
David J. Loundy

Follow this and additional works at: https://repository.law.uic.edu/jitpl

Part of the Computer Law Commons, Intellectual Property Law Commons, Internet Law Commons, Privacy Law Commons, and the Science and Technology Law Commons

Recommended Citation

https://repository.law.uic.edu/jitpl/vol14/iss1/1

This Article is brought to you for free and open access by UIC Law Open Access Repository. It has been accepted for inclusion in The John Marshall Journal of Information Technology & Privacy Law by an authorized administrator of UIC Law Open Access Repository. For more information, please contact repository@jmls.edu.
REVISING THE COPYRIGHT LAW FOR ELECTRONIC PUBLISHING

by DAVID J. LOUNDY†

I. INTRODUCTION

Since the birth of copyright, every age has seen the emergence of a new medium of expression or technology that has led people to express the fear and concern that it defined the boundaries of existing doctrines or that the new candidate for protection was so strikingly different that it required separate legal treatment. These apprehensions were voiced about photography, motion pictures, sound recordings, radio, television, photocopying, and various modes of telecommunication. In each instance, the copyright system has managed over time to incorporate the new medium of expression into the existing framework.¹

A. NO ONE MENTIONS THE EMPEROR’S EARLY TAILORS

As technology changes, the law must also change in order to address concerns raised by new technology. Some of these changes to the law may be minor “gap-fillers,” while some changes may be more substantial. One relatively small revision of the United States Copyright Act² brought the law up to date in regard to some of the issues raised by computer technology. These changes were based on the findings of a study commissioned by Congress,³ which resulted in the Final Report of the National Commission on New Technological Uses of Copyrighted Works, commonly referred to as the CONTU report.

The changes made to the Copyright Act as a result of the CONTU report provide some necessary updating to the Act, but once again, the increasing use of computer technology is demanding additional refinements to the Copyright Act. This paper discusses the need for change brought on by the growth of electronic publishing and the issues related to electronic distribution of copyrighted works. Specifically, this paper

† David J. Loundy has a B.A. in Telecommunications from Purdue University and a J.D. from the University of Iowa College of Law. The author would like to thank Christina King Loundy for her assistance with this paper.


³ A commission was created and given the task of looking into reproduction of copyrighted works by means of “automatic systems capable of storing, processing, retrieving, and transferring information, and . . . by various forms of machine reproduction.” Pub. L. No. 93-573 (1974).
addresses distribution and viewing of electronic works in the United States. In looking at this topic, the principles that guided CONTU will be used, and the Commerce Department Information Infrastructure Task Force's draft report and recent final report which cover many of the same issues will be critiqued.

All discussions of the proper scope of copyright protection in the United States must begin with the Constitution. The Constitution provides the authority for copyright and patent laws. It gives Congress the power to create laws "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their Writings and Discoveries." This constitutional language establishes two competing principles. Protection is to be given to authors by the grant of exclusive rights. However, these exclusive rights are to be given only as long as they reach the purpose of furthering the development of science and the useful arts. Thus, any copyright law must balance a creator's rights against a user's rights. This constitutional language also plays against the free speech guarantee of the First Amendment—"[w]here the First Amendment removes obstacles to the free flow of ideas, copyright law adds positive incentives to encourage the flow." This balancing of interests is necessary whenever the growth of new technology, such as home video recorders or satellite technology, raises issues that cannot readily be addressed under current copyright law. When faced with challenges caused by the new technology, it is necessary to look at the Constitutional principles in order to determine what course of action would best maintain the societal purposes of copy

4. It is important to note, however, that these are issues that require a global solution, even though international copyright law and the importation of works into the U.S. are beyond the scope of this paper.


7. U.S. Const. art. I, § 8, cl. 8.

8. U.S. Const. amend. I.


right law.\textsuperscript{13}

CONTU began its report on changes, necessitated due to the growth of photoduplication and computer technology, by stating that copyright protection should be given to works "used in conjunction with computers and reprographic systems . . . so long as it did not impede public access to such works or otherwise extend monopoly power."\textsuperscript{14} The practical conclusion CONTU draws is that where the cost of duplication is small, copies are more likely to be made. When copies are more likely to be made, legal protection is necessary to preserve the incentive to create and disseminate the works which are subject to copying.\textsuperscript{15}

The Information Infrastructure Task Force ("IITF") White Paper recognizes a similar need to balance the interests of creators and users:

Creators and other owners of intellectual property rights will not be willing to put their interests at risk if appropriate systems—both in the U.S. and internationally—are not in place to permit them to set and enforce the terms and conditions under which their works are made available in the NII [National Information Infrastructure] environment. Likewise, the public will not use the services available on the NII and generate the market necessary for its success unless access to a wide variety of works is provided under equitable and reasonable terms and conditions, and the integrity of those works is assured.\textsuperscript{16}

However, while the IITF Report states that it strives to preserve the balance between the rights of copyright holders and the rights of copyright users, it has been strongly criticized\textsuperscript{17} as intentionally biased in favor of copyright owners, even to the point of misrepresenting the current state of the law.\textsuperscript{18} As Professor Jessica Litman put it, "[r]eading one's mail or picking up one's telephone messages these days requires many of us to commit acts that the government's Information Infrastructure Task Force now tells us ought to be viewed as unauthorized reproductions or transmissions."\textsuperscript{19}

Furthermore, the IITF Report's view that progress will be insured by strong intellectual property protection for the benefit of authors, as is essential to the growth of the National Information Infrastructure, has been scathingly criticized by Professor Litman. Litman points out how industry after industry has survived the evolution and growth of technol-

\textsuperscript{13} Id.

\textsuperscript{14} \textit{National Commission on New Technological Uses of Copyrighted Works} 7 (1979) [hereinafter \textit{CONTU Report}].

\textsuperscript{15} Id. at 10.

\textsuperscript{16} \textit{IITF White Paper, supra} note 6, at 11.

\textsuperscript{17} The criticism was made of the draft report, the substantially similar final report was released only a few days before this article went to press.


\textsuperscript{19} Id. at 33.
ogy without the strong protections that the IITF Report advocates. Too much emphasis on creator's rights impairs the rights of users. This, in turn, clouds copyright and patent policy; “the ultimate purpose of copyright is not the maximization of financial rewards to copyright owners (which is what the publishers would generally like it to be), but fostering the creation and dissemination of literary and artistic works in order to enhance the public's access to knowledge.”

1. CONTU's Analysis

As already stated, CONTU was given the task of proposing changes to the Copyright Act to update it for computer technology. The Commission employed four principles regarding computer program copyright:

1. Copyright should proscribe the unauthorized copying of these works.
2. Copyright should in no way inhibit the rightful use of these works.
3. Copyright should not block the development and dissemination of these works.
4. Copyright should not grant anyone more economic power than is necessary to achieve the incentive to create.

Using these principles, the Commission concluded that protection for computer programs could be developed by making minor changes to the Copyright Act of 1976 for the growing computer technology. Congress agreed, enacting all of CONTU's substantive recommendations.

2. CONTU's Shortcomings

Although the CONTU Report made some needed changes to the Copyright Act, it is becoming apparent that these changes are not sufficient to keep pace with new uses of computer technology, and ultimately, result in additional “holes” in the copyright law that need patching. While some argue that these “holes” are signs the entire intellectual property system is headed for inevitable collapse, the Information Infrastructure Task Force, which was created to determine what new modifications to the copyright law are necessary, concluded that only “minor clarification and amendment” to the system was necessary.

20. Id. at 46-7.
22. CONTU REPORT, supra note 14, at 12.
23. Id.
24. There has been recent talk of seeking to change the copyright law to make the final working change CONTU recommended that was not earlier adopted. See Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 261 (5th Cir. 1988); Samuelson, supra note 12, at 99.
26. IITF Green Paper, supra note 5, at 8. See also IITF White Paper, supra note 6, at 19.
The concerns which gave rise to the IITF Papers are due, in part, to the fact that, unlike with analog print sources (like the photocopies addressed by CONTU) digital copies of works can be made with no "generation loss"—each digital copy is an exact replica of the original, with no loss in quality no matter how many "generations" away the copy is from the original. Also, while both analog and digital copies can be made almost instantaneously, digital technology makes reproduction of electronic documents very inexpensive, unlike photocopying where it may be cheaper just to buy a print copy rather than photocopy a work. Not only are digital copies more conveniently made, but in the case of computer networks, they are made at almost every point in a work's delivery and use. In order to read and use an electronic document the technology requires that at least one copy of the work be made.

The consequences of these holes will be examined by looking at a couple of scenarios. These scenarios display a cross-section of the issues that electronic publishers and users of electronically-published works have to contend with. In examining these scenarios, illustrations of the shortcomings and suggestions on how to plug these holes will be presented.

3. The Scenarios
   
a. The Librarian

Long the copyright user's advocate, libraries continue to preserve access to the intellectual property of many authors. Libraries have traditionally purchased books, thus providing financial incentive to authors to create. Nevertheless, libraries have then made the works freely available to their patrons, and thus promote the progress of art and science. As more and more documents are made available in electronic form, the traditional view of how a library functions is changing. In fact, the current copyright law may present a substantial impairment to the functioning of libraries in an age of electronic documents.

Where once patrons checked out paper books from geographically-fixed repositories, now people are interested in checking out electronic texts from on-line libraries. Of course, checking out a book does not require the creation of an additional copy, while accessing an electronic document does (as will be discussed later). For this reason, it becomes necessary to adjust the copyright law to account for electronic libraries in order to preserve their traditional function and preserve their right to "lend" electronic books.

27. Id. at 6.
28. Id.
29. Id. at 29.
30. Barlow, supra note 25, at 86.
b. The Computer System Operator

In these days of global communications, technology is giving rise to new businesses and creating new issues for more traditional telecommunications providers. Telephone companies, for example, traditionally have not had to worry about suits for copyright infringement resulting from the transmission of copyrighted works. With increasing use of e-mail and voice mail, however, providers of network communication services (especially newer, less regulated, services such as commercial Internet service providers) may find that they have copyright liability merely from storing and transmitting customer files and communications, if the current Copyright Act is read strictly. This may be so even though the provider has no way to identify or control the presence of copyrighted material flowing through or residing on the provider's computer system. Some amending of the copyright law would assure these conduit-providers of the immunity they need to operate properly, while still holding liable those people who legitimately deserve the title "infringer."

c. The Home Computer User

How can we ensure the preservation and use of rightfully possessed electronic documents when such preservation and use of the works may require that additional copies be made? While it is natural to assume that the law allows use of rightfully acquired electronic works, when such use involves the creation of additional copies the statutory law does not clearly allow the necessary copies. While some provisions of the Copyright Act have been added specifically to ensure the use of rightfully owned computer programs, additional changes are needed to help clarify the right to use some kinds of electronic works when it involves the making of additional copies.

