1995

Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace

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Recommended Citation

Jane C. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV 1466 (1995).

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PUTTING CARS ON THE "INFORMATION SUPERHIGHWAY": AUTHORS, EXPLOITERS, AND COPYRIGHT IN CYBERSPACE

*Jane C. Ginsburg**

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INTRODUCTION

The advent of the "Information Superhighway" has sparked much speculation about the roles of authorship, of readership, and of literary property in the vast system of interlinked computer networks that has come to be known as "cyberspace."¹ Through computers linked to a digital network, users can access and add to vast quantities of material. At

* Morton L. Janklow Professor of Literary and Artistic Property Law, Columbia University School of Law. Copyright 1995, Jane C. Ginsburg. This Article is based in part on the Robert S. Appel Distinguished Lecture in Law and Technology, delivered at the University of Denver College of Law, March 23, 1995.

Many thanks for substantive suggestions to Professor Shira Perlmutter, Professor Marci Hamilton and Steven Shaber, Columbia Law School class of 1996; thanks for research assistance to Justine Harris, Columbia Law School class of 1996.

1. See, e.g., I. Trotter Hardy, *The Proper Legal Regime for "Cyberspace,"* 55 U. Pitt. L. Rev. 993 (1994); Jessica Litman, *The Exclusive Right to Read,* 13 Cardozo Arts & Ent. L.J. 29 (1994); David J. Loundy, *E-Law: Legal Issues Affecting Computer Information Systems and Systems Operator Liability,* 3 Alb. L.J. Sci. & Tech. 79 (1993); Raymond T. Nimmer & Patricia A. Krauthaus, *Copyright on the Information Superhighway: Requiem for a Middleweight,* 6 Stan. L. & Pol'y Rev. 25 (1994). On the creation of works in digital media, see, e.g., Pamela Samuelson, *Some New Kinds of Authorship Made Possible by Computers and Some Intellectual Property Questions They Raise,* 53 U. Pitt. L. Rev. 685 (1992); Robert D. Sprague, *Multimedia: The Convergence of New Technologies and Traditional Copyright Issues,* 71 Denv. U. L. Rev. 635 (1994); Jennifer D. Choe, Note, *Interactive Multimedia: A New Technology Tests the Limits of Copyright Law,* 46 Rutgers L. Rev. 929 (1994).

least in theory, every computer user can become his or her own publisher, and every terminal can become a library, bookstore, or audio and video jukebox.

The prospect of pervasive audience access to and ability to copy and further disseminate works of authorship challenges the traditional roles not only of information providers—be they publishers, motion picture producers or record producers²—but of the individuals who create the works. On the one hand, authors will be able to disseminate their works directly to the entire world of online users. On the other hand, this kind of dissemination ensures neither payment nor the security that users will not copy, alter, or further circulate the author's work. Does the "Information Superhighway" put the author in the driver's seat, or will the author become, as Garrison Keillor has warned, "the deer in the headlights" of a vast traffic the author cannot control?³

While circulation in cyberspace may place works of authorship at the risk of uncontrolled copying or adaptation, the works have first to be made available for digital exploitation. As a result, Mort Janklow, a leading literary agent, offers a more hopeful prediction than Keillor's. The entrepreneurs of cyberspace still depend on the participation of authors: as Janklow puts it, "they've got the highway, but I've got the cars."⁴ That is, one can build the highway, but it does not follow that the cars will choose to come. Unless they can become author-friendly, digital media may remain just that: media, without content. Today's travellers on the infohighway are largely (although by no means exclusively) the bicycles and tricycles of e-mail exchanges, and the tractor trailers of enormous data compilations. If all kinds of works of authorship, particularly those of intense creativity and imagination, are to embark willingly on the cyber-road, then authors require some assurance that the journey will not turn into a hijacking.

But if cyberspace threatens authors' ability to control the exploitation of their works, it also offers them new opportunities for creation. By facilitating communication among creators and enhancing their ability to

2. A variety of local and international conferences have recently focused on the rights and liabilities of information providers, publishers and producers in the digital era. See, e.g., WIPO Worldwide Symposium on the Future of Copyright and Neighboring Rights (on file with the author) [hereinafter WIPO Louvre] (symposium held June 1-3, 1994 at the Louvre); WIPO Worldwide Symposium on the Impact of Digital Technology on Copyright and Neighboring Rights, Mar. 19, 1993 (on file with the author) [hereinafter WIPO Harvard] (symposium held Mar. 31-Apr. 2, 1993 at Harvard University); Business and Legal Aspects of the Internet and Online Services (Seminar held Sept. 14-15, 1995 in New York).

3. Remarks at Panel Discussion, Session III, Conference on Intellectual Property Rights and the Arts: The Impact of New Technologies 43 (Dec. 13, 1994) (transcript on file with the Columbia Law Review) (sponsored by The New York International Festival of the Arts).

4. Interview with Morton L. Janklow, Janklow, Nesbit & Associates, at Columbia Law School (Oct. 25, 1994).

disseminate the fruits of their labors, cyberspace may promote new modes of authorship, particularly of a collaborative kind. Today's casual e-mail exchanges may become tomorrow's multimedia productions, as many widely scattered contributors together elaborate works combining words, images, and/or music. This Article therefore analyzes the copyright law consequences of creation as well as of exploitation of works in cyberspace. Moreover, because cyberspace knows no national borders, the evaluation of both topics necessarily takes into account foreign as well as domestic U.S. copyright law.

This Article will address three broad problems: first, who owns the copyright in works created on the infohighway?; second, what rights do the copyright owners of these works—as well as of pre-existing works posted in cyberspace—enjoy?; and third, how may they enforce their rights? Because the law in this area is far from settled, the analysis cannot be purely descriptive; the conclusions offered here are often proposals derived from my analysis of the available elements of positive copyright law. Finally, two premises underlie this analysis. First, in applying or adapting copyright law to issues of copyright ownership and exploitation in cyberspace, I am claiming that copyright law properly does apply, or can successfully be adapted, to digital creation and communication of works of authorship. Thus, I do not believe that the digital format of the works, or their networked dissemination, radically undermines the bases of copyright laws conceived in an analog world.⁵

Second, in articulating and examining the issues from the point of view of authors and copyright owners, I am claiming that fostering authorship remains a primary goal of copyright law, whatever the medium in which works are created and disseminated. It is true that cyberspace vastly enhances the power of users of works: it not only makes works available to individual users more easily and in greater volume than in the hard copy world, but also communicates them in an easily manipulated format that users can instantly recopy, adapt, or forward to other users. Nonetheless, the perspective of user rights, albeit important, should remain secondary. Without authors, there are no works to use.⁶ Copyright law has maintained the balance between encouraging authorship and enlightening the public; as the Copyright Clause of the Constitution de-

5. For the opposite proposition, see, e.g., Nimmer & Krauthaus, *supra* note 1, at 32 (arguing that existing scope and nature of copyright protection are poorly attuned to new milieu of information highway); see also Thomas Dreier, *Copyright Digitized: Philosophical Impacts and Practical Implications for Information Exchange in Digital Networks*, in *WIPO Harvard*, *supra* note 2, at SDT/15, 27 (exploring strains put on traditional copyright concepts when digital media provoke the "dissolution" of the work of authorship).

6. Cf. *Harper & Row, Publishers v. Nation Enters.*, 471 U.S. 539, 559 (1985) (quoting Lionel S. Sobel, *Copyright and the First Amendment: A Gathering Storm?*, 19 Copyright L. Symp. (ASCAP) 43, 78 (1971)) ("If every volume that was in the public interest could be pirated away by a competing publisher, . . . the public [soon] would have nothing worth reading.").

clares, the "Progress of Science" is "promote[d]" by "securing for limited Times to Authors . . . the exclusive Right to their . . . Writings."⁷

I. WHO OWNS THE COPYRIGHT IN THE "CARS"?

Some of the problems posed by electronic networks concern communication and protection of previously created works. These works present no problems of copyright ownership specific to cyberspace: traditional copyright principles can identify their authors or initial copyright owners.⁸ For example, the author of a hard copy photograph that has been scanned and uploaded to a network does not cease being the work's sole author simply because the work's format or mode of communication has changed.⁹ Cyberspace can raise novel copyright ownership questions, however, with respect to works wholly or partially created on electronic networks. Participants in bulletin boards and "chat lines,"¹⁰ or users of electronic mail, can together create works of authorship through multiple online exchanges. The number and location of the participants can be as vast as the number of bulletin board or chat line subscribers, or, even more broadly, as the number of persons with access to e-mail.

Consider the following hypothetical. Suppose that an author writes the beginning of a short story, which she posts on an electronic bulletin board, inviting any and all participants to compose endings for the tale.¹¹ In due course, hundreds of writers respond. The initiating author would now like to publish her beginning, as joined to her favorite fifty conclu-

7. U.S. Const. art. I, § 8, cl. 8.

8. See, e.g., Jane C. Ginsburg, *Domestic and International Copyright Issues Implicated in the Compilation of a Multimedia Product*, 25 *Seton Hall L. Rev.* (forthcoming 1995) (manuscript at I05, 113-16, on file with the Columbia Law Review (outlining traditional copyright principles and describing how they can be applied to problems posed by electronic networks)).

9. Moreover, the person effecting the scanning would not be considered the "author" of the digital version, since she would have vested no independent creativity in scanning the photo. See, e.g., *L. Batlin & Son v. Snyder*, 536 F.2d 486, 491 (2d Cir.), cert. denied, 429 U.S. 857 (1976) (simply transforming the medium in which a work is expressed—in that case converting a cast iron "Uncle Sam" bank to a plastic version—is not an act of authorship).

10. Electronic "chatting," which allows users to have conversations over the internet essentially in real time, is technically described as "messaging between nodes on a network. When your computer connects with a host on a LAN [local area network], the host sends a login prompt to which your computer responds so that the connection can be made." Tom Fahey, *NetSpeak: The Internet Dictionary* 35 (1994).

11. The hypothetical is inspired by an old-technology event: in 1876, Mark Twain wrote a story titled "A Murder, A Mystery and A Marriage." He proposed to the *Atlantic Monthly* "that a number of other famous writers of the period . . . be enlisted, each to write his own final chapter for the work, so that for the mystery set up in the first few chapters, each author would compose a solution, in addition to, or in competition with Twain's own dénouement. In other words, as planned by Twain, there was to be a common plot for the story, with a number of different endings." *Chamberlain v. Feldman*, 89 N.E.2d 863, 863-64 (N.Y. 1949) (concerning rights in Twain's manuscript, his project never having come to fruition).

sions, which she has assembled and edited. Moreover, she hopes to do so free of any copyright claims of the fifty selected contributors. Who owns what rights under copyright in the story and its components?

A. *Joint Works*

Classifying this work affords a starting point for determining its copyright ownership. The collaborative nature of the work might make the Copyright Act's "joint work" category the most apt for the story with all its endings.¹² The Copyright Act defines a "joint work" as "a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole."¹³ Our compendium of endings seems to fit that standard: those who responded to the initiating author's invitation surely intended to merge their endings to her beginning, as did she intend to combine her beginning with their endings.

One might object that the completed stories should not be considered joint works unless the participants collaborated together in space or time, or unless each participant knew whom the others were. But even before the infohighway, joint works did not necessarily imply temporal and spacial proximity. For example, in the "old" days, a composer might have written a melody, hoping and intending that, at some later date, a lyricist would come along and supply the words. In this instance, although the authors did not work together toward their goal (indeed, the authors may never have met or corresponded), both sought to create a work that would combine words and music.¹⁴ While the 1976 Copyright Act emphasizes the intent of the authors at the time their respective contributions were made,¹⁵ it does not require that that intent be simultaneously expressed. The legislative history of the Act in the House and Senate Reports envisions two situations giving rise to a joint work: (1) "the authors collaborated with each other," or (2) "each of the authors prepared his contribution with the knowledge and inten[tion] that it would be merged with the contributions of other authors as 'inseparable or in-

12. See 17 U.S.C. § 101 (1988). The work would most likely not be considered a "work made for hire," see *infra* note 26.

