²³⁰ See generally Diane L. Zimmerman, Copyright in Cyberspace: Don't Throw Out the Public Interest with the Bath Water, 3 *Ann. Surv. Am. L.* 403 (1994). Professor Zimmerman advocates a wait-and-see approach to determine what market solutions will develop to combat the problems posed by cyberspace before jumping to enact new copyright legislation.

²³¹ Arthur R. Miller, Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since *CONTU?*, 106 *Harv. L. Rev.* 977, 982 (1993) (footnotes omitted).