Another problem with electronic publishing arises from the fact that potentially infringing copies can be made by people who do not have the ability even to determine that they are copying protected works. The act of reading one's e-mail may result in the creation of copies of protected works if the message being read contains copyrighted expression. The copyright law draws the line as to who should be held liable based on ideas of justice derived from older technologies. Electronic communications technologies are requiring that this balance be shifted slightly in order to ensure that this sense of justice is retained. The IITF White Paper proposes that this line need not be moved; yet as some people

32. "With no more than minor clarification and limited amendment, the Copyright Act will provide the necessary balance of protection of rights and limitations on those rights to promote the progress of science and the useful arts." IITF White Paper, supra note 6, at 18.
have pointed out, in light of recent case law in the computer context, this amounts to giving copyright owners control over others' rights to read the owner's works, a right that is most likely a much greater incentive to authors than Congress would have enacted into law.33

d. The World Wide Web Provider

The explosive growth of the Internet exposes more and more people to the world of electronic communications, and illustrates some of the difficult copyright questions raised by non-centralized computer information systems. The World Wide Web (or WWW), is a means of accessing hypertext-linked information.34 The World Wide Web's legal position is also muddy because it functions as a sort of hybrid between publishing facility, archive, and bibliography. The WWW raises interesting issues, because linked documents can be stored on machines anywhere on a world wide computer network, such as the Internet, and not just on the information provider's machine. This distributed information delivery may make it hard to determine who is even responsible for any copies that are being made—copies which may or may not be infringements—and for this reason, clarification of the copyright law is necessary.

B. Slap on a Coat of Paint and It'll Look Just Like New

In examining how to revise the copyright law for electronic publishing, this paper suggests changes that do not require a major re-write of the Copyright Act. While it has been suggested that "we are sailing into the future on a sinking ship"35 by trying to patch the current U.S. Copyright Act, copyright law has evolved and survived the creation of other new technologies that have constituted major paradigm shifts.36 This paper assumes that new technologies can be covered by the current law, as was intended by the drafters of that law,37 and argues any necessary corrections to the law can be slight. The copyright law was revised with only minor modifications when the U.S. faced questions similar to those posed by developing network technology with the rise of radio and television broadcasting, and then again with cable television. This paper focuses on various forms of electronic distribution and "publishing," and

33. Litman, supra note 18, at 40.
34. Hypertext works by displaying a document with highlighted terms. If the user selects one of the highlighted terms, another related document (picture or sound) is called up onto the user's screen.
35. Barlow, supra note 25, at 85.
36. The advent of player-piano rolls, audio recorders, and broadcasting, for instance, all presented different ways of conceiving of intellectual property when compared to technologies existing before their introduction.
37. Sony, 464 U.S. at 422.
does not seek to address every needed change brought on by digital technology.

Another concern this paper does not seek to resolve is enforcement of the copyright law. While some people may consider this a serious shortcoming, the current Act does not address the policing of copyrights. Rather, it only addresses the procedure for punishing infringers.38

Technological means may provide the solution to enforcing the copyrights of electronic works by restricting access, such as by using encryption to encode electronic works and distributing a decryption key only to authorized users of the work.39 However, some technological solutions used to protect electronic intellectual property are not widely accepted, and are even seen as a challenge to people determined to make copies.40 (Still, the IITF White Paper recommends amending the Copyright Act to make illegal importation, manufacture, and distribution of devices and the offering of services “the primary purpose or affect” which is to circumvent “without the authority of the copyright owner of the law any... system which prevents or inhibits violation of any of the exclusive rights of the copyright owner...”).41

This paper does not address the merits of enforcement of any new provisions for two additional reasons: first, the current copyright statute is not limited to provisions that are readily enforceable; and second, if technologies such as encryption, coupled with a ban on encryption circumvention are effective, then most of this paper, and the Copyright Act itself, will become moot.42

This paper also tries to avoid relying on the “fair use” provision of the Copyright Act.43 The reason is that “since the doctrine is an equitable rule of reason, no generally applicable definition is possible, and each case raising the question must be decided on its own facts.”44 It is a

40. Id. at 58-9.
41. IITF White Paper, supra note 6, app. 2 at 4. The language and reasoning used in the IITF White Paper is an inapposite and poorly resigned attempt to soften the categorical restriction proposed in the IITF Green Paper.
42. Samuelson, supra note 39, at 60.

If the technology to protect intellectual property becomes very effective, and if attempts to defeat it are made illegal, it would seem that... copyright law itself, might become obsolete. Why would one need copyright protection... if it becomes virtually impossible to copy a work because of the technological protection attached to it?

Id.

44. H. R. Rep. No. 1476, 94th Cong., 2nd Sess. at 65 (1976) [hereinafter House Report]. See also Campbell v. Acuff-Rose Music, Inc., 114 S.Ct. 1180, 1182 (1994) (stating “[t]he task is not to be simplified with bright-line rules, for the statute, like the doctrine it recognizes,
REVISING THE COPYRIGHT LAW

doctrine intended to avoid the rigid application of the copyright law when such an application would defeat the law's underlying purpose.\textsuperscript{45} Some courts have questioned whether the fair use analysis is even an appropriate test where purely mechanical reproduction is involved.\textsuperscript{46} In any case, it should not be used to exempt ordinary and regular conduct deserving of protection. In other words, it is an inelegant solution to a set of problems that need a more clear-cut resolution. While this paper tries to fill the holes in the copyright law demonstrated by electronic publishing without resorting to fair use, it does not advocate the elimination of the fair use defense. For each situation addressed in this paper, a fair use analysis must still be performed.

This paper does not address the categorization of electronic works. The copyright clause of the Constitution does not distinguish between types of "writings." And, as discussed in the legislative history, the classes of writings listed in section 102 are intended to be illustrative only, and in some cases the categories overlap.\textsuperscript{47} The copyright law expects fairly rigid classification of works, and assigns different rights and privileges based on that classification.\textsuperscript{48} Unfortunately electronic works, such as multimedia presentations and hypertext documents, cannot easily be classified as a "literary work," a "musical work," a "sound recording," or an "audiovisual work."\textsuperscript{49} In fact, the IITF White Paper even suggests that at some point it may make sense to eliminate the Copyright Act's classification scheme altogether.\textsuperscript{50} This point may be worth addressing sooner, rather than later.


45. Marcus v. Rowley, 695 F.2d 1171, 1174 (9th Cir. 1983).
46. American Geophysical Union v. Texaco, Inc., 37 F.3d 881, 885-86 (2d Cir. 1994). Indeed, if the issue were open, we would seriously question whether the fair use analysis that has developed with respect to works of authorship alleged to use portions of copyrighted material is precisely applicable to copies produced by mechanical means. The traditional fair use analysis, now codified in section 107, developed in an effort to adjust the competing interests of authors—the author of the original copyrighted work and the author of the secondary work that 'copies' a portion of the original work in the course of producing what is claimed to be a new work. Mechanical 'copying' of an entire document, made readily feasible and economical by the advent of xerography, \textit{see} SCM Corp. v. Xerox Corp., 463 F.Supp. 983, 991-94 (D. Conn. 1978), \textit{aff'd}, 645 F.2d 1195 (2d Cir. 1981), \textit{cert. denied}, 455 U.S. 1016 (1982).

49. Samuelson & Glushko, supra note 48, at 241.
50. IITF White Paper, supra note 6, at 50.
Finally, another issue in need of resolution not addressed by this paper is the current Copyright Act’s deposit requirement. Section 407 of the Copyright Act requires that the owner of the copyright in a work published in the United States must, unless exempted by regulation, deposit two copies or phonorecords of the work in the Copyright Office, within three months after the date of publication, for use by the Library of Congress. Currently, an Electronic Copyright Management System is being developed that will allow for electronic copyright registration. However, this system is being designed with journal articles in mind, and may require a $20 registration fee for each work registered. While $20 may be reasonable for commercial works, it is not reasonable that every post made to a BBS or to a Usenet newsgroup be registered on these terms. For this reason, it makes sense to exempt such communications from the deposit requirement. This paper, however, does not attempt to determine what constitutes a piece of authorship deserving to be put in the national library, and what would be too insignificant or too burdensome to be archived.

II. THE PROBLEM OF FIXATION

A. FLIP THE SWITCH, VIOLATE THE COPYRIGHT

In order for a copyrightable work to exist, the work must be “fixed” in a “tangible medium of expression.” The Copyright Act defines a fixation as follows:

A work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than a transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is ‘fixed’ for purposes of this title if a fixation of the work is being made simultaneously with its transmission.

This fixation requirement arises from the constitutional imperative that the “writings” of an author be given protection—if there is no fixation, arguably there is no writing. The writing requirement also serves to determine when the federal copyright law comes into play, and when the work may only be protected by common law copyright. Thus, a speech made on a street corner is not considered to be protected under the fed-

53. Id.
55. 2 MELVILLE B. NIMMER, NIMMER ON COPYRIGHT, § 2.03[B] (1993).
Similarly, an electronic transmission of this same speech is not protectable unless it is also fixed at the time the speech is made. A traditional transmission, such as a telephone call, is not a protectable work because it does not exist in a form that is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than a transitory duration." Computer technology is now clouding this issue.

Let us start with an example of an electronically published speech. If we are going to transmit this speech, the first step is to type it into a computer. If you type the speech into a computer, and then save the speech onto a floppy or hard disk, the disk is clearly a fixation of the speech. A floppy disk is a tangible medium of expression. The speech residing on the disk was put there by the author, and it may be perceived, reproduced, or otherwise communicated from the disk for a period of more than transitory duration. More importantly, a number of cases have held that the act of typing the speech into the computer constitutes the creation of a fixed copy.

Many of these cases held that, in the context of computer software, by merely loading the software into a computer's Random-Access Memory ("RAM"), the software is sufficiently fixed for there to be an infringing copy. These decisions have proven to be somewhat controversial, due to the nature of computer memory. Computer RAM is generally of two types, Dynamic Random-Access Memory ("DRAM"), or Static Random-Access Memory ("SRAM"). The first type of memory must be continually "refreshed" or the contents of the memory are lost, while the second type does not need refreshing. However, in either case, once the computer is turned off, the contents of the memory are quickly gone.

One school of thought finds the decisions holding that loading a work into RAM constitutes a fixation are bad, precisely because if you turn the computer off, the work is gone. A fixation is only maintained by virtue of application of constant power. As one author has pointed out, if you follow this line of thought, then holding a mirror up to a book creates a

57. Id.
58. See, e.g., Id.; Pacific, 744 F.2d at 1494; IITF Green Paper, supra note 5, at 12.
61. Advanced Computer, 845 F. Supp. at 362. A third type of computer memory, Read Only Memory (ROM) is permanently fixed and unchangeable.
62. Id.
potentially infringing copy, because the book's image will be retained for more than a transitory duration—as long as the mirror is held up to the book. Some have even pointed out that there is case law to support this view, and that:

Loading a computer program into RAM is only a 'temporary fixation,' and is insufficiently permanent to qualify as a copy under section 101 of the Copyright Act. Although the MAI court recognized that in Apple, the court held that 'software could be used through RAM without making a permanent copy,' it did not address the sharp contradiction between its conclusions and those of the Apple court.