13. 17 U.S.C. § 101.

14. Or suppose the composer had no intent regarding the pairing of her tune with words, but a lyricist nonetheless joined a text to the tune. The lyricist certainly intended to create a work that was "joint" in the sense that he bound the words and music together. The Second Circuit, in a much criticized decision under the 1909 Act, held that the intent of the subsequent author sufficed to qualify the combined work as "joint." See *Shapiro, Bernstein & Co. v. Jerry Vogel Music Co.*, 221 F.2d 569, 570 (2d Cir.), modified on rehearing, 223 F.2d 252 (2d Cir. 1955) (the "*12th Street Rag*" case). The primary basis for the criticism of this decision, however, is the lack of the first author's intent to create a joint work, rather than the belatedness of the second author's contribution.

15. See S. Rep. No. 473, 94th Cong., 1st Sess. 103-04 (1975); H.R. Rep. No. 1476, 94th Cong., 2d Sess. 120 (1976).

terdependent parts of a unitary whole.'"¹⁶ While collaboration implies simultaneity of intent, the other example from the committee reports, of contributions created with the intent that they be merged, arguably accommodates the hypothetical composer awaiting a lyricist, as well as our initiating author and her cyber-collaborators.

However, the legislative history suggests that, while the co-authors need not actually meet and work together, they must not only intend, but must also be aware of each other's contributions. For there to be not only an "intention[] at the time the writing is done" to combine the parts,¹⁷ but also the knowledge (or at least the reasonable expectation) that the contributions will be merged, it would seem that each contributor's intent must be fairly contemporaneous.¹⁸ Even so, our initiating author may satisfy the statutory criteria of joint authorship. When she posts the opening of her story on the electronic bulletin board, she does not know who will come along to complete it, but she can be reasonably certain that someone (or many someones) will respond. Moreover, to enhance her knowledge of the contributions she intends to merge with her own, she can at all times monitor the progress of her invitation, and thus watch the collaboration unfold. As a result, even though their contributions are serial rather than simultaneous, all the contributors (including the initiator) know, before each begins, that their efforts will form "inseparable or interdependent parts of a unitary whole."

As the co-owner of a "joint" work, the initiating author would be entitled, under U.S. law, to exploit the work on a nonexclusive basis without obtaining her co-authors' permission.¹⁹ However, she could not grant third parties *exclusive* rights without the co-authors' permission. Moreover, absent a contract to the contrary, any nonexclusive exploitation in which the initiating author engages gives rise to a duty to account to her co-authors.²⁰ Accounting for profits among fifty co-authors could prove cumbersome—and relatively unprofitable.²¹ Moreover, under some foreign copyright laws, joint authors may not individually exploit the joint work, even on a nonexclusive basis, without obtaining all the co-authors' accord.²² Thus, the rights afforded to the co-authors under copyright's

16. S. Rep. No. 473, supra note 15, at 103; H.R. Rep. No. 1476, supra note 15, at 120.

17. S. Rep. No. 473, supra note 15, at 103; H.R. Rep. No. 1476, supra note 15, at 120.

18. See, e.g., S. Rep. No. 473, supra note 15, at 103 ("although a novelist, playwright, or songwriter may write a work with the hope or expectation that it will be used in a motion picture, this clearly is a case of separate or independent authorship rather than one where the basic intention behind the writing of the work was for motion picture use").

19. See, e.g., *Werbungs und Commerz Union Austalt v. LeShufy*, 6 U.S.P.Q.2d (BNA) 1153, 1154 (S.D.N.Y. 1987) (citing M. Nimmer, Copyright § 6.10 (1987)).

20. See, e.g., *Oddo v. Ries*, 743 F.2d 630, 633-34 (9th Cir. 1984); *Jerry Vogel Music Co. v. Miller Music*, 74 N.Y.S.2d 425, 427-28 (App. Div. 1947), aff'd, 87 N.E.2d 681, 681 (N.Y. 1949).

21. Moreover, the other joint authors may, in the absence of an agreement to the contrary, exploit the initiating author's contribution.

22. See, e.g., C. Prop. Intell. art. L. 113-3 (1992) (Fr.); Law No. 633 for the Protection of Copyright and Other Rights Connected With the Exercise Thereof art. 10 (1981) (Italy),

joint works regime are significantly constrained, both in the U.S. and abroad. But these limited rights reflect only the basic framework: the initiating author may alter that arrangement by contract. Our next inquiry therefore addresses cyberspace assignments of copyright, and the extent to which they comply with copyright law requirements.

B. *Transfers of Exclusive Rights Under Copyright*

To enjoy maximum freedom to dispose of the collection of stories, our initiating author would like to obtain assignments of all of the contributors' copyright interests. (This would be true whether the contributors were considered co-authors of each story, co-authors of the whole collection, or individual authors of their distinct story endings.) To this end, suppose she includes the following notice when she posts the beginning of her story and her invitation to others to finish the tale:

By contributing material to the completion of the story, you thereby assign to me all your right, title, and interest, in and to any copyright in your contribution, for the full term of copyright, and any renewals and extensions thereof. The territory covered by this agreement shall be the whole world. The laws of the United States and of the State of New York shall govern this agreement.

Is the notice—which is a sort of cyberspace analog to the “shrinkwrap license” of software distribution fame²³—effective to transfer the contributors' copyrights?

The U.S. Copyright Act provides that authors may transfer their rights under copyright in whole or in part, but that a grant of exclusive rights must be made in an “instrument of conveyance, or a note or memorandum of the transfer” “in writing and signed by the owner of the

reprinted in 2 Copyright Laws and Treaties of the World, Italy: Item 1, at 2 (UNESCO Supp. 1992) [hereinafter Copyright Laws of the World]; Law Amending the Federal Law of Copyright, arts. 12–13 (1981) (Mex.), reprinted in 2 Copyright Laws of the World, supra, Mexico: Item 1 at 2–3.

23. A “shrinkwrap license” is an adhesion contract that purports to take effect when the consumer opens the package and retains the goods. In the computer software area, shrinkwrap licenses typically claim to have transferred possession, but not ownership, of a copy of a computer program to the purchaser, subject to a variety of conditions concerning permissible copying or adaptation of the work. See, e.g., cc:Mail Program License Agreement (on file with the Columbia Law Review) (“Opening this package and/or using this program indicates your acceptance of the terms and conditions stated below. . . . cc:Mail, Inc. grants you a non-exclusive license to use this software product . . .”).

For legal commentary on copyright and shrinkwrap licenses, see, e.g., David L. Hayes, Shrinkwrap License Agreements: New Light on a Vexing Problem, 15 Hastings Comm. & Ent. L.J. 653 (1993); David W. Maher, The Shrink-Wrap License: Old Problems in a New Wrapper, 34 J. Copyright Soc'y 292 (1987); Richard H. Stern, Shrink-Wrap Licenses of Mass Marketed Software: Enforceable Contracts or Whistling in the Dark?, 11 Rutgers Computer & Tech. L.J. 51 (1985); see also Step-Saver Data Sys. v. Wyse Technology, 939 F.2d 91 (3d Cir. 1991) (analyzing acceptance of shrinkwrap license terms under UCC § 2-207).

rights conveyed."²⁴ While the notice may be a writing sufficient to meet the Copyright Act's formal requirements, where is the signature? In the absence of authority recognizing online assents as equivalent to signed writings,²⁵ our initiating author may not be able to rely on the medium of cyberspace to secure the necessary contracts. Rather, she may have to resort to paper mailings (or faxes) to and from her contributors.²⁶

On the other hand, the notice may suffice to transfer *nonexclusive* rights in the contributions. The Copyright Act does not require nonexclusive grants to be in writing; rather, they may be made orally, or inferred from the parties' conduct.²⁷ Thus, suppose the initiating author posts a notice stating her intention to compile and publish the results of her invitation, and further providing that participation in the story constitutes permission to publish, without payment to the contributors, their contributions as part of the collected results. In that case, a nonexclusive license from the contributors can reasonably be inferred. Moreover, the license, stated to be royalty-free, would absolve the initiating author of any duty to account to the contributors. In this respect, the nonexclusive license solves some of the problems inherent in the basic joint works regime.²⁸

24. 17 U.S.C. § 204(a).

25. Cf. David R. Johnson & Kevin A. Marks, Mapping Electronic Data Communications Onto Existing Legal Metaphors: Should We Let Our Conscience (and Our Contracts) Be Our Guide?, 38 Vill. L. Rev. 487, 491 (1993) (posing, but not answering, the question of what should constitute a signature in cyberspace). See generally Bernard D. Reams, Jr. & L.J. Kuttan, Electronic Contracting Law 162-64 (1994) ("Until the legislature takes action, electronic signatures, passwords and algorithms may not meet the signature requirements of courts of law."); Benjamin Wright, The Law of Electronic Commerce EDI, FAX and E-Mail: Technology, Proof, and Liability § 16.4.4.2 (1991) (Part V "Electronic Contract Issues") (discussing application of UCC § 2-201 signing requirement to electronic transactions).

26. For the same reason, the initiating author may not succeed in characterizing the collection as a "work made for hire," of which the initiating author would be the "employer" and initial holder of all rights under copyright. While the collection of stories would be a compilation or a collective work, to which a specially ordered or commissioned contribution can be a work made for hire, the Copyright Act further requires that there be a writing, signed by both the initiator and the contributor, stating that the contribution will be considered a work made for hire. See 17 U.S.C. § 101. Moreover, the writing should be executed before the work is undertaken. See *Schiller & Schmidt, Inc. v. Nordisco Corp.*, 969 F.2d 410, 412 (7th Cir. 1992). But see *Playboy v. Dumas*, 53 F.3d 549, 559 (2d Cir. 1995) ("[T]he writing requirement of § 101(2) can be met by a writing executed after the work is created, if the writing confirms a prior agreement, either explicit or implicit, made before the creation of the work.").

Finally, any purported transfer of exclusive rights or of authorship status may be ineffective, or at least insecure, as to contributors under the age of capacity to contract—as many participants in cyberspace communications are likely to be.

27. See, e.g., *Effects Assocs. v. Cohen*, 908 F.2d 555, 558 (9th Cir. 1990), cert. denied, 498 U.S. 1103 (1991).

28. Both the joint works and the nonexclusive license regimes avoid another potential impediment to dissemination of the collection, the 1976 Act termination right. Under § 203(b), a grant of exclusive rights made after 1977 may be terminated by the grantor (or

C. Copyright Ownership of a Compilation

Having concluded that the initiating author can at least assert nonexclusive rights in the contributions, and therefore may insulate herself from infringement claims of the contributors,²⁹ we should inquire whether the initiating author also enjoys any exclusive rights of her own. While she is not a copyright owner of the various endings taken individually,³⁰ she is the author and thus the copyright owner of her beginning, and inoreover, of her assembly of the beginning with the endings. That is, assuming she has engaged in a minimally original selection and arrangement of the contributed endings, the resulting collection enjoys its own copyright as a "compilation."³¹ The owner of the copyright in a compilation holds exclusive rights in the reproduction and public display (among other rights) of the work, as edited by its compiler.³² The compilation copyright does not extend to the compiled elements, but only to their collective presentation.³³ This means that the initiating author may protect her collection against total or substantial copying, but would have no claim against a third-party who excerpted one or a few endings.