Others believe that these cases were rightly decided. This is the view supported by CONTU. Holding that copying a work in a computer's RAM is a fixation is also in line with a plain reading of the statute's definition of a fixation. Just like a floppy disk, you can point to a RAM chip—it is a tangible means of expression. And, as long as power is supplied, the RAM chips in a computer will store their contents indefinitely—certainly long enough so that:

Useful representations of the program's information... can be displayed on a video screen or printed out on a printer. And this can be done virtually instantaneously once loading [of the software into RAM] is completed. Given this, it is apparent that a software program residing in RAM is 'stable enough to be perceived, reproduced, or otherwise communicated for a period of more than a transitory duration.' 17 U.S.C. § 101.

What is important is not the length of time that the work is available in a computer's RAM, but rather what can be done with the work once it is in the computer's RAM. In other words, "transitory duration" is a term that must be defined in context, and in the computer context, a very short duration may constitute a fixation.

B. PROTECTING US IN THE NAME OF TRUTH, JUSTICE, AND COMMON SENSE

Because merely turning on a computer may create infringing copies

---

63. Litman, supra note 18, at 42 n.63. While it is an interesting example, it is not a very convincing one. A copy made by a device which requires the use of a legally obtained copy (i.e. a copy that does not displace sales of the original work), such as the mirror in this example, has been held in the past to be a fair use of the copyrighted work. Lewis Galoob Toys v. Nintendo of Am., 964 F.2d 965 (9th Cir. 1992), cert. denied, 113 S.Ct. 1582 (1993).


66. CONTU REPORT, supra note 14, at 13.

67. Advanced Computer, 845 F. Supp. at 363; See also MAI, 991 F.2d at 519.

of the computer's operating software, the usability of computers would diminish unless the copyright owner gave permission to the users of the software to make any copies necessary to use the software. Rather than require such a solution, at CONTU's suggestion, section 117 was added to the Copyright Act. Section 117 allows for two types of copies to be made which might otherwise constitute an infringement.

Section 117(1) allows the owner of a copy of a computer program to make or authorize the making of a copy of the program provided: "(1) 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." Section 117(2) also allows a copy to be made or authorized provided: "(2) that such new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful." This section is considered to be necessary to insure against damage which can easily occur to some types of magnetic media on which software is often stored, yet it prevents people from making "archival copies" for their own use while selling the original to someone else. In fact, the section goes on to spell out that once you sell, lease, or otherwise transfer one copy of the computer software, all of the utilization copies or archival copies made in accordance with section 117 must also be transferred. This, in essence, requires that computer software be treated like any other type of fixed copyrighted work—when you sell a book, you do not have the right to copy it first and retain those copies.

C. The Knight's Shining Armor Needs Polishing

However, section 117 is limited. One limit is that it has been held to allow only copies to be made of software which have been fixed using some means of tangible expression, and not to other types of fixations. This is a result of the CONTU Report's statement that archival copies

69. MAI, 991 F.2d at 519; Triad, 31 U.S.P.Q.2d at 1242; Advanced Computer, 845 F. Supp. at 363.
71. Id. at § 117(1). See also RAV Commun., Inc. v. Philipp Bros., Inc., No. 87 CIV. 3366 (LLS), 1988 WL 36174, at *2 (S.D.N.Y. Apr. 13, 1988); Micro-Sparc, 592 F. Supp. at 35.
73. CONTU Report, supra note 14, at 13. See also Apple Computer, 594 F. Supp. at 621-22.
75. The creation of additional copies of a work is one of the exclusive rights reserved for the owner of the copyright by 17 U.S.C. § 106(1). "The purchaser of a book, once sold by authority of the owner of the copyright, may sell it again, although he could not publish a new edition of it." Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 350 (1908).
could be made “to guard against destruction or damage by mechanical or
electrical failure.”76 Thus, there may be no archival copies of works
which are not readily susceptible to mechanical or electrical failure in
their current form of fixation. Such works include software in paper
form77 and ROM chips (Read Only Memory chips like those used in video
game cartridges).78 Presumably, CD-ROMs would also fall into the same
category.

The second potential limit is the more troubling one. The language
of section 117 allows copies to be made of “computer programs.” Com-
puter programs are defined as “a set of statements or instructions to be
used directly or indirectly in a computer in order to bring about a certain
result.”79 As some have commented, it is therefore questionable that
this section applies to other types of digitized information, such as the
data file that constitutes our speech, or a recording of the speech in a
sound file.80 It is arguable that such files do not work to bring about a
certain result; they are merely acted upon by other software, and it is the
other software that brings about any result, not the data file. If this
reading is correct, then we are left with the same situation computer
software was in prior to the addition of section 117—to use a copy of a
text file is to risk making an infringing copy. For there not to be an in-
fringement, there must either be an implied license to load a data file
into RAM, or the copy must fall under an exception such as the fair use
provision.81 The treatment of such data files is crucial to determining
the liability of everyone involved in the distribution chain in an elec-
tronic publishing environment. The simplest solution to this problem is
to amend the Copyright Act to make it clear that data files are covered by
section 117.

In order to amend the Copyright Act with the least amount of dis-
ruption, the definition of a computer program could be changed to read:

A ‘computer program’ is a set of statements or instructions to be used
directly or indirectly in a computer to bring about a certain result. A
computer program also includes any work of authorship in digitized
form which is used in conjunction with a computer or other computer
program. With the addition of 25 words, we have now made it clear that
section 117 extends to electronic texts, e-mail, data files, and multi-me-
dia works.82

76. CONTU REPORT, supra note 14, at 13.
80. See, e.g., Elkin-Koren, supra note 65, at 385.
82. It also has the side-effect of allowing people to make “back-ups” of Digital Audio
Tapes (“DATs”) and the like, but such copies are limited by the language of section 117 to
III. PERFORMANCE AND DISPLAY

A. DON'T STARE AT THAT SCREEN

The Copyright Act of 1976 for the first time gave copyright holders not only the right to make and authorize copies, but it also gave the copyright holder the exclusive right publicly to display or perform the work. The legislative history notes that the “existence . . . of this right under the present statute is uncertain and subject to challenge.”

The word “display,” according to the legislative history of the Copyright Act, is intended to include “the projection of an image . . . by electronic or other means, and the showing of an image on a cathode ray tube, or similar viewing apparatus connected with any sort of information storage and retrieval system.” The performance right is described as being “accomplished ‘either directly or by means of any device or process,’ including all kinds of equipment for reproducing or amplifying sounds or visual images, any sort of transmitting apparatus, any type of electronic retrieval system, and any other techniques and systems not yet in use or even invented.”

It is important to note that this section of the Copyright Act covers “public” displays and performances, and not all displays or performances. If the copyright holder’s rights were not so limited, even singing in the shower could constitute an infringing performance.

Furthermore, even some types of public displays are exempted. The classic example is a work of art in a gallery. Section 109, as part of the “first sale doctrine” (discussed later), allows the owner of a copy of certain works to display the copy of the work publicly. It also allows the projection of individual images (i.e. you cannot show a movie publicly,

83. 17 U.S.C. § 106(5) (applies to “literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work”).
84. 17 U.S.C. § 106(4) (applies to “literary, musical, dramatic, and choreographic works, pantomimes, and motion picture and other audiovisual works”).
86. Id. at 64.
87. Id. at 63.
88. It is important to note that the Copyright Act of 1976 changed the public performance section to remove the “for profit” requirement mentioned in the older cases that discuss this section. House Report, supra note 44, at 62. The for-profit requirement was removed in part due to the difficulty in drawing the line as to what constitutes a for-profit performance, and what does not. Id.
89. 17 U.S.C. 106(5) (includes “literary, musical, dramatic and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work”).
though you can show slides you bought on your vacation) so long as the viewers are located at the same place as the copy you are showing (i.e. you cannot buy vacation slides and show them on the local cable public-access channel). This "transmission of a public display" limitation would also apply to a display of an electronic work over a computer network. Because the display of a digitized work requires the creation of a copy, the interplay between the exclusive right of the copyright holder to display or perform a work can get confused and intermixed with the copyright holder's exclusive rights to make and distribute copies of the work. To examine this situation, let us see how computer technology compares with other technologies.

B. SAME AS IT EVER WAS

In examining public displays and performances, it is useful to look at how other communications media were treated by the courts when those technologies were new.

In the early days of radio, courts were called upon to address whether a radio broadcast constituted a public performance of the works transmitted to the listening audience. Without needing to revise the Copyright Act, the courts had little trouble in finding that the rendition of a work under the auspices of a broadcaster which was intended to be heard by a large audience of people, even if unseen and widely scattered, was a public performance, and thus was an infringement unless licensed.

Also, the question of whether a radio listener was also performing the copyrighted work transmitted by the broadcaster arose: If, by analogy to a live performance in a concert hall or cabaret, a radio station "performs" a musical composition when it broadcasts it, the same analogy would seem to require the conclusion that those who listen to the

91. Id.
92. House Report, supra note 44, at 80, reads:
[S]ection 109(b) takes account of the potentialities of the new communications media, notably television, cable, and optical transmission devices, and information storage and retrieval devices, for replacing printed copies with visual images. First of all, the public display of an image of a copyrighted work would not be exempted from copyright control if the copy from which the image was derived were outside the presence of the viewers. In other words, the display of a visual image of a copyrighted work would be an infringement if the image were transmitted by any method (by closed or open circuit television, for example, or by a computer system) from one place to members of the public located elsewhere.