The above analysis, while made under U.S. copyright law, would be essentially the same under many foreign copyright laws. As a general matter, the initiator and compiler of a "collective work," such as a newspaper or an encyclopedia, enjoys exclusive rights in the work in its collective presentation, but is not the initial copyright owner of the various contributions making up the work.³⁴

her statutory successors) thirty-five years after the grant was made. If the grant is terminated, the grantee may no longer exploit the work in its original form (although she may continue to exploit derivative works prepared under the authority of the grant). By contrast, there is no termination right of a nonexclusive grant, nor may co-authors terminate each others' rights. See 17 U.S.C. §§ 203(a), 304(c) (1988 & Supp. V 1993).

29. This conclusion also depends on the validity in foreign jurisdictions of the notice's choice of law provision. If, under foreign law, the notice was not recognized as a contract, or if the choice of law clause was rejected, then it would be necessary to inquire whether, under the law of that jurisdiction, the notice, or the participants' conduct, gave rise to or permitted an inference of a nonexclusive royalty-free license.

30. The statute defines a copyright owner as an owner of any exclusive right under copyright. See 17 U.S.C. § 101 (1988).

31. See *id.* §§ 101, 103; *Feist Publications v. Rural Tel. Serv.*, 499 U.S. 340 (1991); see also Council of the European Communities, Common Position on Directive on the Legal Protection of Databases, 7934/95, PI 40, Culture 56, Codec 72, art. 3.1 (June 21, 1995) (standard of originality required for protection of databases by draft European Union database directive).

32. See 17 U.S.C. §§ 103, 106.

33. See *id.* § 103(b); *Feist*, 499 U.S. at 348-49.

34. See, e.g., C. Prop. Intell. art. L. 113-2 (1992) (Fr.); Law No. 633 for the Protection of Copyright and Other Rights Connected with the Exercise Thereof arts. 3, 7 (1981) (Italy), reprinted in 2 Copyright Laws of the World, *supra* note 22, Italy: Item 1, at 2; Law Amending the Federal Law of Copyright arts. 12-13 (1981) (Mex.), reprinted in 2 Copyright Laws of the World, *supra* note 22, Mexico: Item 1, at 2-3; Law No. 22/1987 on Intellectual Property art. 8 (1987) (Spain), reprinted in 3 Copyright Laws of the World, *supra* note 22, Spain: Item 1, at 4.

So, our initiating author is a copyright owner, but is her legal ownership of certain exclusive rights in the compilation at all meaningful in a networked environment? For that matter, is *any* author's or other proprietor's copyright ownership—whether of new works created on digital networks, or of pre-existing works posted to a network—meaningful? Will authors and copyright owners be happy surfers in cyberspace, or will they “wipe out” in the “third wave information age”? To address this question, we will review the exclusive rights comprehended in a copyright, and their application to electronic network communications. Finally, if our initiating author's copyright still has content, how can it be enforced, and against whom? This question prompts inquiry into the copyright liability of the bulletin board service or online operator that carries the infringing material.

II. RIGHTS UNDER COPYRIGHT IN CYBERSPACE

Copyright is often referred to as a “bundle of rights.”³⁵ It includes the exclusive rights to reproduce the work in copies, to prepare derivative works based on the copyrighted work, to distribute copies of the work, and to perform or display the work publicly.³⁶ All of these rights can come into play in a networked environment. Moreover, in principle, the rights copyright confers will be the same whatever the format of the work, whether originally created in hard copy or in digital format, including, as in the case of our initiating author, works created in whole or in part on digital networks.³⁷ As a result, the following discussion applies not only to our initiating author, but to authors of all kinds of works, however originally elaborated, whose works are made available on digital networks.³⁸

35. See, e.g., H.R. Rep. No. 1476, 94th Cong., 2d Sess. 61 (1976); *Stewart v. Abend*, 495 U.S. 207, 220 (1990).

36. See 17 U.S.C. § 106; see also, e.g., C. Prop. Intell. art. L. 122-1-122-3 (1992) (Fr.); *An Act Dealing With Copyright and Related Rights*, § IV.3 (1990) (Germany), reprinted in 2 *Copyright Laws of the World*, supra note 22, Germany: Item 1, at 3; Copyright Law of 1970 art. 79, 80 (1989) (Japan), reprinted in 2 *Copyright Laws of the World*, supra note 22, Japan: Item 1, at 20; Law No. 22/1987 on Intellectual Property, ch. III, § 2 (1987) (Spain), reprinted in 3 *Copyright Laws of the World*, supra note 22, Spain: Item 1, at 5-7.

37. Section 102(a) of the Copyright Act, one of the 1976 revisions, poses the principle of the indifference of the medium (whether “now known or later developed”) in which the work is expressed. 17 U.S.C. § 102(a); see also H.R. Rep. No. 1476, supra note 35, at 52: it makes no difference what the form, manner or medium of fixation may be—whether it is in words, numbers, notes, sounds, pictures or any other graphic or symbolic indicia, whether embodied in a physical object in written, printed, photographic, sculptural, punched, magnetic, or any other stable form, and whether it is capable of perception directly or by means of any machine or device “now known or later developed.”

38. The one exception is sound recordings; these works do not currently enjoy the full scope of copyright protection, since there is no exclusive public performance right in a sound recording, and the reproduction and derivative works rights are limited to acts of copying, not imitating, the actual recorded sounds. See 17 U.S.C. § 114. Legislation is

A. *Reproduction Right*

Copies of a work are made not only when the online user stores a work to a hard or floppy disk, or prints it out, but also when a temporary copy is received in the memory of her computer.³⁹ The "reproduction is created within the computer memory to make the work accessible by means of the computer."⁴⁰ Thus, simply accessing a work online implicates the reproduction right, even if the user does not make a more permanent copy on a hard or floppy disk.

Does this mean that every reader of online material is by definition a copyright infringer?⁴¹ Not necessarily, since the access may have been permitted, depending on the circumstances under which the reader obtained the material. Much material distributed over the Internet is made available for free (or on a share-ware basis⁴²); accessing, and even storing

currently pending to recognize a public performance right in digital transmissions of sound recordings. See H.R. 1506, 104th Cong., 1st Sess. (1995); S. 227, 104th Cong., 1st Sess. (1995).

39. Electronic distribution entails the making of "copies" within the meaning of the 1976 Copyright Act, at least as amended in 1980, when Congress adopted the recommendations of the Commission on New Technological Uses (CONTU). Under the CONTU approach, a "copy" is made when a work in machine-readable form is received into the computer's temporary memory. See Report of the Commission on New Technological Uses, quoted in Robert A. Gorman & Jane C. Ginsburg, Copyright for the Nineties 692-94 (4th ed. 1993) [hereinafter CONTU Report]. This approach is the premise for § 117 of the U.S. Copyright Act, and has been followed in the European Union. See Council Directive 91/250, art. 4(a), 1991 O.J. (L 122) 42. U.S. courts have also applied this principle. See, e.g., MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 517-18 (9th Cir. 1993), cert. dismissed, 114 S. Ct. 671 (1994); Advanced Computer Servs. v. MAI Sys. Corp., 845 F. Supp. 356, 362-64 (E.D. Va. 1994) (unauthorized loading of a program into computer's temporary memory held to create an infringing copy); Telerate Sys. Inc. v. Caro, 689 F. Supp. 221, 231 (S.D.N.Y. 1988) (unauthorized remote access to database; receipt of data in unauthorized user's computer held to create a copy). Thus, to receive an electronic distribution is to make a copy, even if no further, more permanent, copy follows. See generally Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights 64-66 (1995) [hereinafter NII White Paper].

However, several commentators have questioned or even strongly criticized the proposition that receipt in a computer's random access memory entails making a "copy." See, e.g., David Post, *New Wine, Old Bottles: The Case of the Evanescent Copy*, Am. Lawyer, May 1995, at 103, 103-04 (questioning); Litman, *supra* note 1, at 40-43 (criticizing); Pamela Samuelson, *Legally Speaking: The NII Intellectual Property Report*, Communications of the ACM, December 1994, at 21, 22-23 (criticizing).

40. CONTU Report, *supra* note 39, at n.164.

41. See generally Litman, *supra* note 1, at 40 (criticizing the NII White Paper, *supra* note 39, on the ground that it would confer on copyright owners the "exclusive right to read").

42. Share-ware is defined as:

A form of software distribution that makes copyrighted programs freely available on a trial basis; if you like the program and use it, you are expected to register your copy and send a small fee to the program creator. Once your copy is registered, you might receive a more complete manual, technical support, access to the programmer's bulletin board or information about upgrades. You can

it can come within the scope of the creator's implicit or explicit license to the readers. Material distributed by commercial online services such as CompuServe, America Online, and Prodigy, may carry charges; the services' subscriber agreements or other notices generally specify the conditions of access and permissible copying. By contrast, material acquired by "hacking" into an online service and accessing without permission would be obtained in violation of the copyright law (as well, potentially, as of other laws⁴³).

One might object that even if mere accessing of electronic documents is "copying," it is, at least initially, done by private individuals for their personal enjoyment. Many if not most users who access online documents simply to view them do not seek to compete with the copyright owner by commercializing or engaging in further reproduction and dissemination of the document. Indeed, whether the "copy" resides temporarily in a computer, or is created or stored in a more permanent medium, including in hard copy, pursuit of individual copyists seems both unfeasible and distasteful. One might therefore expect copyright law to exclude from the copyright owner's control purely personal, noncommercial copying.

While the U.S. has not traditionally included a general "private copying" exception of this kind,⁴⁴ many European countries have.⁴⁵ However, the entire concept of "private copying" makes little sense in a world where the work is predominantly marketed directly to the end user. Much copying in cyberspace will be "private," because intermediaries, such as traditional publishers (and booksellers and librarians) who reproduce, package and distribute copies to end users, will no longer be

download share-ware from many bulletin boards including CompuServe and it is often available from your local user group.

Peter Dyson, *The PC User's "essential accessible" Pocket Dictionary* 468 (1994).

43. See Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (1988); Electronic Communications Privacy Act, 18 U.S.C. § 2510 (1988). Hackers have also been prosecuted under wire fraud statutes, and under provisions regarding the interstate transport of stolen goods, 18 U.S.C. § 2314 (1988). See, e.g., *U.S. v. Riggs*, 739 F. Supp. 414 (N.D. Ill. 1990). See generally Robert L. Dunne, *Deterring Unauthorized Access to Computers: Controlling Behavior in Cyberspace Through a Contract Law Paradigm*, 35 *Jurimetrics J.* 1 (1994).

44. See, e.g., Alan Latman, *Fair Use of Copyrighted Works* (1958), reprinted in Study No. 14 for the Senate Committee on the Judiciary, *Copyright Law Revision*, Studies Prepared for the Subcommittee on Patents, Trademarks, and Copyrights, 86th Cong., 2d Sess. 1 (1960); *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417, 465-66 (1984) (Blackmun, J., dissenting).

45. See Latman, *supra* note 44, at 24-29 (study prepared for U.S. Copyright Office concerning fair use in U.S. and related doctrines abroad). See generally Gillian Davies, *Private Copying of Sound and Audio-visual Recordings* (1984) (study of many countries' laws regarding private copying).

necessary.⁴⁶ As a result, the market for, or "normal exploitation of," the work will by and large be the private copying market.⁴⁷

The supplanting of traditional distribution of copyrighted materials by private copying represents the end point on a continuum that has been evolving since the introduction of the photocopier and the audiotape recorder in the 1960s. These technologies first undermined, and then eradicated, the premise underlying private copying exemptions: that private copying would be laborious and economically insignificant.⁴⁸ In Europe, the diffusion of these technologies has led legislators to limit the exemption, or, in some cases, to eliminate it altogether.⁴⁹

By contrast, in a U.S. controversy concerning the dissemination of technologies facilitating private copying, the Supreme Court employed

46. Thus, there has been much speculation that certain kinds of publishing, particularly of academic journals, will be supplanted by direct communications of scientific articles over the Internet. See, e.g., Andrew M. Odlyzko, *Tragic Loss or Good Riddance? The Impending Demise of Traditional Scholarly Journals*, 42 *Notices of the Am. Mathematical Soc'y* 49 (1995) (arguing that the growth in size of scholarly literature combined with the growth of electronic technology will result in the disappearance of traditional scholarly journals and their replacement by online versions). Thanks to my colleague Gerry Neuman for giving me this article. See also Eugene Volokh, *Cheap Speech and What It Will Do*, 104 *Yale L.J.* 1805, 1807 (1995) ("Control over what is said and heard will shift from intermediaries . . . to speakers and listeners themselves.").

47. Cf. *Berne Convention for the Protection of Literary and Artistic Works*, Sept. 9, 1886, as revised at Paris on July 24, 1971 and amended in 1979, art. 9.2, S. Treaty Doc. No. 99-27, 99th Cong., 2d Sess. 43 (1986) [hereinafter *Berne Convention*] (member countries may "permit the reproduction of [literary and artistic] works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work").

48. See, e.g., *Copyright Law of 1941*, art. 68 (1981) (Italy), reprinted in 2 *Copyright Laws of the World*, supra note 22, Italy: Item 1, at 10 ("The reproduction of single works or of portions of works for the personal use of readers, when made by hand or by a means of reproduction unsuitable for circulating or diffusing the work in public, shall be free.").

49. When the copies generated by these new means of reproduction began to compete with purchases of copies of the works, European legislators permitted private individuals to make copies, but imposed a variety of private copying levies on the machinery and/or media of reproduction, and provided for distribution of the levies to the authors, producers and performers of the musical and audiovisual works captured by audio and video tape recorders. See, e.g., C. Prop. Intell. art. L. 122-4-122-5 (1992) (Fr.); *An Act Dealing with Copyright and Related Rights* art. 68 (1990) (Germany), reprinted in 2 *Copyright Laws of the World*, supra note 22, Germany: Item 1, at 10-11; *Law No. 22/1987 on Intellectual Property* art. 25 (1987) (Spain), reprinted in 3 *Copyright Laws of the World*, supra note 22, Spain: Item 1, at 5-7; *Royal Decree No. 287*, of Mar. 21, 1989 (Spain), reprinted in 3 *Copyright Laws of the World*, supra note 22, Spain: Item 2E, at 1 (regulating "Compensatory Remuneration for the reproduction for personal use of books, phonograms and videograms by means of non-typographical technical apparatus").

Finally, in the case of computer programs, the European Commission's 1991 Directive to harmonize the copyright laws of the European Union's member countries precludes private copying, except for the making of a backup copy by "a person having the right to use the computer program . . . insofar as it is necessary for that use." Council Directive 91/250 of 14 May 1991 on the Legal Protection of Computer Programs, art. 5.2, 1991 O.J. (L 122) 42, 44. Presumably, if the software copyright owner includes a backup disk in the software package sold, then the user has no right to make her own backup disk.

both implied license and economic insignificance justifications to create a limited private copying exception. In the "Betamax case," the Court considered whether "time-shifting"—videotaping TV programs for deferred viewing and subsequent erasure—by individual VCR owners constituted copyright infringement. The Court held that because the public had been "invited to witness . . . [the programs in their] entirety free of charge," copying them for time-shifting purposes was a "fair use" of the copyrighted works.⁵⁰ Particularly significant to the Court's analysis was its perception that time-shifting was not likely to have a negative impact on existing or potential markets for the copied work.

Applying the "Betamax" criteria to online documents, if the document is made freely available for copying in the first place, it is not necessary to inquire whether private copying was fair use: fair use excuses *prima facie* infringements,⁵¹ and where the copying was permitted, there is not even *prima facie* infringement. However, if the document is available only through a commercial online service, then the public is not "invited to [view it] . . . free of charge," and copying it, even temporarily (as in time-shifting) has a much weaker claim to being fair use. This is especially true if, as anticipated, private copying adversely affects the "potential market for or value of the copyrighted work."⁵²

While the market impact justification for exempting private copying from the scope of an author's exclusive rights may be out of place in cyberspace, a different justification may still apply—impracticability of enforcement. Because the issue of enforcement of rights in cyberspace extends beyond the problem of private copying, however, we will defer that inquiry until we have examined the application of other exclusive rights in cyberspace.

B. *Public Performance and Display Rights*

Disseminating works over electronic networks also calls into play the copyright owner's public performance and display rights. The Copyright Act defines a public performance or display to include the following conduct:

to transmit or otherwise communicate a performance or display of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.⁵³

50. Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 449 (1984).

51. See, e.g., Campbell v. Acuff-Rose, 114 S. Ct. 1164, 1177 (1994) ("[F]air use is an affirmative defense."). See generally William F. Patry, *The Fair Use Privilege in Copyright Law* 385-402 (1985) (study of history, policy, and implementation of the fair use defense).

52. 17 U.S.C. § 107(4) (1988).

53. 17 U.S.C. § 101. The Act also provides: "To 'transmit' a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent." *Id.*

Thus, if an online reader of our initiating author's collection of variously-ended stories were to forward the collection to a mailing list of mystery lovers, the transmission could be both a public display and a reproduction. A reproduction would occur in the temporary memories of the recipients (as well, potentially, as in the memories of their e-mail servers⁵⁴). The forwarding to the mailing list would be a public display by means of transmission if its recipients constituted "the public." The Copyright Act does not define "the public," but it does provide that a work is performed or displayed "publicly" if it is performed or displayed "at any place where a substantial number of persons outside a normal circle of a family and its social acquaintances is gathered."⁵⁵ One might therefore inquire if the mailing list comprises "a substantial number of persons outside a normal circle of a family and its social acquaintances." Some might contend that in the "global village" of cyberspace, the entire community of network users—or if not all users, then at least the users of a given bulletin board service—would be considered "a normal circle of a family and its social acquaintances." However, even acknowledging that cyberspace can promote a kind of friendship and perhaps even familial feeling among correspondents who do not otherwise know each other, the potential "circle" of networked acquaintances is too capacious to fit the statutory definition or intent.⁵⁶

Is simply posting a work on a network, without directly sending it to members of the public, also a "public performance or display"? Once the work is posted, members of the public with access to that network are "capable of receiving the performance or display . . . in separate places and at the same time or at different times."⁵⁷ While the users will not receive the performance or display until they call the work up, the text of the Copyright Act provides for disjunction in times of receiving the program. Case law involving more rudimentary technologies illustrates the point. In *On Command Video Corp. v. Columbia Pictures Industries*,⁵⁸ a federal district court held that a hotel video system through which guests could electronically order the transmission of videocassette motion pictures to the televisions in their rooms "publicly performed" the movies, even though no film would be sent to more than one room's television at a time. The video service had contended that the serial (rather than simultaneous) nature of the transmissions removed them from the cate-

54. A "server" is "[a] specialized network device of software that provides a service to other devices. The most common services on a LAN are printer servers, file servers and mail servers." Tom Fahey, *NetSpeak: The Internet Dictionary* 164 (1994). A "mail server" is "[a]n application that distributes email items in response to requests." *Id.* at 119.

55. See 17 U.S.C. § 101.

56. Cf. H.R. Rep. No. 1476, *supra* note 15, at 64 ("One of the purposes of the definition [of public performance] was to make clear that . . . performances in 'semipublic' places such as clubs, lodges, factories, schools are 'public performances' subject to copyright control.").

57. 17 U.S.C. § 101.

58. 777 F. Supp. 787 (N.D. Cal. 1991).

gory of public performances. However, the court applied the Copyright Act's definition to hold that the transmissions were made "to the public" (the hotel's clientele was "the public") in different places (different rooms) at different times.

There is one difference between transmitting a work via a hotel video system and posting a work in cyberspace. At the hotel, each time a guest ordered a film, the hotel's system sent it directly to the guest; in our hypothetical, the person who posts the material leaves it to the network to send the material on. Thus, the public performance would be directly attributable to the network operator (or bulletin board service) rather than to the individual poster.⁵⁹ Nonetheless, one may argue from this decision that placing the material in a system that makes it possible for "the public" to receive it by deferred transmissions also "publicly performs or displays" the work, or at least is a contributory infringement of the public performance or display right.⁶⁰ Arguably, the text of the Copyright Act does assume that the performance or display will in fact be received by the members of the public: in the definition of public performance the members of the public "capable of receiving" the performance do "receive" it. But the key element would seem to be making the performance available for receipt. For example, even if no viewers tuned in to a particular television broadcast, the unpopular transmission should still be considered a public performance. Similarly, while it is possible (even if unlikely) that no end user would choose to access a work posted on a network, the result should be no different.⁶¹

C. *Distribution Right*

The Copyright Act also grants the author the exclusive right "to distribute copies . . . of the work to the public by sale or the transfer of ownership . . ." ⁶² Disseminating a work on a digital network may not only constitute a public performance or display by means of transmission,⁶³ it might also be considered a distribution of copies, since the network servers and all those who access the work on the network receive "copies" of the work in their computers.⁶⁴ However, while a distributor of "hard" copies must part with the physical object embodying the copy, a distributor of digital copies may cause new copies to be made in the servers' and recipients' computers, all the while retaining her own copy. As a result,

59. See, e.g., *Playboy Enters. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993).

60. See, e.g., *Sega Enters. v. MAPHIA*, 857 F. Supp. 679 (N.D. Cal. 1994). On contributory infringement, see discussion *infra* text accompanying notes 80-85.

61. Cf. 17 U.S.C. § 101 (Supp. V 1993) (defining "publication" as including the "offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display").

62. 17 U.S.C. § 106(3) (1988).

63. See discussion *supra* text accompanying notes 53-61.

64. See discussion *supra* text accompanying note 39.

there may be no "transfer of ownership" of the distributor's copy, and the distribution right, as currently defined, may not be implicated.

The possible lack of fit between the statutory distribution right and digital dissemination may not significantly undermine the author's copy-right, so long as digital transmissions can be deemed public performances or displays. Nonetheless, there may be a practical reason to distinguish between digital performances or displays, and digital distribution of copies: the author may license (or retain) rights separately. If the only exclusive right pertaining to digital transmissions was the public performance/display right, then the holder of that right could block the holder of the reproduction right from disseminating copies of the work over digital networks.

The Information Infrastructure Task Force, appointed by President Clinton in 1993, has recently issued a report recommending amendment of the Copyright Act⁶⁵ to specify an exclusive right to "distribute copies . . . to the public . . . by transmission."⁶⁶ The Task Force would also supplement the definition of "transmit" by adding: "To transmit a reproduction is to distribute it by any device or process whereby a copy or phonorecord of the work is fixed beyond the place from which it was sent."⁶⁷ This definition thus accommodates the distributor's retention of her copy. The Task Force stresses, however, that "The proposed amendment does not create a new right. It is an express recognition that, as a result of technological developments, the distribution right can be exercised by means of transmission—just as the reproduction, public performance and public display rights may be."⁶⁸

To the extent that the proposed right of digital distribution simply transposes to computer networks the traditional right to distribute (physical) copies of the work, the White Paper is correct that the right is not "new." While the traditional right's subject matter focus on material copies makes little sense in a digital environment, the activity targeted (dissemination) and its result (consumers receiving copies) remain the same. Nonetheless, the proposed right of digital distribution by means of transmission underscores something that is new: because digital communication de-materializes copies, the same act can be analyzed as either (or both) a reproduction or a public performance or display. For example, an act which the user may perceive as a public performance, such as a digital broadcast of a popular song, is also a transmission of copies to the listeners' computers. An act which the user may perceive as a reproduc-

65. Bills based on this report have recently been introduced in both the Senate and the House. See S. 1284, 104th Cong., 1st Sess. (1995); H.R. 2441, 104th Cong., 1st Sess. (1995).