Id.
97. Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 157-59 (1975).
broadcast through the use of radio receivers do not perform the composition. And that is exactly what the early federal cases held:

Certainly those who listen do not perform, and therefore do not infringe. . . . One who manually or by human agency merely actuates electrical instrumentalities, whereby inaudible elements that are omnipresent in the air are made audible to persons who are within hearing, does not 'perform' within the meaning of the Copyright Law.98 Yet, when someone “actuates electrical instrumentalities” that result in the work being heard by a larger group than just someone with a radio, the situation was found to be different. In Buck v. Jewell-LaSalle Realty Co., 99 the court found that a hotel that operated a “master radio receiving set,” which it used to pick up broadcasts which were then routed to speakers in the public and private rooms of the hotel, was publicly performing the broadcasted works in violation of the copyright holder’s rights.100

Later cases that looked at similar issues did not think very highly of the equities resulting from the Buck decision and therefore severely restricted Buck.101 In the end, the solution was to amend the Copyright Act to address the situation. Section 110(5) of the Copyright Act of 1976 says that notwithstanding the copyright holder’s exclusive rights, it is not an infringement to:

(5) [communicate] a transmission embodying a performance or display of a work by the public reception of the transmission on a single receiving apparatus of a kind commonly used in private homes, unless—

(A) a direct charge is made to see or hear the transmission; or

(B) the transmission thus received is further transmitted to the public.102

From then on, all that had to be fought about was what constituted a receiving apparatus of the kind commonly used in private homes.103

Of course, then along came another technology, CATV (Community Antenna TeleVision, the precursor to modern cable TV).104 In Fort-
nightly Corp. v. UA TV, Inc., the court held that unlike broadcasters, cable companies did not perform the works they transmitted:

The function of CATV systems has little in common with the function of broadcasters. CATV systems do not in fact broadcast or rebroadcast. Broadcasters select the programs to be viewed; CATV systems simply carry, without editing, whatever programs they receive. Broadcasters procure programs and propagate them to the public; CATV systems receive programs that have been released to the public and carry them by private channels to additional viewers. We hold that CATV operators, like viewers and unlike broadcasters, do not perform the programs that they receive and carry.

Fortnightly states that cable, which merely passively retransmits another's signal, was found not to perform the works transmitted, while a radio system in a hotel, which also merely transmits another's signal (through a cable), did perform the works. Once again, it was time for a legislative solution — section 111 of the Copyright Act is a compromise which provides certain exemptions for secondary transmissions by cable systems, but in exchange for a compulsory license fee. Hotels, apartment complexes and the like were also given a limited exemption from liability, but were not subjected to the compulsory license.

Once things had been clarified again by the legislature, the only thing to fight about was whether new technologies, such as satellite broadcasting, fit under the protections given to cable systems provided in section 111. As with the creation of radio and television transmission, cable transmission, and satellite transmission, the Copyright Act must now accommodate the new types of transmission provided by computer information systems and Internet service providers.

C. A Flock of Sheep, A Coven of Witches, A Public of Individuals

For a performance or display to be public, it may be observed "at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered." Alternatively, the performance or display may be a public one if the performance or display is transmitted or "otherwise commu-
nicated” to the same class of people, who may be located at the same or different places, whether they receive it at either the same or different times. Thus, the work becomes public when the public shares in it. Sharing occurs either by displaying the work in a “public place,” or by allowing members of the public to experience it individually at home at their convenience. A television broadcast, for example, makes information available to the public, even though each member of the public may receive the information in private. “On-line services, like broadcasters, facilitate the sharing of information with the public, although the actual exposure to the information may take place in the privacy of one’s home.”

The public display doctrine may be clear when discussing live performances, but when technological mediation is thrown in, the doctrine becomes more difficult to apply. This has been shown clearly by the cases that have addressed uses of videotapes. For example, some cases have held that viewing videotapes in a hotel room constitutes a public performance of the videotape because hotel rooms are open to the public since anyone can rent them. However, other courts have held that watching movies in a hotel room is no different than watching movies at home. Because the purpose of renting a hotel room is to obtain temporary living accommodations, and not just a place to watch a movie, by watching a movie in a hotel room there is no public performance of the copyrighted work. Yet, if the temporary accommodations are as public as a hotel room but their purpose is to watch videotapes instead of sleep, then there is a public performance (presumably even if you end up sleeping in the private viewing room). In any case, where there is a public performance, the proprietor of the facility allowing the performance can be held liable for performing the copyrighted works. Even where the user of the work is the one who actually performs the acts resulting in the performance, the proprietor is still liable for authorizing

113. Id.
115. See On Command Video Corp. v. Columbia Pictures Indus., 777 F. Supp. 787, 790 (N.D. Cal. 1991). Hotel rooms are public places for performance analysis because the relationship between the movie transmitter, the hotel, and its guests is a commercial public one, regardless of where the viewing takes place. Id. “The non-public nature of the place of the performance has no bearing on whether or not those who enjoy the performance constitute ‘the public’ under the transmit clause.” Id. Although the rooms may be private, the viewers in the rooms are nonetheless members of the public. Id.
117. Id.
119. See, e.g., Aveco, 800 F.2d at 64, Redd-Horne, 749 F.2d at 159.
the performance, a right reserved to the copyright owner.\textsuperscript{120}

With this in mind, a public Bulletin Board System ("BBS") which distributes electronic works is open to the public. Similarly, a file archive, a UseNet News discussion group, or a World Wide Web site would be open to the public. All of these services allow the distribution of information to a group of people beyond one's normal circle of family and friends, even though the works may be accessed from separate places and at separate times.

It should not affect the analysis that a file made available is not actually accessed by anyone;\textsuperscript{121} all that is important is that it be made available to the public. Even if the work is restricted to certain groups of people, the work would still be publicly available if that group exceeded a "normal circle of family and its social acquaintances."\textsuperscript{122} The provider's liability for creating a public display or performance is also not affected by the user being responsible for the initiation of the transmission resulting in the display.\textsuperscript{123}

Now, however, we come to the question which causes the most confusion—even if an archive, web page, etcetera is accessible to the public, and even if the site provides copyrighted works: is there a public display of the copyrighted works?

D. IF A GIF IS DOWNLOADED IN THE FOREST...\textsuperscript{124}

Clearly, if a document is downloaded over a computer network (and the work is not immediately viewable) then a copy is made. Where once there was only a copy of our speech on the computer acting as the server, now there are two copies in existence—one on the server, and one on the user's computer. Two cases involving computer BBSs discussed the making and distribution of copies as a result of files being uploaded and downloaded from a host computer (a bulletin board system in these cases), resulting in liability for the BBS operator.

\textsuperscript{120} Aveco, 800 F.2d at 64.
\textsuperscript{123} On Command, 777 F. Supp. at 789-90.

On Command transmits movie performances directly under the language of the definition. The system 'communicates' the motion picture 'images and sounds' by a 'device or process'—the equipment and wiring network—from a central console in a hotel to individual guest rooms, where the images and sounds are received 'beyond the place from which they are sent.' See also Professional Real Estate, 866 F.2d at 282 n. 7. The fact the hotel guests initiate transmission by turning on the television and choosing a video is immaterial.

\textit{Id.}
Neither *Playboy Enterprises, Inc. v. Frena*\(^{124}\) nor *Sega Enterprises v. MAPHIA*\(^{125}\) specifically holds system operators liable for making copies of protected works, a right protected by section 106(1) of the Copyright Act.\(^{126}\) However, the *Sega* court concludes that the defendants could be held directly liable, and liable as a contributory infringer, for making and distributing copies of a copyrighted work.\(^{127}\) The *Playboy* court, while acknowledging that the defendant claims not to have made any copies himself, held the defendant liable for distributing copies in violation of the exclusive rights protected by section 106(3).\(^{128}\) This conclusion is arguably wrong. Clearly Frena was involved in making copies, if not directly, then as a third-party infringer (discussed below). However, Frena did not "distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease or lending" as section 106(3) requires.\(^{129}\) As one author illustrates, in such cases a copy is not transmitted for the purposes of section 106(3):

> When a BBS user communicates information to other subscribers, the user transfers nothing tangible. The bits displayed on a BBS are not transferred to subscribers "by sale or other transfer of ownership, or by rental, lease or lending." [Citation omitted]. Rather a BBS provides subscribers with access and services. As such, BBS operators do not create copies, and do not transfer them in any way. Users post the copies on the BBS, which other users can then read or download. [Citation omitted]. The shift from distribution of copies to dissemination by access is typical of the digitized environment.\(^{130}\)

While it is true that the work may be transmitted as a result of the defendant's actions, in that the work has been communicated by a device or process so that the images or sounds are perceived beyond the place from which they are sent,\(^{131}\) it is not true that a "copy" has been "distributed." Note that according to the Copyright Act, a "copy" refers to "material objects . . . in which a work is fixed."\(^{132}\) The fixation of *Playboy*'s photographs is found in Frena's hard drive. At some point the works become fixed in the RAM of Frena's computer in the course of transmission.\(^{133}\) After a user logs onto Frena's BBS and downloads "copies" of *Playboy*'s pictures, Frena is still in possession of his hard drive. No fixa-

---

132. Id. (defining "copies").
133. See discussion of loading a work into a computer's RAM constituting the creation of a copy, infra text accompanying notes 240-48.
tion of the work has been distributed, even though there is now a fixation of the work on the BBS user's hard disk. Rather, what has happened is that Frena has allowed access to his copy\(^{134}\) of Playboy's pictures, and the pictures have been reproduced by means of transmission from Frena's computer to the computer of his BBS's users. Thus, the \emph{Playboy} court was incorrect in holding that there was a violation of Playboy's section 106(3) right to distribute copies; instead, there was a violation of Playboy's section 106(1) right to make or authorize the making of reproductions of their works.

\textbf{E. DIRECT AND CONTRIBUTORY AND VICARIOUS, OH MY!}

There are three types of liability that can be incurred by an electronic publisher. The first and most obvious is direct liability for infringement. Anyone who violates any of the exclusive rights reserved to the copyright holder in section 106 of the Copyright Act is an infringer,\(^ {135}\) subject to any of the listed exemptions.\(^ {136}\)

Looking at Mr. Frena and his BBS, it can be argued that he was a direct infringer of Playboy's copyrights. Although he claimed not to know that copies were being made, knowledge of the infringement or intent to infringe is not a requirement—copyright infringement is a strict liability offense.\(^ {137}\) As mentioned, it is a difficult question as to whether Frena is responsible for the actual transmission of the protected works when what he did was to provide access to the works. But for his actions, Playboy's works would not have been copied. However, but for the user's actions in calling up the BBS and requesting a transmission of the file, the file would not have been transferred. (This dilemma is, in a way, similar to concerns the courts had over the relationship between broadcasters and TV viewers).\(^ {138}\) Regardless, he had to set up the BBS, allow the uploading of the graphic files, and he had to allow users to connect

134. The fixation of the pictures on Frena's disk drive.
137. \emph{Playboy}, 839 F. Supp. at 1559.

The television broadcaster in one sense does less than the exhibitor of a motion picture or stage play; he supplies his audience not with visible images but only with electronic signals. The viewer conversely does more than a member of a theater audience; he provides the equipment to convert electronic signals into audible sound and visible images. Despite these deviations from the conventional situation contemplated by the framers of the Copyright Act, . . . broadcasters have been judicially treated as exhibitors, and viewers as members of a theater audience. Broadcasters perform. . . . Viewers do not perform. . . . Thus, while both broadcaster and viewer play crucial roles in the total television process, a line is drawn between them. One is treated as active performer; the other, as passive beneficiary.