66. NII White Paper, *supra* note 39, at 213-20, app. 1 at 2.

67. *Id.* This definition could apply to transmissions by fax as well. While sending a fax to one person or to a restricted group would not be a transmission of copies "to the public," a mass faxing would be.

68. *Id.* at 213-14.

tion, such as ordering the delivery of a document to her computer's screen and memory, is also a public display by means of transmission. The traditional reproduction/public performance distinction thus becomes increasingly elusive.⁶⁹ In the short term, recognizing a right of digital distribution of copies may assist grantees of the reproduction right in resisting the competing claims of holders of the public performance right. In the long run, however, in the digital world it may make most sense to recharacterize the rights of reproduction, distribution, and public performance or display as facets of a general right of communication of works to the public.⁷⁰

D. *Derivative Works Right*

There is another right in the bundle—the right to prepare derivative works⁷¹—that might also be at issue in a variety of online circumstances. The Copyright Act defines a derivative work as encompassing any “form in which a work may be recast, transformed or adapted.”⁷² The derivative works right thus covers all kinds of adaptations of the work of authorship, including but not limited to sequels, spin-offs, dramatizations and translations. For example, our initiating author would control translation and sequel rights in the collection of variously-ended stories, at least with respect to the beginning of the story. If she is not the holder of exclusive rights in the story endings, she would lack authority either to license or to bring an infringement action against adaptations of that material. On the other hand, adaptations of her contributions to the collection, for example, of her selection, arrangement and editing of the endings, would come within the scope of her derivative works right. Thus, if a third party made a motion picture—or in cyberspace, posted a digital video—based on a sequence of stories drawn from the collection, our initiating author would allege violations of her exclusive rights to prepare derivative works based on the beginning of the story, and based on the sequence (selection and arrangement) set forth in the collection.⁷³ Similarly, a sound recording of a reading of the stories, possibly together with

69. The prior version of the NII White Paper, the “Green Paper,” attempted to maintain the distinction by dividing digital transmissions into those that were primarily public performances, and those that were primarily reproductions. See Intellectual Property and the National Information Infrastructure: Preliminary Draft of the Report of the Working Group on Intellectual Property Rights 121–23 (1994). This attempt provoked widespread criticism, see Litman, *supra* note 1, at 30–31 & n.14 (noting that this approach “drew nearly unanimous protest” at Green Paper public hearings), and the White Paper abandoned the distinction.

70. See Paul Mallam, *Copyright and the Information Superhighway: Some Future Challenges*, 6 Ent. L. Rev. 234, 236 (1995).

71. See 17 U.S.C. § 106(2).

72. 17 U.S.C. § 101.

73. See discussion *supra* text accompanying notes 29–34.

music or other sound effects, is also a derivative work,⁷⁴ and would come within our initiating author's copyright monopoly.

What if third-party entrepreneurs, rather than recording a reading of the stories, which reproduces the literary work onto the audio format, produced a sound recording omitting the stories' words, but supplying appropriate musical and other sound effects, timed to complement the user's own reading of the stories? Or what of illustrations produced to complement the stories? While ventures of these kinds are improbable in an analog world—who would buy a book, separately purchase illustrations, and collate the two?—they may be quite feasible in a digital environment. The user can easily integrate the text and the images and/or the sounds, thus creating her own multimedia "derivative work" of which the entrepreneurs will have supplied the components, without directly producing the derivative work. One may imagine the development of a substantial market for peripheral works annexed to, or to be used together with, the primary copyrighted work. Does this market come within the copyright owner's control?

Where the third-party work "goes with" but does not itself reproduce or alter the copyrighted work, no rights under copyright are implicated, despite the economic dependence of the peripheral work on the primary work.⁷⁵ In our hypothetical, however, the user puts the two (or more) works together to create a new derivative work. The case law addressing this kind of situation is not plentiful, but it is divided. The two relevant cases both involved additions to video games. In one case, the Seventh Circuit held that the sale of a "Promblaster" circuit board designed to enable the consumer to speed up the action of plaintiff's games yielded unauthorized adaptations of the games and thus violated the derivative works right.⁷⁶ However, the Ninth Circuit held that the sale of "Game Genie" video game "enhancers" that altered the action of Nintendo video game characters did not create unauthorized derivative works.⁷⁷ The Ninth Circuit's holding turned on its determination that the altered game had no "form" because the Game Genie could not itself produce an audiovisual display: the display resulted from the interaction of the

74. See 17 U.S.C. § 101.

75. See, e.g., H.R. Rep. No. 1476, *supra* note 15, at 62 ("To constitute a violation of section 106(2), the infringing work must incorporate a portion of the copyrighted work in some form; for example, a detailed commentary on a work or a programmatic musical composition inspired by a novel would not normally constitute infringements under this clause.") But see *Worlds of Wonder, Inc. v. Vector Intercontinental, Inc.*, 653 F. Supp. 135 (N.D. Ohio 1986) (independently-produced audiotapes to be played inside "Teddy Ruxpin" dolls held to violate derivative works right in the dolls); *Worlds of Wonder, Inc. v. Veritel Learning Sys.*, 658 F. Supp. 351 (N.D. Tex. 1986) (same); cf. *Addison-Wesley Publishing Co. v. Brown*, 223 F. Supp. 219 (E.D.N.Y. 1963) (answer key to questions in high school physics textbook held to infringe copyright in the textbook).

76. See *Midway Mfg. Co. v. Artic Int'l*, 704 F.2d 1009 (7th Cir.), cert. denied, 464 U.S. 823 (1983).

77. See *Lewis Galoob Toys v. Nintendo of America*, 964 F.2d 965 (9th Cir. 1992), cert. denied, 113 S. Ct. 1582 (1993).

Game Genie and the Nintendo video game cartridge.⁷⁸ This formalistic conclusion is probably erroneous: in determining if the altered presentation is a derivative work, it should not matter whether the presentation resides in a particular piece of hardware. The point is that the interaction of the machines produces a variation of the game.⁷⁹ Under the Ninth Circuit approach, disseminating peripherals for users to combine with copyrighted works would not infringe, while the result under the Seventh Circuit's analysis portends less well for third-party entrepreneurs.

There is another approach to the problem of peripheral works designed to permit the end user to create her own unauthorized derivative work. Dissemination of the peripheral works could be contributory infringement: "One who, with knowledge of the infringing activity, induces, causes, or materially contributes to the infringing conduct of another, may be held liable as a 'contributory' infringer."⁸⁰ Is the end user's creation of an unauthorized derivative work "infringing conduct"? Under the analysis set out earlier,⁸¹ just as "private" copying should not (or should no longer) escape characterization as infringement merely because the copyist is an end user, so "private" adaptations should not enjoy automatic exemptions from liability.

One might object that this analysis is inconsistent with the Supreme Court's determination in the "Betamax" case.⁸² There, the Court held that the dissemination of a product (video recording equipment) that can be used for infringing purposes is not contributory infringement if the product is also "widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses."⁸³ In that case, the "substantial noninfringing use" was "time-shifting" of "free" broadcast television programs.⁸⁴ The majority opinion did not explicitly address whether "librarying" the copy would also be fair use, but the emphasis of its analysis was on the temporary nature of the copy.⁸⁵

Here we are positing that the peripheral work has no substantial use other than in connection with the targeted copyrighted work. Whether that use is noninfringing may turn on two factual questions. First, was

78. *Id.* at 968.

79. Cf. H.R. Rep. No. 1476, *supra* note 15, at 62 (derivative works right is "broader than" the reproduction right "in the sense that reproduction requires fixation in copies or phonorecords, whereas the preparation of a derivative work, such as a ballet, pantomime, or improvised performance, may be an infringement even though nothing is ever fixed in tangible form").

80. *Gershwin Publishing Corp. v. Columbia Artists Mgmt.*, 443 F.2d 1159, 1162 (2d Cir. 1971); see also *Demetriades v. Kaufman*, 690 F. Supp. 289 (S.D.N.Y. 1988).

81. See discussion *supra* text accompanying notes 44-52.

82. *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1984).

83. *Id.* at 442.

84. *Id.*

85. See *id.* at 451-55. By contrast, Justice Blackmun's dissenting opinion examined both "time-shifting" and "library-building," and contended that neither was fair use. *Id.* at 483-84 (Blackmun, J., dissenting).

access to the copyrighted work "free," or did the author or proprietor impose conditions of payment and/or limitations on usage as part of the work's dissemination? Second, analogizing to the "time-shifting"/"librarying" distinction, is the user making a one time derivative work in her computer's temporary memory, so that the adaptation will vanish when she turns the computer off, or has she instead retained a copy of the do-it-yourself adaptation?⁸⁶

These conditions should be cumulative. If the work is not "free," or if the copyright owner has made the work available subject to the limitation that users shall not make even temporary adaptations of the work, then the "time-shifting" should not suffice to exculpate the adaptation. Even if access to the work is "free," the creation of multiple (across the universe of "private" adaptors) permanent adaptations interferes with the copyright owner's exercise of her "exclusive" right to prepare derivative works (although the copyright owner may certainly disclaim that right when she makes copies available for free).

Thus, to return to the Game Genie, even if its producer was not a direct infringer, distribution of a device whose sole purpose was to alter the action of the Nintendo games should have made the producer a contributory infringer. Nintendo did not distribute its game cartridges for free, and for present purposes we may assume that if Nintendo distributed games online, it would not do so without placing payment and use restrictions on that distribution. Because access to the games is subject to charges and restrictions, "time-shifting" should not be a defense.

One might object that if all the copyright owner need do to insulate itself from a fair use defense is to make clear that it is reserving all rights to make derivative works, then the fair use defense becomes meaningless. After all, the fair use defense trumps the copyright owner's claims to exclusive rights, when the balance between the copyright owner's interest in compensation and control and the public's interest in access to works of authorship tips in the public's favor. Nonetheless, in this instance, the making of even temporary adaptations could have a more severe economic impact in cyberspace than in the analog world. Indeed, the Game Genie example illustrates how "time-shifting" may adversely affect the copyright owner's market for derivative works. In cyberspace it may be very easy for consumers to assemble derivative works from the elements available online. If so, there may be no need to keep a copy of the adaptation; rather, the user may simply recreate it each time she goes online. Indeed, for products like the Game Genie, the latter course may be preferable, because each time the user accesses the Game Genie or similar program, she may create a different alteration to the underlying game. In that case, there may be a third category of conduct—repeated time-

86. Cf. 17 U.S.C. § 117 (permitting owners of copies of computer programs to make copies or adaptations of the program, provided "that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner").

shifting of the same material—whose economic impact may be the same as librarying.⁸⁷

In sum, the derivative works rights of the author of a work created or posted in cyberspace should extend in principle to third parties' dissemination not only of fully realized adaptations, but also of work-specific components designed for users' incorporation with the underlying work. There are important corollaries to this principle. First, the third-party creator of a general purpose work, such as a translation program or a graphics program, should not be liable to the author of the underlying work if users employ these tools. A general purpose third-party work lends itself to too many "substantial non-infringing uses"⁸⁸ to justify liability for contributory infringement. Thus, for example, the purveyor of the graphics program should incur no liability if a reader of our initiating author's collection of variously-ended stories downloaded the work and added images generated with the aid of the program.