\emph{Id.}
and download them. It is his computer that caused the data to be transferred to the users' computers, though it was at the users' request. With this set of facts, other courts have not had trouble finding the system operator responsible for transferring the material, regardless of whether or not it was initially requested by the user.  

The language of the Copyright Act does not, however, limit itself to holding only direct violators liable for infringements. There are two types of third-party liability that may be present: one is contributory liability (summarized as "knowledge and participation" in the infringing activity), and the other is vicarious liability (summarized as "benefit and control" of the infringing activity). These two types of liability are often hard to distinguish from one another.

Contributory infringement is based on the third party's relation to the infringing activity. It is a "species of the broader problem of identifying the circumstances in which it is just to hold one individual accountable for the actions of another." The proper circumstances for finding contributory infringement are those in which the third party provides "services or equipment" to aid in the direct infringement of a protected work. The oft-cited definition of a contributory infringer is "[o]ne 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." Thus, contributory infringement requires a "know or has reason to know" standard. This test also re-

---

139. See U.S. v. Thomas, unreported decision, (W.D. Tenn. 1994), on appeal as case Nos. 94-6648, 94-6649 (6th Cir.).
142. ITIF Green Paper, supra note 5, at 64.
143. Sony, 464 U.S. at 435.
146. See, e.g., Casella, 820 F.2d at 365. Business owner who sold restaurant complete with singing robots was a contributory infringer when he did not inform business pur-
quires that the function of the contributor be looked at in the infringing process, and not just the “quantitative contribution” of the infringer.147 If the person authorizes the use of a work without the permission of the copyright holder, and was in a position to control the use of the copyrighted works by others, then that person can be held liable as a contributory infringer.148

Again looking at Mr. Frena, although he claimed he was not aware of his users’ copying of Playboy’s photographs from his BBS, at trial a jury could find that he either knew or had reason to know that the infringements were occurring. Also, he provided the facilities necessary to store and access the protected works. Though perhaps not at a summary judgment level (where he denied having knowledge of the infringement) at trial he could reasonably be held to be a contributory infringer of Playboy’s copyrights. In the Sega case, contributory infringement was clear, because the defendants provided the “facilities, directions, knowledge and encouragement” with which to copy Sega’s works.149

The second type of third-party liability is vicarious liability. Vicarious liability attaches when, even in the absence of knowledge of the infringement, a party has the “right and ability” to supervise the infringing activity of another, and derives “obvious and direct financial interest in the exploitation of copyright materials.”150 Vicarious liability cases are often analyzed based on two lines of cases—landlord-tenant cases (which exempt from liability landlords who receive only a fixed rent from their tenants, do not know about their tenants’ copyright violations, do not supervise their tenants, and receive no financial benefit from any infringement),151 and “dance hall” cases (where nightclub owners have been held vicariously liable for infringing music played by bands per-

---

147. *Gershwin*, 443 F.2d at 1162.
151. See e.g., *Deutsch v. Arnold*, 98 F.2d 686, 688 (E.D.N.Y. 1938).
Courts faced with vicarious liability cases have had to find where on this spectrum of cases the infringing activity falls.153

The theory behind vicarious liability is that:

The law of vicarious liability treats the expected losses as simply another cost of doing business. 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.154

This is true even where the vicarious infringer does not have actual knowledge of the infringement—the claim is that the vicarious infringer should either pay more attention, or should bear the loss instead of the copyright owner.155 Even a passive actor who derived benefit from the infringement can be held “responsible for the policy of neglect which resulted in the infringement of the Plaintiff’s copyright interests.”156 Even if the infringing acts were performed by an independent contractor, there is still vicarious liability for the party who had the right and ability to supervise the infringer’s activities,157 under the theory that the supervisor should not profit from the infringing behavior of another who the supervisor could have controlled.158

Applying this standard to Mr. Frena, he had a financial interest in the infringing of Playboy’s copyrights by virtue of charging for access to his bulletin board system. He also had the ability to supervise which files were being uploaded and downloaded from the publicly accessible areas of his computer. Finally, because it was his bulletin board system, he had the right to control its use and to control which files were transferred. If Frena’s BBS was so large that he could not monitor the file traffic for copyright violations, then perhaps there could be no finding of vicarious liability (though this does not address the other types of liability). If copyrighted material was being exchanged on his BBS via private

152. See, e.g., Shapiro, 316 F.2d at 307; Polygram, 855 F. Supp. at 1324.
154. Id. at 1325. See also Fourth Floor Music, Inc. v. Der Place, Inc., 572 F. Supp. 41, 44 (D. Neb. 1983); Pinkham, 983 F.2d at 834.
156. Sailor, 867 F. Supp. at 569.
e-mail, and he had contractually bound himself not to read his user's e-mail, then perhaps he would not have the right to supervise any infringing activity, and thus would not be vicariously liable. Absent these limits, however, Frena could be vicariously liable for the copyright infringements of his BBS's users.

F. Let's All Gather 'Round the Monitor

While the Playboy v. Frena court did not specifically address whether Frena was a primary, contributory, or vicarious infringer, nonetheless, it held that he was liable for distributing copies of the plaintiff's works.

The Playboy court, however, also held that the defendant was liable for publicly displaying Playboy's pictures, which had been scanned into the computer and were distributed on the BBS. The court held:

Furthermore, the 'display' rights of PEI [Playboy] have been infringed upon by Defendant Frena. . . . The concept of display is broad. . . . It covers 'the projection of an image on a screen or other surface by any method, the transmission of an image by electronic or other means, and the showing of an image on a cathode ray tube, or similar viewing apparatus connected with any sort of information storage and retrieval system.' . . . The display right precludes unauthorized transmission of the display from one place to another, for example, by a computer system.

This holding is also of questionable accuracy. The defendant did not transmit a performance, as does a television station. With a television signal, the performance is displayed simultaneously with its reception, no further actions are needed to make the images perceptible, even though a device is required to make the signals appear in a perceivable form. This is not the same situation with the works being transmitted by Mr. Frena's bulletin board system. Such bulletin board systems do not transmit a performance or display of the work; rather, they either trans-

159. The court merely held that his actions 'implicated' the exclusive rights protected by 17 U.S.C. § 106(3), and that "there is no dispute that [he] supplied a product containing unauthorized copies of a copyrighted work." Playboy, 839 F. Supp. at 1556.
160. Id.
161. Id. at 1556-57.
162. Id. at 1556.
163. This holding is accepted in the IITF White Paper, however, it then proceeds to either contradict this holding in a parenthetical in the very next sentence or at least demonstrate a lack of knowledge of the facts in the Playboy case:

The definition of 'display' clearly encompasses, for instance, the actions of the defendant BBS operator in the Playboy case. Thus, when any NII user visually 'browses' through copies of works in any medium (but not through a list of titles or other 'menus' that are not copies of the works), a public display of at least a portion of the browsed work occurs.

IITF White Paper, supra note 6, at 80-1.
mit a copy of the work, or at least make facilities available for others to make copies of the work and thus are contributorily liable for violating the copyright holder’s right to create reproductions of the work.\textsuperscript{164} If one connected a computer to the JumboTron television at the local football stadium, logged onto Frena’s BBS, and downloaded Playboy’s copyrighted works, the tens of thousands of viewers would likely see no more than the computer displaying a report that “file Playboy.gif has been successfully transferred.” In fact, if the file is then deleted, the transfer will never meet the Copyright Act’s definition of a display, much less a protected public one.\textsuperscript{165}

A more accurate way of describing the actions of the BBS or archive operator is that he or she has made the file available for public copying, not public viewing. The archive operator has no way of controlling what is done with the file once it has been copied from his or her system.

If a print library makes the Playboy pictures available, the works would be on public display. (They are accessible to a group beyond one’s family and friends at a place open to the public.) Yet it would be a public display allowed by section 109(c).\textsuperscript{166} In the case of the electronic “library” containing the same pictures, however, there is no public display, only the ability publicly to request copies of the photographs. It is as if in order to see the photographs you have to ask the librarian to put the magazine in one end of the photocopier while you receive what is coming out of the other end of the copier. Clearly a violation of the copyright holder’s rights has occurred, but it is a violation of the copyright holder’s right to make and distribute copies. Furthermore, the section 109(c) right would not apply to an electronic library because, even if there were a display, the display would be by people who may be receiving the display from anywhere reached by the library’s computer network. If the library network is limited to one room, perhaps it would be considered to be a display occurring “at the place where the copy is located,”\textsuperscript{167} but if the library is connected to the Internet, then the display could be seen anywhere in the world, which is clearly beyond the limits of the section 109(c) exemption.

\begin{footnotesize}
\textsuperscript{164} 17 U.S.C. \textsection 106(1).
\textsuperscript{165} “To ‘display’ a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.” \textit{Id.}
\textsuperscript{166} 17 U.S.C. \textsection 109(c).
\textsuperscript{167} \textit{Id.}
\end{footnotesize}
G. If it Looks Like a Duck, if It Quacks Like a Duck, if It Swims Like a Pigeon...

The display versus copying confusion is even more clearly illustrated in the case of the World Wide Web provider. With a "graphical web browser" (software used to access web pages that is capable of displaying graphics), many works made available through a regular web page are immediately viewable to someone accessing the page with one of these web browsers. The works are drawn on the user's screen as they are transmitted across the modem or network connection—parts of the work are usually visible before the entire work has been copied from the web server to the user's computer. Often, these works are in the form of design elements that make up a web page and are intended to be immediately displayed by users accessing the web page—although technically a "copy" is transmitted, the work is intended to be a "public" display within the definition of the Copyright Act, even if it technically may not be a public display. This situation looks much more like a public display than a simple bulletin board system (like the ones at issue in the Playboy or Sega cases). However, these web pages are still accessible by text-based browsers. In this case, any graphical works are not immediately displayed, and may never be displayed. Even if a graphical browser is used, the function that causes the images to be viewed immediately can be deactivated.

Importantly, regardless of what type of web browser is used and regardless of whether the software may be set to display immediately any pictures or play any sounds and the like, the actions and intent on the part of the web provider are the same. To hold that the web provider is violating different sections of the Copyright Act depending on the actions of the web page user, which the web provider has no way either to control or become aware of, is nonsensical.

With the growth of video conferencing and video distribution over computer networks, and even radio stations putting out their programming in real-time over the Internet it is beginning to look like another legislative solution is needed to restore clarity.

H. It's All In Your Head

The IITF Working Group recommends that, to address the confusion between public performance versus public copying, what is needed is a change in the definition of "transmit," and an amendment to section

---

168. As opposed to a text based browser which requires that any graphics be downloaded before viewing.
170. See, WXYC available at URL: http://sunsite.unc.edu/wxyc/.
171. IITF White Paper, supra note 6, at 275.
106(3) which reserves for the copyright holder the right to distribute copies by transmission. It also notes the argument "public downloading" of "performable" works should be considered a public performance.