Second, the end user's liability for direct infringement of the derivative works right would turn on fair use considerations. If the user has created an unauthorized derivative work, there is a *prima facie* violation of the author's exclusive rights. The fair use doctrine would excuse this violation if, most importantly, the creation of the derivative work threatened no significant economic consequences to the underlying work.⁸⁹ Evaluation of economic impact may turn on whether or not the user further disseminates the unauthorized derivative work. Thus, for example, if a user of our hypothetical story collection translated the work into Portuguese for his private enjoyment and edification, no infringement should be found. If, however, the user instead posted the translation to a generally accessible bulletin board, then infringement should be found.⁹⁰

We have seen the contexts in which the reproduction, public performance and display, distribution, and derivative works rights can apply to cyberspace. But we have not yet explored how our initiating author will be able to enforce those rights. If indeed the predominant exploita-

87. Cf. *Sony*, 464 U.S. at 485–86 (Blackmun, J., dissenting) (discussing the economic impact of "time-shifting").

88. See *id.* at 442.

89. See *Harper & Row Publishers v. Nation Enters.*, 471 U.S. 539, 566 (1985) (fourth fair use factor, potential economic harm, is "undoubtedly the single most important element").

90. If the user posts the translation to a few friends or to a small online Portuguese-language reading group, the fair use inquiry becomes more difficult. Arguably, the dissemination of the translation would remain sufficiently discrete to warrant application of the fair use exception. However, once the translation is posted in cyberspace, its proclivity to further dissemination may be too great to ignore its potential economic impact. See text accompanying notes 53–61, on "public" performances in cyberspace.

For a discussion of whether the bulletin board or online service that carries the translation should also be liable, see *infra* text accompanying notes 107–117.

tion of online works will be by the end users, how can a copyright owner police her rights?

III. ENFORCEMENT OF COPYRIGHT IN CYBERSPACE

Copyright owners have traditionally avoided targeting end users of copyrighted works. This is in part because pursuing the ultimate consumer is costly and unpopular. But the primary reason has been because end users did not copy works of authorship—or if they did copy, the reproduction was insignificant and rarely the subject of widespread further dissemination. Rather, the entities creating and disseminating copies (or public performances or displays) were intermediaries between the creators and the consumers: for example, publishers, motion picture producers, and producers of phonograms. Infringements, rather than being spread throughout the user population, were concentrated higher up the chain of distribution of works. Pursuing the intermediary therefore offered the most effective way to enforce copyright interests. By contrast, in cyberspace individuals will often commit the unauthorized acts, both for private consumption and for further dissemination to other individuals. Can there be meaningful, and palatable, copyright enforcement against individuals? Alternatively, will there still be intermediaries worth pursuing?

Some of the hypotheticals we have examined retained the presence of intermediaries—such as producers of components destined for consumer incorporation into derivative works—whom the copyright owner can locate and pursue in much the same way as copyright owners pursue unauthorized exploiters in the analog world. There are also other instances in which intermediaries persist, facilitating copyright enforcement. Most notably, authors and other copyright owners may be able to work with commercial online services to control the gate between author and public. The author, through the service, can impose contractual access and payment conditions on subscribers; the service may also implement technological impediments to unauthorized copying or redistribution.⁹¹

But if a work is disseminated without authorization on an unpoliced bulletin board or network, or if an online service declines to assume responsibility for monitoring what is placed on its network, the task of the copyright owner to discover and combat infringements seems overwhelming. Two complementary approaches may alleviate this problem. First, authors may form, or seek the assistance of already formed, collective licensing societies. Second, bulletin board operators and online services

91. See, e.g., Karen Rodriguez, *Vendors Rally to Secure Internet; Encryption-Based Systems Readied*, *InfoWorld*, Jan. 30, 1995, at 14; *General Terms and Conditions for Use of the LEXIS-NEXIS Services* (May 1, 1995); *WESTLAW Subscriber Agreement* (Aug. 1, 1995).

may be held directly or vicariously liable for the unauthorized dissemination of copyrighted works.

A. *Collective Licensing*

Two principal characteristics of the market for works in cyberspace make enforcement daunting: users are extremely numerous, and they are widely dispersed.⁹² Nonetheless, this situation has low tech analogies. A similar problem has existed since the mid-nineteenth century with respect to the public performance of musical works. No one composer or publisher can find and license (or, failing a license, sue) every commercial music user, from restaurants, to retail establishments, to clubs, to concert halls, to broadcasters, etc. But the composers and publishers can pool their copyrights for collective licensing, and delegate the policing function to the collective licensing organization. Users get the right to perform all the music covered by the blanket license, and the authors and copyright owners create an organization with the resources needed to enforce the performance rights against uncooperative users.⁹³

The music performance rights collectives are private law creations in the United States and, for the most part, abroad.⁹⁴ The rights holders have chosen to form the collectives; no composer or publisher is legally obligated to join them. But not all copyright sectors have formed collectives as pervasively or as willingly, despite the compelling economic incentives for doing so. In the United States, the copyright owners of literary works, for example, have traditionally been reluctant to give up control over rights and permissions to copy in favor of collective licensing of photocopy rights.⁹⁵ Nonetheless, judicial and legislative activity in the United

92. In addition, piratical users may be difficult to identify if they operate anonymously or under a pseudonym.

93. On collective licensing, particularly as practiced by the music performing rights organizations, see generally Stanley M. Besen & Sheila N. Kirby, *Compensating Creators of Intellectual Property: Collectives That Collect* at iii (1989) (examining the role of performance and reproduction rights organizations in the United States and other developed countries when "decentralized use makes individual enforcement of . . . property rights uneconomic."); Proceedings of the Colloquium on the Collective Administration of Copyright (1995) (colloquium held October 31, 1994 in Toronto); Bernard Korman & I. Fred Koenigsberg, *Performing Rights in Music and Performing Rights Societies*, 33 J. Copyright Soc'y 332, 348 (1986) (reviewing the "development of the performing right in music and the operation of ASCAP, the oldest and largest performing rights society in the United States").

94. See generally Besen & Kirby, *supra* note 93, at 15-44 (surveying domestic and foreign performance rights collectives).

95. See generally *id.* at 45-63 (discussing reproductive rights organizations); Ferdinand Melichar, *Collective Administration of Electronic Rights—A Realistic Option?*, Address before Academy Colloquium: The Future of Copyright in a Digital Environment (colloquium held July 5-7, 1995 in Amsterdam) (on file with the Columbia Law Review).

States and abroad points toward (or mandates) greater inclusion of literary works in the collective licensing repertory.⁹⁶

For example, in a U.S. decision of primary importance both for its determination of copyright liability for photocopying and for its endorsement of collective licensing, the Second Circuit recently ruled that Texaco violated the copyright in the *Journal of Catalysis* when one of its research scientists made and retained copies of articles from the journal.⁹⁷ The court rejected Texaco's fair use defense, holding (inter alia) that the copying diverted the market for the journal because the copyright owner could have licensed photocopying rights to Texaco. Acquiring a license would have been "administratively tolerable"⁹⁸ for Texaco, because the plaintiff publisher had made its works available for licensing through the Copyright Clearance Center, a photocopy rights collective that represents scientific and technical journal publishers. The Second Circuit suggested that the fair use analysis might be different if the copyright owner were not making its works available for licensing.⁹⁹ In that event, indicated the court, it might even be appropriate for the court to impose a license that would compensate the copyright owner for the copying, but that would enable the defendant to make the copies without obtaining consent.¹⁰⁰

As a result, *Texaco* makes user friendly licensing both a carrot and a stick for copyright owners. If the copyright owner can offer the user a collective or other administratively tolerable form of license,¹⁰¹ then fair

96. For an argument that collective licensing should become the predominant form of compensation for authors of works of visual art (and, by implication, for copyright owners in general) see Marci A. Hamilton, *Appropriation Art and the Imminent Decline in Authorial Control Over Copyrighted Works*, 42 J. Copyright Soc'y 93, 115-25 (1994).

97. See *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913 (2d Cir. 1994). The claim against Texaco involved systematic copying by hundreds of research scientists, but, for purposes of ruling on the fair use defense, the parties agreed to limit the record to one scientist's copying. See *id.* at 915.

98. *American Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1, 25 (S.D.N.Y. 1993) (Leval, J.), *aff'd*, 37 F.3d 881 (2d Cir. 1994), order amended and superseded, 60 F.3d 913 (2d Cir. 1995).

99. *Texaco*, 60 F.3d at 931.

100. *Id.* at 932 n.19, citing *Campbell v. Acuff-Rose Music*, 114 S. Ct. 1164, 1171 n.10 (1994) (indicating that injunctive relief for copyright infringement may not always be appropriate, and that a continuing award of damages may in some circumstances best accommodate the rights of the copyright holder and the public's interest in access to unauthorized transformations of the plaintiff's work).

101. For example, the Copyright Office is currently enhancing its online database of copyright registrations to include information about obtaining licenses. The Copyright Office's project envisions an online clearance procedure that would make it possible for users to ascertain the status and ownership of a work, to obtain permission, and to pay for the use, all at the push of a few buttons. See, e.g., U.S. Copyright Office, Copyright Office Electronic Registration, Recordation & Deposit System (1995); Guy Lamolinara, *Copyright in the Digital Age: CORDS Project to Make Registration, Verification Easier*, 54 Library of Congress Information Bulletin 267, 267 (1995); Eric Schwartz, *The Herbert Tenzer Memorial Conference: Copyright in the Twenty-First Century: The Role of the Copyright Office in the Age of Information*, 13 Cardozo Arts & Ent. L.J. 69 (1994); see also NII White

use claims whose primary justifications are burdensomeness or lack of economic impact on copyright exploitation may well be foreclosed.¹⁰² On the other hand, if copyright owners do not facilitate licensing, then a court may step in and in effect grant the license anyway—on terms that the copyright owner will not have set. This result compromises copyright owners' rights to decide whether and to whom to license reproduction rights, but less so than would application of the fair use exception, which would deprive the copyright owner of both control and compensation.¹⁰³

Some foreign jurisdictions have adopted stronger measures to promote collective licensing. In the Nordic countries, the "extended collective license" provisions of the copyright laws force holdout publishers into the reproduction rights collective once a "substantial portion" of national authors or publishers within a particular field have joined the collective licensing organization.¹⁰⁴ In France, a law promulgated in January 1995 provides that "publication of a work entails the transfer of the right to reproduce by photocopying to [an approved collective licensing] society. Only approved societies may contract with users for the purpose of managing the right thus transferred. . . ."¹⁰⁵ Thus, copyright holders covered by these laws have no choice but to cede photocopying rights to collectives that will grant blanket licenses covering the repertoire. In return, the copyright owners will be compensated according to the particular country's licensing fee formula.¹⁰⁶

Paper, *supra* note 39, at 191–94, 235–36 (recommending measures to promote "Copyright Management Information").

102. Market failure is not the only justification for fair use claims. In some cases, even if the copyright owner could license the use, copyright policy favors freeing the use from the copyright owner's control. Criticism and parody are leading examples of these kinds of uses: we would not want to limit the available commentary on works of authorship to authorized book reviews and licensed parodies. An authorized book review would be even more suspect than an authorized biography, and a licensed parody seems an oxymoron.

103. The Copyright Clearance Center and the Folio Corporation have announced their intention to form an alliance to promote widescale electronic clearance, billing, and distribution systems for local and wide-area digital networks (including Internet). See Folio Corp. & Copyright Clearance Ctr., Press Release, Mar. 6, 1995 (on file with the Columbia Law Review).

104. See generally Gunnar Karnell, *Extended Collective License Clauses and Agreements in Nordic Copyright Law*, 10 Colum.-VLA J.L. & Arts 73 (1985) (describing the extent and functioning of extended collective license systems in the Nordic countries).

105. C. Prop. Intell. art. L. 122-10 (1995) (Fr.).

106. See generally Jane C. Ginsburg, *Reproduction of Protected Works for University Research or Teaching*, 39 J. Copyright Soc'y 181, 192–98 (1992) (discussing legal licensing regimes in foreign countries) and works cited therein.

The fuller development of licensing collectives abroad may be due to a variety of additional factors as well. First, such collectives have existed for a longer time in other countries. Second, there may be fewer antitrust constraints on the price fixing that collective licensing often implies. Third, in many countries, the government promotes or supervises collective licensing organizations. See generally, Besen & Kirby, *supra* note 93 (discussing copyright collectives throughout world).

How would these models apply in cyberspace? A collective could assume (or at least assist in discharging) the burden of monitoring electronic bulletin boards and networks to discover unauthorized postings of its members' works. The burden would be substantial, however, since the content of cyberspace changes by the second, and new unlicensed postings will inevitably follow hard upon each perusal.

Even were monitoring feasible, whom would the collectives license? Despite the collectives' strength and resources, it could still be impractical to seek out and contract with individual users (or to pursue them, except perhaps on an occasional *in terrorem* basis). Rather, the likely targets of licensing and of infringement suits will be the persons or entities who make available and control the electronic fora for communication of unauthorized copies, displays, or derivative works: that is, the bulletin board services and the network operators.

B. *Liability of Online Services for Copyright Infringement*

The liability of online services for copyright infringements committed on "their" networks or bulletin boards sparks much controversy—at least from the point of view of the service providers, who do not wish to bear the burden of monitoring the copyright compliance of their subscribers.¹⁰⁷ After all, in many cases, the services did not initiate the unauthorized copying or communication; they simply provided the means by which another party could disseminate the infringement to the public. However, the principle that parties who provide the fora of communication of infringement are also liable for copyright infringement is not new to copyright law. In fact, it is the cornerstone of many of the collective licensing and copyright enforcement activities of societies such as ASCAP and BMI (and their foreign analogues). ASCAP, the American Society of Composers Authors and Publishers, and BMI, Broadcast Music Inc., license their members' public performance rights, and initiate suits against users who decline to take the licenses. For example, the music perform-

107. On copyright liability for bulletin boards and online services, see generally NII White Paper, *supra* note 39, at 114–24 (reviewing current status of online service provider liability, and recommending against a diminution of the services' liability); Charles Cangialosi, *The Electronic Underground: Computer Piracy and Electronic Bulletin Boards*, 15 Rutgers Computer & Tech. L.J. 265 (1989) (examining bulletin board services systems operator's liability for copyright infringement); Hardy, *supra* note 1 (evaluating alternative analyses of the emerging law of cyberspace); Loundy, *supra* note 1 (discussing legal issues related to copyright and computer information systems in cyberspace); Jonathan Gilber, Note, *Computer Bulletin Board Operator Liability for User Misuse*, 54 Fordham L. Rev. 439 (1985) (proposing deterrent and mitigation measures against illegal bulletin board use).

On the related topic of liability of online services for defamation committed by subscribers, compare *Cubby, Inc. v. CompuServe*, 776 F. Supp. 135 (S.D.N.Y. 1991) (declining to hold service liable for subscribers' online defamatory statements) with *Stratton Oakmont, Inc. v. Prodigy Servs. Co.*, 23 Media L. Rep. (BNA) 1794, 1795 (N.Y. Sup. Ct. May 24, 1995) (holding service liable because Prodigy exercises some degree of control over the content of postings to its network).

ance rights societies license the venues in which live music is played (such as concert halls, jazz clubs, bars with live bands, etc.); they do not license the musicians.¹⁰⁸ The courts have confirmed the liability of the owners or managers of the restaurants and similar places that engage the performers of the music.¹⁰⁹

Moreover, while restaurants that hire musicians to entertain the diners might be considered the employers of the performers, the doctrine of vicarious liability in copyright law extends beyond the master-servant relationship. As the Second Circuit held in 1963:

When the right and ability to supervise coalesce with an obvious and direct financial interest in the exploitation of copyrighted materials—even in the absence of actual knowledge that the copyright monopoly is being impaired—the purposes of copyright law may be best effectuated by the imposition of liability upon the beneficiary of that exploitation.¹¹⁰

Economic policy considerations supply the rationale for the doctrine of vicarious liability in copyright: the party having the “right and ability to supervise” is best situated to pay for—or better, to prevent—infringement. Judge Keeton has recently elaborated the point:

The enterprise and the person profiting from it are better able than either the innocent injured plaintiff or the person whose act caused the loss to distribute the costs and to shift them to others who have profited from the enterprise. In addition, placing responsibility for the loss on the enterprise has the added benefit of creating a greater incentive for the enterprise to police its operations carefully to avoid unnecessary losses.¹¹¹

108. See, e.g., *Korman & Koenigsberg*, supra note 93, at 358–59.

109. See, e.g., *Herbert v. Shanley Co.*, 242 U.S. 591 (1917) (Holmes, J.) (orchestra performing popular songs in restaurant); see also *Polygram Int'l Publishing v. Nevada/TIG, Inc.*, 855 F. Supp. 1314, 1324 (D. Mass. 1994) (Keeton, J.) (distinguishing direct liability of performer from vicarious or contributory liability of party hiring the performer).

110. *Shapiro, Bernstein & Co. v. H.L. Green Co.*, 316 F.2d 304, 307 (2d Cir. 1963) (liability of department store—that had not obtained music performance right license—for violation of public performance right when one of its concessioners played phonograph record of plaintiff's music).

111. *Polygram*, 855 F. Supp. at 1325 (liability of organizer of computer software trade show who had declined to take ASCAP license, when exhibitors at show were alleged to have performed copyrighted music at their booths). But see *Artists Music, Inc. v. Reed Publishing*, 31 U.S.P.Q.2d (BNA) 1623 (S.D.N.Y. 1994) (refusing to find trade show organizers liable for some exhibitors' unlicensed public performance of copyrighted music); *Fonovisa, Inc. v. Cherry Auction, Inc.*, 847 F. Supp. 1492 (E.D. Cal. 1994) (no liability for organizer of swap meet who rented booths to vendors of counterfeit audiotapes). In both cases, the courts found that the defendants lacked the power to supervise and control the exhibitors' activities.

The NII White Paper's analysis resembles Judge Keeton's: “On-line service providers have a business relationship with their subscribers. They—and, perhaps, only they—are in the position to know the identity and activities of their subscribers and to stop unlawful activities. . . . They are in a better position to prevent or stop infringement than the

Where a commercial online service is concerned, the "direct financial interest" test should be satisfied. This is particularly clear if the service is set up as a forum for the communication and exchange of copyrighted material. But even where the transmission of copyrighted works is incidental to the service, the standard may continue to apply, especially if the availability of copyrighted works on the network enhances the service's appeal to potential subscribers.¹¹² On the other hand, under this standard, it is less likely that the operator of a nonprofit bulletin board or network would face similar liability for its users' piracy.¹¹³ As for the "right and ability to supervise" component, the nature of the digital communications forum may also be significant. While some fora appear to be rather anarchic,¹¹⁴ others are more closely controlled, at least with regard to some elements of their content, such as pornography and obscene, or even merely disrespectful, language.¹¹⁵

Finally, entrepreneurs may incur direct, as well as vicarious, liability. As a result of the technology of communication on digital networks (at least for now), the online service or bulletin board is itself engaging in acts of copyright exploitation. When a user posts a work on the bulletin board, a "copy" of the work is made in the service's server.¹¹⁶ When the work is communicated to subscribers, it is "publicly performed or displayed" on their screens.¹¹⁷

copyright owner. Between these two relatively innocent parties, the best policy is to hold the service provider liable." NII White Paper, *supra* note 39, at 117.

112. For example, in *Polygram*, 855 F. Supp. 1314, the exhibitors were not performing the music in order to sell recordings (as was the case in *H.L. Green*), but in order to attract customers to their booths, where they sold computer software and related goods.

113. Under this analysis, the universities and government agencies whose servers form the bulk of the Internet, a noncommercial, unmonitored series of networks, would not be vicariously liable for infringements transmitted on the Internet. On the other hand, commercial services offering connections to the Internet could be vicariously liable if an infringing communication to the Internet originated with a subscriber to the commercial service.

114. See, e.g., John P. Barlow, *The Economy of Ideas: A Framework for Rethinking Patents & Copyrights in the Digital Age* (Everything You Know About Intellectual Property is Wrong), *Wired*, Mar. 1994, at 85-86 (describing present and future dilemma imposed by the "unbounded and perhaps permanently lawless waves of cyberspace").

115. See, e.g., America Online, Terms of Service §§ 1.3, 2.5, 4.2, 8.2, available in America Online, "Member's Services" Area, "Members' Online Support" Department (stating that members agree to a code of conduct and America Online can restrict their transmissions or expel them if code is violated); Geoffrey Moore, *The First Amendment Is Safe at Prodigy*, *N.Y. Times*, Dec. 16, 1990, § 3, at 13 (explaining why Prodigy should and does edit the contents of its electronic bulletin board); Matthew L. Wald, *A Child's Internet Sins Visited on the Parent*, *N.Y. Times*, Feb. 26, 1995, § 4, at 2 (describing instance in which adults were excluded from America Online after their children committed "infractions"); cf. *Stratton Oakmont Inc. v. Prodigy Servs. Co.*, 23 Media L. Rep. (BNA) 1794, 1798 (N.Y. Sup. Ct. May 24, 1995) (online provider's exercise of control over network justified liability for user's defamatory statements).

116. See discussion *supra* text accompanying notes 39-42.

117. See discussion *supra* text accompanying notes 52-61.

C. International Considerations

Finally, the ubiquitous nature of online delivery requires consideration of multinational enforcement. This raises international conflict of laws questions. In principle, there is no such thing as "international copyright"; instead, there are a multiplicity of national copyright regimes.¹¹⁸ However, the Berne and Universal Copyright Conventions and the TRIPs accord impose certain substantive minimum standards to which member countries must conform their domestic copyright laws (at least with respect to protection of foreign copyright owners).¹¹⁹ These treaties also link the member countries through imposition of the nondiscrimination rule of national treatment, which requires member countries to treat works from other member countries as if they were local works.¹²⁰

The assimilation of foreigners to domestic copyright owners confirms the territorial character of international copyright. An author and international copyright owner possesses no extra-conventional supra-na-

In addition, were the Copyright Act amendments recommended by the NII White Paper to be enacted, communication to subscribers would also be a "transmission of copies" subject to the § 106(3) distribution right. See NII White Paper, *supra* note 39, at 213-20, app. 1, at 2.

There have been two decisions concerning bulletin board services' liability for copying and disseminating protected material. In both instances, the courts held the services directly liable for copyright infringement. In *Playboy Enters. v. Frena*, 839 F. Supp. 1552, 1555-59 (M.D. Fla. 1993), a federal district court sustained an infringement claim against a bulletin board service when one of its subscribers systematically scanned and uploaded Playboy centerfolds. In *Sega Enters. v. MAPHIA*, 30 U.S.P.Q.2d (BNA) 1921 (N.D. Cal. 1994), the service itself was directly encouraging its subscribers' unlicensed posting of copies of videogames.

A pending action, *Frank Music v. CompuServe*, No. 93 Civ. 8153 (S.D.N.Y. Nov. 29, 1993), may afford greater guidance on the application of vicarious liability to a network operator who claims that its role in the communication of infringing materials on a bulletin board was too passive to give rise to liability for any kind of copyright infringement.

The NII White Paper cites another claim pending against a Bulletin Board operator and an Internet access provider, *Religious Technology Center v. NETCOM*, No. C95-20091 (N.D. Cal. filed Mar. 3, 1995). See NII White Paper, *supra* note 39, at 121-22 & n.391.