To add to section 106(3) that a "copy" can be distributed by transmission, is to weaken the distinction between making copies and transferring them. As was discussed earlier, there is a difference between a work, and a fixation of a work. Distributing a copy requires the transfer of a physical object, while making a copy does not. Adding to section 106(3) a reservation for the copyright holder to "distribute copies by transmission" is to reserve a right that is already, in essence, protected by section 106(1). The IITF Green Paper suggests changing the definition of "transmit" in a way which will allow either the finding of a transmission of a performance, or a distribution of a reproduction, based on the "primary purpose or effect" of the transmission.

Let us apply this proposal and see how it works—if a work is placed in a public archive, such as on a bulletin board system, or an "FTP" site the purpose most likely is to transmit reproductions, as these generally require further acts on the part of the user to display or perform the work. In the case of a web page, if the work is set up so that the normal viewer could immediately perceive the work, then it is likely a display or performance of the work—the purpose was to make the work viewable to the public, regardless of whether the public actually viewed the work as was intended. If, on the other hand, the work is not intended to be immediately perceivable, such as when a user is given the instruction to "click here to download a copy of this paper," then the purpose would be to transmit a "copy" of the work, and the effect of the transmission would be to fix a copy remotely as well.

Now let us look at another example—if a work is sent by an individual to another individual, such as a picture sent by e-mail and intended for the recipient's personal consumption, then there is no public display or performance. The purpose and effect is to transmit a copy, not create a public display. If the e-mailed picture was then viewed by the recipient on our computer plugged into the JumboTron at the football stadium, the effect of the transmission would be a public display, regardless of the

172. Id. at 270. "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." Id.

173. IITF White Paper, supra note 6, at 79-80.

174. 17 U.S.C. § 106(1) (reserving the exclusive right to reproduce the copyrighted work for the copyright holder).

175. IITF Green Paper, supra note 5, at 108.

176. FTP, or File Transfer Protocol, is a method of moving computer files over a network.
message sender's purpose. In this case, although the actions and the intent of the party transmitting the work are the same as if the work were seen by only one individual, here the effect would constitute a possibly infringing public display. Once again, as a result of actions beyond his control, the person transmitting the work may or may not be an infringer based on the actions of a party he has no way to control, and of whose actions he may not even be aware. This is likely to produce inequitable results.

The IITF White Paper abandons the "purpose or effect" approach of defining when a transmission produces a reproduction and when it results in a performance or display. The abandonment is only in the proposed statutory change—the IITF White Paper now states, in essence, that the courts should apply a "purpose or effect" test in cases where there is a question as to whether the transmission produces a reproduction or a display.¹⁷⁷

Perhaps a better way to fix the Copyright Act to account for the transmission of a public display or performance issue is simply to amend the definition of what constitutes a public display or performance.

The definition of a public display addresses in Paragraph (1) of section 101¹⁷⁸ the showing of a work to a group outside of one's family and friends. Paragraph (2) covers transmissions of a work which creates a public display, even if this group of non-family and non-friends are in different places, or are partaking of the display or performance at different times. A possible solution is to add a third paragraph defining a public performance or display to include making works publicly accessible in electronic form. Such a paragraph could read as follows:

To Perform or display a work "publicly" means—

* * *

(3) to make available for public access in electronic form a musical, dramatic, graphic, sculptural, choreographic, pantomime, or literary work.

This is not a perfect solution. It does not address the scenario where someone downloads a work in electronic form, and then deletes it immediately. In such a case, there is no traditional display or performance, even though there is a reproduction. However, this is only because of the actions of the user—over which the person making the work available has no control. On the other hand, the party making the work available for public access—for instance on a web page, a BBS, by posting to a UseNet Newsgroup, or the like—knows exactly which of his or her actions may result in liability.

Under this approach (as is still possible, but not discussed under the

¹⁷⁷. IITF White Paper, supra note 6, at 275-76.
¹⁷⁸. 17 U.S.C. § 101 (definition of "to perform or display").
IITF approach), a copy is still made which implicates section 106(1).\textsuperscript{179} This is the proper result because, regardless of whether or not the work is “displayed,” before the transmission a copy of the work existed only on the server, and after the transmission a copy of the work also existed on the user’s computer.

IV. TESTING THE CHANGES IN THE DIFFERENT SCENARIOS

Taking a step back, let us examine how the proposed changes would affect the various scenarios mentioned in the beginning of this paper.

A. Home User

Using a speech received by e-mail as an example, the home user can load a copy of a speech into his computer’s RAM. Although this constitutes the creation of a copy,\textsuperscript{180} it is a copy that is authorized by section 117,\textsuperscript{181} as a copy necessary to use the rightfully owned copy, when section 117 is read in light of the revised definition of a “computer program.” Similarly, making an archival copy of the speech would be permissible under section 117.\textsuperscript{182}

If the user forwarded a copy of the letter containing the speech to a third party, a potentially infringing copy would be made. This would be no different than photocopying and distributing a speech the user had on paper. If forwarding the speech constituted a fair use, or if there was an implied or explicit license given by the copyright owner to further distribute the speech, there would be no violation. In addition, the home computer user could show a copy of the letter to anyone as it appears on his screen. According to the definition of a public display\textsuperscript{183} (the only kind of display to which the copyright holder has the exclusive rights)\textsuperscript{184} as long as the copy of the speech on the user’s screen is shown only to a normal circle of friends and their social acquaintances, there is no infringement. Furthermore, the copy on the user’s screen could be shown to anyone who can be squeezed into the room with the computer display, as allowed by section 109(c).\textsuperscript{185}

If instead of a speech by private e-mail, the work at issue is a diatribe sent as part of an e-mail discussion group, or a note on a UseNet newsgroup, or a post on a BBS, then arguably the user could make addi-

\textsuperscript{179} 17 U.S.C. § 106(1).
\textsuperscript{180} MAI, 991 F.2d at 519; Triad, 31 U.S.P.Q.2d at 1242; Advanced Computer, 845 F. Supp. at 363.
\textsuperscript{181} 17 U.S.C. § 117(1).
\textsuperscript{182} 17 U.S.C. § 117(2).
\textsuperscript{183} 17 U.S.C. § 101.
\textsuperscript{184} 17 U.S.C. § 108(5).
\textsuperscript{185} 17 U.S.C. § 109(c).
tional copies—especially in order to respond to the note, so long as any copies made are within the reasonable expectations of the other users of the particular forum.\(^\text{186}\) There could reasonably be found to be an implied license to make certain uses of the work based on the nature and expectations of the forum in which the work is made available. Uses beyond such expectations—for example, reprinting a letter from a BBS in the newspaper—could exceed this implicit license and may therefore constitute an infringement.\(^\text{187}\)

B. WORLD WIDE WEB PROVIDER

To examine how the changes apply to a World Wide Web provider,\(^\text{188}\) we must first examine how the Web works.

To call up a document on the World Wide Web, a user connects to the web provider's web server. There, the user is presented with a "homepage," which is the introductory hypertext document. By selecting the various hypertext links, "copies" of other documents\(^\text{189}\) (or sub-pages) are transmitted to the user. These documents may be transmitted directly to the user by the web provider, if the documents reside on the initially-contacted web provider's computer. However, it is often the case that these documents reside on a web page on another computer somewhere else on the computer network (referred to here as the "secondary computer")—which could potentially be anywhere in the world. In this case, the hypertext link serves as an address, much like a listing in a bibliography, or, more accurately, like a description of a place on the shelf in someone else's library where the book is stored. The user's "web browser" software reads this listing (the hypertext link), and then uses it to request a copy of the document from the secondary computer that stores the document at the location indicated by the hypertext link. If the document is not stored on the initial web provider's computer; then the initial web provider provides the address of the linked item on the secondary computer, it is the user who transmits a request to the secondary computer, as recommended by the initial computer, which results in the secondary computer transmitting a copy of the requested file. If the secondary computer is not available, or if the remote file is password pro-

\(^{186}\) Elkin-Koren, supra note 65, at 373, n. 161.

\(^{187}\) Id. at 373. Implied licenses are generally beyond the scope of this paper, as they are based on a combination of state contract law and copyright law. See, e.g., S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081 (9th Cir. 1989).

\(^{188}\) To avoid additional levels of complexity, the discussion of web providers assumes that the entity that designs and maintains the web page is also providing the web page on the entity's own "web server," (a computer which runs web software and "serves up" the requested files) as opposed to having the web page actually made available by some third party, such as on a university or commercial service provider's computer.

\(^{189}\) Which could be text, pictures, motion pictures, sounds, or software files.
tected or otherwise limited in its access, then the work will not be transmitted at the user's request, and the user will receive only an error message or will be prompted for a password. It is as if the bibliography refers the user to a book that is missing from the shelf of the distant library, or is in a library for which the user does not have a library card.

The initial web provider has no control over what is provided at the secondary site, but the initial provider must program the link to the secondary site for it to be accessible from the initial web page in the first place. In other words, the book may be in the library, but the web user would either not know that it exists, or would not be able to get it as a result of the information provided by the initial web page. It is also possible that, after the link is made, another "book" could be put in the same "place on the shelf"—in other words, a web page provider could link to Document A at a distant site, and at some point later, the distant site could replace Document A with Document B. The only way for the initial web provider to know of the switch in documents would be to follow the link and see that a different document is being transmitted than the one originally linked to on the homepage.

Another way of examining the situation is as follows: Accessing a link which calls up a document distributed from a web server to which you are directly connected is the equivalent to sending a request to that web page's computer saying "transmit to me the file stored on your machine at the location specified in this link." At this point, if the user has the appropriate permission, the indicated work is sent. If the file is not stored on the machine running the web page the user is accessing, then accessing a link is the equivalent to saying to the initial web provider's computer "you are indicating to me that I can access a copy of document A at this distant location, and I would like to access document A." At this point a request is sent by the user to the secondary computer recommended by the initial computer, for a transmission of the document stored at the link's destination. If the user has the appropriate permission, a "copy" of the document is then "sent" to the user's computer.

If the document accessed on the web page is stored locally, then the copyright analysis is fairly straightforward. By virtue of the work being made available on the public web page, the copyright holder's section 106(4) and (5) rights are implicated under our revised definition of "public display or performance." The document is read off of the web provider's disk drive and into the RAM of the web provider's computer,

---

190. In other words, if the document is "world readable" or if the user has any necessary passwords needed to access the document.