118. See Jon A. Baumgarten, *Primer on the Principles of International Copyright*, in *Fourth Annual U.S. Copyright Office Speaks: Contemporary Copyright and Intellectual Property Issues* 470, 471 (1992) ("The term 'international copyright' is something of a misnomer, for neither a single code governing copyright protection across national borders, nor a unitary multi-national property right, exists. What does exist is a complex of copyright *relations* among sovereign states, each having its own copyright law applicable to acts within its territory.").

119. See Berne Convention, *supra* note 47, arts. 5, 6*bis*, S. Treaty Doc. No. 99-27, at 41; Universal Copyright Convention, July 24, 1971, arts. 1-7, 25 U.S.T. 1341, 1344-63; Agreement on Trade-Related Aspects of Intellectual Property Rights Including Trade in Counterfeit Goods, Dec. 15, 1993, arts. 9-14, 33 I.L.M. 83 (1994).

120. See Berne Convention, *supra* note 47, art. 5(2), S. Treaty Doc. No. 99-27, at 40; Universal Copyright Convention, *supra* note 119, art. II; see also Sam Ricketson, *The Berne Convention for the Protection of Literary and Artistic Works: 1886-1986*, §§ 5.51-5.68 (1987) (demonstrating the scope and evolution of the principle of national treatment).

tional rights; she is instead, and at once, the proprietor of a French copyright, a U.S. copyright, a Mexican copyright, a Japanese copyright, and so on. Thus, unauthorized copying of the author's work in each of these countries would give rise to an action for the violation of the local copyright law. Distribution of copies of an infringing work would be judged under the copyright laws of each country where copies were disseminated. Similarly, unauthorized public performance of a song on the radio would be analyzed under the laws of each country receiving the broadcast.

This approach may pose problems in cyberspace. Suppose, for example, that a hacker in Thailand gained access to and copied the entirety of our initiating author's collection of variously-ended stories, and had posted it on "Cyberworld," a (hypothetical) Canadian-headquartered commercial service. True to its name, Cyberworld can be accessed from anywhere in the world, and subscribers in France, Mexico, China and the United States do indeed download the collection. We will further assume that it is not worthwhile to pursue the individual international downloaders. If our author sues Cyberworld in the United States, application of the principle of territoriality would mean that the forum would be obliged to apply scores of foreign laws, in addition to its own copyright law.¹²¹ Such an exercise could prove daunting, particularly if the applicable laws differ significantly. Substantive differences between potentially applicable national laws are likely to occur in many of the areas this Article has considered, including ownership of copyright interests in the work, existence and scope of exclusive rights in the work,¹²² and existence and scope of liability of online services for either direct or indirect infringements.¹²³

In the United States, some courts have simplified the choice of law problem by applying U.S. law to the entirety of a multinational infringement claim when the root act of copying occurred in the United States.¹²⁴ From this viewpoint, the extraterritorial infringements are all the direct consequences of a local U.S. infringement. Where, as in the hypothetical, however, the extraterritorial infringements cannot be rooted in a U.S. violation of copyright, U.S. law might not apply to alleg-

121. The NII White Paper confirms the application of U.S. law to the unauthorized dissemination of copies in the United States by recommending that the Copyright Act's importation provision be amended to specify that unauthorized transmission of copies into the United States violates the copyright owner's exclusive rights. See NII White Paper, *supra* note 39, at 107-09, 221.

122. Moreover, in many foreign countries, authors' exclusive rights include not only economic rights, but the "moral rights" to preserve the integrity of the work and receive authorship credit for the work. See, e.g., Berne Convention, *supra* note 47, art. 6*bis*, S. Treaty Doc. No. 99-27, at 41; C. Prop. Intell. art. L. 121-1 (1992) (Fr.).

123. For a fuller discussion of these problems, see Jane C. Ginsburg, *Global Use/Territorial Rights: Private International Law Questions of the Global Information Infrastructure*, 42 J. Copyright Soc'y 318 (1995).

124. See *Update Art v. Modii Publishing*, 843 F.2d 67, 72-73 (2d Cir. 1988).

edly infringing acts occurring beyond U.S. borders. Thus, the Ninth Circuit, having determined that a defendant's mere "authorization" in the United States to reproduce copies without the copyright owner's permission was not itself a violation of U.S. copyright law, further held that the making of the reproductions abroad similarly did not infringe the U.S. copyright.¹²⁵

As a middle ground, U.S. copyright law might apply to unauthorized reproductions occurring abroad if U.S. shores appear designed to be the ultimate destination of the foreign-made copies.¹²⁶ In practice, however, the middle ground may vastly expand: since cyberspace reaches everywhere, copyright infringements will almost inevitably come to U.S. shores, no matter what the point of origin of the communication, or whom the initial intended audience. The person or entity posting a work on a digital network in effect knows, or should know, that the U.S. will be a likely destination for the work. It may therefore be appropriate to distinguish between transmissions targeting U.S. recipients, and those for which the United States is an incidental stop in the stream of cyberspace.¹²⁷

The root act or master copy approach to choice of law resembles that of the European Union's Satellite Directive, which designates the law of the country of "uplink" to govern liability for dissemination of programs by satellite.¹²⁸ Although the satellite signal can be received in many countries, the multinational communication can be traced to a single

125. See *Subafilms, Ltd. v. MGM-Pathe Communications Co.*, 24 F.3d 1088, 1091-94, 1096-98 (9th Cir.), cert. denied, 115 S. Ct. 512 (1994). Defendant, from its California offices, allegedly licensed the reproduction and distribution of videocassettes of *Yellow Submarine* around the world; the Court held that the claim as to licenses for reproduction and distribution outside the United States was not cognizable under the Copyright Act. *Id.* at 1090.

Moreover, even where infringements allegedly occurred in U.S. territory, the Ninth Circuit has dismissed a copyright claim on *forum non conveniens* grounds when the parties were not U.S. nationals, when the work allegedly infringed in the United States was first published outside the United States, and when the court believed that the U.S. claims could be properly adjudicated in the country of the work's origin and of the parties' nationality (Singapore). See *Creative Technology Ltd. v. Aztech Sys. PTE Ltd.*, 61 F.3d 696, 701-704. In dissent, Judge Ferguson was "astounded . . . that it is not convenient to try an American copyright case in an American court for copyright infringement that takes place solely in America." *Id.* at 705 (Ferguson, J., dissenting).

126. See, e.g., *Metzke v. May Dep't Stores*, 878 F. Supp. 756, 761 (W.D. Pa. 1995) (offshore copying may violate U.S. copyright law if defendant commissioning the making of unauthorized copies abroad knew, or should have known, that copies would be sold in United States); see also *Nintendo of America v. Aeropower Co.*, 34 F.3d 246, 251 (4th Cir. 1994) (holding overbroad an injunction against sales by Taiwanese manufacturer of unauthorized copies of Nintendo videogames in Mexico and Canada, but suggesting the injunction should have been drawn to enjoin Mexican and Canadian sales of copies that were likely to reach the United States).

127. Cf. *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 296 (1980) (sending goods into general stream of commerce, without further purposeful targeting or anticipation of arrival of goods in forum, held not sufficient to satisfy due process requirements of assertion of personal jurisdiction over out of state car dealer).

128. See Council Directive 93/83, *pinbl.* 14, art. 1.2(b), 1993 O.J. (L 248) 19.

point of departure. In cyberspace terms, the place of the root act or uplink could be called the country of the "upload."

Designation of the law of the country of upload to judge alleged infringements occurring throughout the world would appear to enjoy the virtue of simplicity. However, it also shares the vice of manipulability.¹²⁹ The approach may work in the European Union because all member countries must adhere to a minimum standard of protection.¹³⁰ If the approach is extended to the whole world, however, cyberpirates will simply make sure they post the unauthorized copies from, or locate their services in, a country having an extremely lax intellectual property regime. Perhaps, just as certain nations have become the venue of choice for entrepreneurs seeking maximum banking secrecy and minimum taxes, some nations will endeavor to enhance the local economy by attracting professional infringers to their copyright-free shores.¹³¹ Without a serious minimum standard applicable to all nations, or without a pirate nation exception from the application of the law of the upload, no choice of law approach will completely avoid this problem.¹³²

CONCLUSION

Cyberspace creators like our initiating author, and authors of previously created works subsequently posted in cyberspace, enjoy rights whose effective enforcement in cyberspace is today rather uncertain. Collective licensing could enhance the likelihood that authors would at least be compensated for copying (and public performance and display, or even derivative works). However, for many kinds of works of authorship, the collectives that would license electronic rights are only in the early

129. Moreover, it may not always be simple to identify the country of upload; in some instances, the communication may emanate from more than one country. For example, our hypothetical initiating author may receive contributions to her collection of stories from participants in many different countries.

130. See Proposal for a Council Directive, Explanatory Memorandum, COM(91)276 final at 4, 26-29 (establishment of common level of protection for copyright and neighboring rights is necessary component of EC Satellite Directive).

131. Cf. *id.* at 4 (explaining that harmonization is necessary in order to avoid creation of "copyright havens").

132. See Lea Brilmayer, *Conflict of Laws* § 4.3.2 (1995).

Arguably, article 5.2 of the Berne Convention does not in fact mandate application of the law of each place of infringement. See A. Lucas & H. J. Lucas, *Traité de la Propriété Littéraire et Artistique* §§ 1066-1074 (1994) (raising, but rejecting, this interpretation). Rather, in designating the application of the law of the country "where protection is sought," the treaty is referring not to the places where the acts against which the copyright owner is seeking protection occurred, but rather to the forum country. After all, it is before the courts of that country that the copyright owner is seeking protection. Under this interpretation, a single law—that of the forum—would apply to the entirety of multinational infringements. This apparently would be the case even if no infringements were alleged to have occurred within the forum: there may be an independent basis, such as defendant's domicile, for a given country to be made the forum.

For a fuller discussion of the conflicts of law problem, see Ginsburg, *Global Use/Territorial Rights*, *supra* note 123, at 330-35.

stages of formation, at least in the United States. Resistance to collective licensing has persisted, notably among publishers of traditional literary works, primarily because collective licensing implies the surrender of control over the selection and activities of its licensees. While some might think that in a networked environment any such control is illusory, others are extremely (not to say, unduly) optimistic that the online medium, combined with encryption technologies, will in fact afford copyright owners *more* control than they enjoyed in the analog world.¹³³

Moreover, in many if not most instances, enforcement, whether by a collective or individually by our initiating author, will not be meaningful unless its target is a profitable intermediary, such as a bulletin board or commercial network operator. The effectiveness of pursuing the online provider will in turn depend on what national law (or laws) applies to determine liability for infringements created and/or carried online.

Finally, the "information superhighway" will undoubtedly carry a great deal of "information," but transmitting information is not the same as conveying authorship.¹³⁴ The viability of cyberspace as a medium for the consensual communication and creation of sustained works of authorship—real "cars," not simply conversations, data of the day, or pirated postings—will depend on authors' and copyright owners' confidence that the kinds of questions raised in this Article will find solutions that will meet the needs of both authors and users.

133. See, e.g., Lance Rose, *The Emperor's Clothes Still Fit Just Fine*, *Wired*, Feb. 1995, at 103, 104:

Net cops can swiftly clean each new infringement out of the major online markets as soon as it appears. They will soon become better at it when copyright owners begin deploying software agents that can roam the entire Net, searching out anonymous infringements. Every time a pirated work is spread to the four corners of the Internet by an anonymous user, software agents will quickly sniff it out.

134. See, e.g., *Feist Publications v. Rural Tel. Serv.*, 499 U.S. 340, 362 (1991) (useful and informative telephone white pages lacks sufficient originality to be considered a work of authorship).