191. Which section is implicated depends on the type of work accessed, e.g., video clip versus picture file.
creating a copy.\textsuperscript{192} This copy is arguably necessary for the utilization of the work, as allowed by section 117\textsuperscript{193} (the type of work does not matter when this section is read in light of the proposed new definition of "computer program"). The work is then transmitted through the computer network (the implications of which will be discussed shortly) and "fixed" in the RAM of the user's computer. The work has now been reproduced, implicating the section 106(1) right\textsuperscript{194} of the copyright holder (who, of course, may be the web provider). Finally, if the user then saves the transferred work onto his hard disk, assuming the transfer of the work was an authorized one,\textsuperscript{195} the copy on the hard disk is an archival copy authorized by section 117.\textsuperscript{196}

If the document accessed is not located on the web provider's computer, and is "linked" only on the provider's web page while residing on another computer, the situation becomes a bit more complicated.

In this situation, the web provider is not delivering the document directly, and no copy ever comes into contact with the initially-accessed web provider's computer. The initial web provider does not transmit anything to the user other than the location of the work on the secondary provider's computer. Because of this, there can be no \textit{direct} liability if the transferral of the work constitutes an infringement. It then becomes necessary to determine whether the initial provider is either contributorily or vicariously liable for the infringement.

As stated earlier, "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."\textsuperscript{197} This does require that in order for a web operator to be liable for placing a link on its web page to an "infringing site,"\textsuperscript{198} the web operator must either know or have reason to know of the infringements that are likely to occur.

\begin{itemize}
  \item \textsuperscript{192} \textit{Maj}, 991 F.2d at 519; \textit{Triad}, 31 U.S.P.Q.2d at 1242; \textit{Advanced Computer}, 845 F. Supp. at 363.
  \item \textsuperscript{193} 17 U.S.C. § 117(1).
  \item \textsuperscript{194} 17 U.S.C. § 106(1).
  \item \textsuperscript{195} If the reproduction is of a work that is already an infringing copy, or if the reproduction by transmission would be in excess of the rights allowed by the copyright holder, then any copies made would be infringing ones. \textit{Cf. Apple Computer}, 594 F. Supp. at 621-22.
  \item \textsuperscript{196} 17 U.S.C. § 117(2).
  \item \textsuperscript{198} For these purposes, an "infringing site" is defined as a web page which will transmit copyrighted material when accessed as a result of a user following the link provided on the initial web page, or a page which is linked for the purpose of accessing infringing material contained thereon, even if the infringing material is not immediately transmitted as a result of the initial link.
\end{itemize}
as a result of the user accessing the infringing site. Actual knowledge that the link will result in infringements is not required, reason to know on the part of the web operator will suffice. It is also most likely not important that the user is doing the actual infringing, as long as the user is doing the infringing through the initial web provider's web page. Even though all that is being provided by the initial web page is a form of advertising for the infringing site, in other contexts cases have held that contributory liability could be found if an advertiser knew that the product being promoted was an infringing one. In this case, not only is the infringing site being "advertised" by the initial site, but the initial site is also giving the user a lift onto the train to infringement land. While the user may be able to gain knowledge of the infringing site without the help of the initial page, the assistance provided by the initial site is likely material enough to constitute contributory infringement.

When there is no contributory liability, the web provider may still be vicariously liable for linking to an infringing site. This would apply in situations where a link is put on the initial page to a secondary site which is making available infringing works, unbeknownst to the initial page provider. In some ways, if a web operator links to a site containing copyright violations, the situation is analogous to the bars in the "dance hall cases" who invite in "guests" (web page users) to enjoy the "performances" (links) which the proprietor is making available, even if the performers (sites linked) are "independent contractors." In other ways, the web page provider is more like a landlord—the web provider provides

199. See, e.g., Casella, 820 F.2d at 364-65.
203. It is worth adding that the Sony case held that one who merely provides the copying equipment cannot be held liable as a contributory infringement when the copying equipment is capable of substantial non infringing uses. Sony, 464 U.S. at 442. However, in this case, this is like saying that the company that programmed the web browser software or web server software cannot be held liable as a contributory infringer. Id. Sony did not hold that the blank videotape salesperson, who explained to the Betamax owner how to copy the copyrighted videotape the user said he or she was about to get from the local video store, could not be held contributorily liable for the resulting infringement. Id.
204. See, e.g., Famous Music Corp. v. Bay State Harness Horse Racing and Breeding Ass'n, Inc., 554 F.2d 1213, 1214 (1st Cir. 1977); Dreamland Ballroom, 36 F.2d at 355; KECA, 432 F. Supp. at 74-5.
the link, but is not in a position to supervise or control the conduct of the infringing site. The most control the web provider could have over the "tenant" (secondary provider), is to "evict" him or her (by removing the link from the initial web page).

Case law in the vicarious liability area is unclear and inconsistent. In a somewhat analogous situation, some cases have held that trade show organizers are liable for infringements which occur in the booths at their trade shows, while other cases have held that trade show organizers lack the supervisory and control powers needed for vicarious liability (a position similar to that taken by some courts in the flea-market context, construing the relationship between a flea-market organizer and the merchants selling copyrighted merchandise at the market). The majority of the parent/subsidiary vicarious infringement cases have held that a parent corporation is not liable for the infringing activities of its subsidiary, unless some actual involvement can be shown, though a minority have been more willing to make the stretch necessary to find liability.

In the end, although vicarious liability poses a tough question, a court may rely on "dueling quotations" and find an infringement if the merits of the case warrant such a finding, and only if direct or contributory liability cannot be found.

205. Cf., Deutch, 98 F.2d at 688 (holding a handwriting analyzing chart made by a person having access to the copyrighted handwriting chart infringed on the copyrighted chart).


211. For instance:

[Liability for copyright infringement proceeds on the principle that as between two innocent parties (i.e., the copyright owner and the innocent infringer) it is the latter who should suffer since he, unlike the copyright owner, either has an opportunity to guard against the infringement by diligent inquiry, or at least the ability to guard against liability for infringement by an indemnity agreement from his supplier or by an 'errors and omissions' insurance policy.

3 Nimmer on Copyright, § 13.08. See also Shapiro, 316 F.2d at 308. Compared with the argument that the web page provider is not in the business of overseeing the integrity of the sites linked, and is "ill-equipped to do those things . . . such as hiring an 'Intellectual Property Patrol.'" Fonovisa, 847 F. Supp. at 1497.
C. The Librarian

Libraries have traditionally been allowed to operate as a function of the "first sale" doctrine. The first sale doctrine says that once a work is first alienated, by sale, lending, gift, trade, etc., the copyright law does not prevent any further transfers of that copy, although additional copies cannot be made from the alienated copy of the work.212 In other words, once a library buys a copy of a book, the library is free to lend it out to library users. Without this limit on the copyright owner's distribution rights, we would not have libraries as they exist now, nor would we have things such as used book stores, both of which involve distributions of copyrighted works. A copyright holder may still be able to put contractual restrictions on any further transfer of the work, but this would be an issue beyond the realm of copyright law.213

The first sale doctrine is codified as section 106(3) and section 109 (especially 109(a)) of the Copyright Act.214 However, as was discussed earlier, and as the IITF Green Paper notes:

[T]he system encompassed by sections 106(3) and 109(a) appears to 'fit' only 'conventional' transactions in which possessory interests in tangible copies are conveyed in the first instance . . . Electronic disseminations, by contrast, typically involve the proliferation of copies, with the 'publisher' retaining its copy and the user acquiring a new one. This suggests that, under the current law, the reproduction right, may be both more logically applicable and more legally appropriate.215

In the case of electronic works used on the library premises, the changes proposed in this paper thus far will do a reasonable job of addressing library patrons' use of electronic works. For electronic works used at library facilities, the library functions very much as the home user does. A copy can be read by a library patron, so long as no more than one copy is used simultaneously. Each time a work is loaded into the RAM of a terminal hooked up to a library server, a copy is made in order to utilize the work, as allowed by section 117(1).216 If more than one person views the work on the same screen, the viewing is allowable under section 109(c). However, if more than one copy is called up on different library terminals, then only one of the copies is necessary for the utilization of the work, and thus the scope of the section 117(1) ex-


215. IITF Green Paper, supra note 5, at 32. See also IITF White Paper, supra note 6 at 113.

emption is exceeded. If a library wished to have more than one active copy of an electronic work, the library can arrange for the equivalent to a software "site license" which allows more than one active copy at once. Any use exceeding the license allowance would then be a copyright infringement, as would any use after the termination of any such agreement. Alternatively, the library could pay a royalty fee for any multiple copies through a mechanism such as the Copyright Clearance Center. (In fact, it is conceivable that licensing agreements could eclipse much of the regular copyright law pertaining to electronic works.)

If a user wished to copy part of the electronic work for his other research, we would need to look at the fair use provisions, as well as the section 108 provisions of the Copyright Act for library copying.

Under section 108, certain copies can be made by or for the library user. Because the works are electronic in nature does not mean it requires a different analysis in most circumstances. In some cases the differences required may extend only to placing a copyright notice on the computer's floppy disk drive as well as on any copy machines.

For example, the IITF Green Paper discusses difficulties with section 108(c), which allows copies to be made of works which are deteriorating, but limits any reproductions to those made in facsimile form—which arguably does not include making machine-readable copies. The IITF White Paper has a reasonable approach to this situation. It proposes that even though, the legislative history to the Copyright Act clearly intended that section 108 not apply to digital reproduction, such reproductions should be allowed in some situations. Even more, the IITF White Paper proposes, similarly to the expanded section 117 proposed here, that multiple digital copies be allowed, so long as only one

---


218. The Copyright Clearance Center, created in 1978, provides services to libraries and commercial organizations for the licensing of copyrighted works and the collecting and disbursement of copyright royalties. See Copyright Clearance Ctr., Inc. v. Comm'r, 79 T.C. 793, 794 (1982). The CCC was set up to better compensate copyright holders whose works were subject to multiple copying, yet still provide a streamlined system to make licensed reproduction a practical possibility. Id. at 797.


224. IITF Green Paper, supra note 5, at 48-9.

225. IITF White Paper, supra note 6, at 286.
copy is in use at any given time.\textsuperscript{226} A similar effect to the IITF reports suggestion could be achieved by expanding section 117 to allow archival copies of any electronic works, and not just software; section 108(b)'s limitation to works "duplicated in facsimile form"\textsuperscript{227} can then simply be removed from the Copyright Act.

Lastly, section 117(h), which excludes musical, pictorial, graphic, or sculptural works, as well as motion pictures, and some types of audiovisual works, from the library's right to reproduce works,\textsuperscript{228} needs addressing. The Legislative history only addresses sub-section (h) in two paragraphs\textsuperscript{229} of the eighty-two page legislative history, and does not offer a justification for why these categories of works should be excluded. In fact, much of its treatment of sub-section (h) is taken up explaining that the "fair use" doctrine still applies.\textsuperscript{230} Because of the merging of the types of works that occur with multi-media files, this section may pose an unnecessary impediment, and should probably be removed from the statute (as the IITF White Paper recommends may need to be done with the classification of works in general).\textsuperscript{231}

If a library or archive allows access to its collection from remote locations, or if the archive wishes to lend copies of electronic works, we have a much more complex situation. The first problem is that by allowing the electronic works to be viewed off-site, the section 109(c) exemption which protects public displays in traditional libraries no longer applies.\textsuperscript{232} The second problem, as discussed earlier, is that to make the works available to remote locations requires the creation of additional copies. As the IITF Green Paper points out, when transferring a document by electronic transmission, a copy is retained; thus, you are not "disposing" of it as is required by section 109.\textsuperscript{233}

The IITF White Paper's solution is simply to state that copies can be distributed by transmission.\textsuperscript{234} Then, because a copy is retained, the first sale doctrine should not apply to disposal by transmission.\textsuperscript{235}

This is a drastic and unnecessary step. The current Copyright Act already contains an example of an adequate solution to this problem. Section 117 (covering computer programs) states that "[a]ny exact copies prepared in accordance with the provisions of this section may be leased,

\begin{itemize}
\item \textsuperscript{226} \textit{Id.} at 287.
\item \textsuperscript{227} 17 U.S.C. § 108(b).
\item \textsuperscript{228} 17 U.S.C. § 108(h).
\item \textsuperscript{229} \textit{House Report, supra} note 44, at 78.
\item \textsuperscript{230} \textit{Id.}
\item \textsuperscript{231} \textit{IITF White Paper, supra} note 6, at 50.
\item \textsuperscript{232} 17 U.S.C. § 109(c).
\item \textsuperscript{233} \textit{IITF White Paper, supra} note 6, at 113.
\item \textsuperscript{234} \textit{Id.} at 270.
\item \textsuperscript{235} \textit{Id.} at 117-18.
\end{itemize}
sold or otherwise transferred, along with the copy from which such copies were prepared, only as part of the lease, sale or other transfer of all rights in the program."236 In other words, if you sell one copy of the software, you must dispose of all of the copies of the software that you may possess. Funny, this sounds like an application of the first sale doctrine applied to an electronic work.

Considering the proposed changes to make it clear that section 117 applies to all electronic works, and not just to computer software: if a library divested itself of all of its copies of a work in the process of lending the work to its patrons, it would be possible for a library to lend electronic works. If things need to be made even clearer, instead of adding the IITF White Paper's language exempting copies made by transmission from the first sale doctrine,237 we could amend the current section 109(a) by adding the following: "In the case of electronic works, the copy of the work may be transferred only if all copies of the particular work are transferred contemporaneously."238

The IITF Report does not approve of such an approach. It argues if even no more copies result from this electronic transfer process, the transfer does involve the making of copies—a section 106 right reserved to the copyright holder. The IITF White Paper argues that this is a problem because no exemption from liability would permit these copies. The changes proposed here would provide just such an exemption.

These changes do not address a library's "lending" of works to users at remote locations. Under the current law, a library cannot lend the copy because when the work is transmitted to the remote user, the archive has retained a copy in the process and has thus exceeded the section 117 allowance.

It is tempting here to present a way to exempt remote library users from the copying restrictions239 such that all of a library's electronic works can be accessed by library patrons located anywhere in the world. However, to do so would be too broad an allowance. To allow a library to disseminate copies without restriction to anyone who seeks to access its electronic archives results in the same situation as any other web provider, FTP archive host, or neighbor whose computer is publicly accessible. To say that the library patron cannot connect to a neighbor's computer and download the file because it would result in a copyright infringement, but that same patron could download the same file in the same manner without it being an infringement simply because the com-

---

237. IITF White Paper, supra note 6, at 117-18.
238. It is worth noting that although 17 U.S.C. § 109(b)(1) prohibits the lending or rental of some types of works, libraries are exempted from its limitations. 17 U.S.C. § 109(b)(1).
puter is owned by a "library," is an unreasonable distinction. If a library wishes to make an electronic document "world readable" it should be required either to obtain permission from the copyright holder to allow such broad access, or a licensing arrangement should be arranged with an organization such as the Copyright Clearance Center. Alternatively, "client" software could be developed to access the library materials which does not allow copies of the work to be made saving the work to a disk or printing the work.

D. THE SYSOP

The last scenario to address is that of the Internet service provider (or other computer service operator). A service provider is defined here as an entity which provides the conduit or facilities for the other types of users already discussed. While a service provider could, for instance, put up its own world wide web pages, the effect of doing so should be kept distinct from the provider's conduit services—just as we would likely isolate the postal service's liability for delivering defamatory mail from its liability for publishing defamatory comments in a postal service newsletter.

If a user sends a copyrighted work by e-mail, several copies are made in the course of transmission. First, if a user logs on to a service provider's computer, a copy of the work becomes fixed in the service provider's computer RAM, as the copyrighted work is entered into the e-mail program. Often, when the work is sent, a copy is then saved to the user's "out-box" on the service provider's disk drive, creating another copy. In the mean time, the actual e-mail note may be sent to a mail handling computer, where the note will reside in RAM, and possibly on another hard disk. From here, the copyrighted note will be passed from computer to computer as it makes its way to the intended recipient. If a link in the network is down along the way, the note may be stored on some intermediate provider's computer until the, note can be forwarded on its way. Finally, a copy is stored in the recipients "in-box." At some point, the sender's service provider and the recipient's service provider may back-up the contents of their hard drives, making yet more copies of the work.

While the initial copy in the user's "out-box" may be a legitimate archival copy authorized by section 117, the others are likely not pro-

240. Although as stated in the beginning of this paper, a "fair use" analysis should always be applied. See 17 U.S.C. § 107.

241. Any such system would not likely be completely effective, but systems could be devised that would prevent all but the most determined users from making copies.


ected copies. If the message constitutes an infringement in the first place, then all copies made from it are infringements. Therefore, it is possible that dozens of service providers could be making infringing copies of the work contained in the e-mail message, and most of the infringers would not even know what materials were being copied.

This dilemma stems from the fact that copyright infringement is a strict liability offense, even if the infringer derives no benefit from the infringement: 

We begin with a basic principle of copyright law. Once a plaintiff has proven that he or she owns the copyright on a particular work, and that the defendant has infringed upon those "exclusive rights," the defendant is liable for the infringement and this liability is absolute. The defendant's intent is simply not relevant: The defendant is liable even for "innocent" or "accidental" infringements. Even where the defendant believes in good faith that he is not infringing a copyright, he may be found liable.

In some cases, the transmission of the work may not result in a fixation of more than a transitory duration as is necessary for the creation of a copy. For example, if the telephone company transmits a call, the work merely passes through the cables and is not fixed. If, however, the call is sent through a fiber optic cable, the call must first be digitized and transmitted as binary data in the form of pulses of light through the optical cables. This digitization requires the signal to be read into a computer's RAM. However, even though the work is in the RAM of the phone company's computer, it is not there for more than a transitory duration, and thus, the transmission would not rise to the level of a fixation.

In the store-and-forward model of e-mail delivery, however, the work may reside on a service provider's computer for more than the transitory duration needed to perceive the work. Because of this, as long as

244. Donald S. Chisum & Michael A. Jacobs, Understanding Intellectual Property Law, § 4F[1] (1992). "For example, person A may obtain a manuscript from person B, believing the manuscript to be B's original creation when, in fact, it is a copy of person C's copyrighted work. If A copies the manuscript, A infringes C's copyright even though A acts without knowledge of B's copying or C's copyright." Id. See also DeAcosta v. Brown, 146 F.2d 408, 410-12 (1944), cert. denied, 325 U.S. 862 (1945) (holding that a copy, though innocently made, of an infringing work also infringes the original copyrighted work).

245. See, e.g., Bily, 406 F. Supp. at 733.

246. Pinkham, 983 F.2d at 828.

247. 17 U.S.C. § 101 (defining "fixed").

248. The IITF Green Paper states that "transmissions from one computer to another . . . may only reside on each computer in RAM . . . , but that has been found to be sufficient fixation." IITF Green Paper, supra note 5, at 12 (citing Advanced Computer). See also, House Report, supra note 44, at 53.

249. "[C]opyright law is not so much concerned with the temporal 'duration' of a copy as it is with what that copy does, and what it is capable of doing, while it exists. Transitory
there is strict liability, according to the letter of the law, service providers are at risk.\textsuperscript{250} Even fair use arguments do not stand up well in the case of infringing works passively transmitted by the computer operator in the form of world wide web, e-mail, or FTP traffic, because a number of cases have held that to argue that a use is a fair one, you must have started with a legitimate copy in the first place.\textsuperscript{251}

The Copyright Act already gives some types of carriers immunity from infringement claims based on the transmission of a performance or display of a work as long as certain conditions are met.\textsuperscript{252} What section 111(a)(3) does is give communications carriers that merely act as a passive conduit for television signals (such as cable and SMATV (Satellite Master Antenna TeleVision services)) immunity from liability for transmitting the signals from distant broadcast stations.\textsuperscript{253} This section was intended to address the holding in cases such as \textit{Fortnightly Corp. v. United Artists Television,}\textsuperscript{254} which held that the retransmission by a CATV system did not constitute a performance under the Copyright Act of 1909, and therefore did not give rise to copyright liability.\textsuperscript{255}

Section 111 is part of a compromise. Because the Copyright Act establishes that the definition of "to perform or display a work publicly" is broad enough to cover signals relayed by cable systems, but because it would be unreasonable to make the cable systems arrange for licenses from everyone whose works the system carries, section 111(a)(3) provides immunity in exchange for the payment of a compulsory license as provided in section 111(c)(1).\textsuperscript{256} Section 111(a)(3) only applies to those entities "whose activities with respect to that transmission consist solely of providing wires, cables, or other communications channels for the use of others."\textsuperscript{257}
This section was originally intended to give protection to systems which merely retransmitted television signals. Compensation of the copyright holders for these signals, which were merely passed on without alteration, was theoretically already being addressed by other mechanisms, such as through licensing fees and advertising revenues. It was only when these retransmitting systems altered the signals by, for instance, inserting new commercials, that these mechanisms failed to protect the right holders.\textsuperscript{258} Passive transmitters, such as cable companies, can make an initial determination of which signals to carry, as may be necessary to accommodate technical limitations, so long as they do not control the content of those signals they transmit. In other words, secondary cable distributors can choose which specific station to run on their satellite transponder, as long as they make the signal available to all who want it.\textsuperscript{259} The rationale behind requiring a compulsory licensing fee and limiting the types of signals that cable companies can carry,\textsuperscript{260} is that:

\begin{quote}
[Their retransmission of distant non-network programming by cable systems causes damage to the copyright owner by distributing the program in an area beyond which it has been licensed. Such retransmission adversely affects the ability of the copyright owner to exploit the work in the distant market. It is also of direct benefit to the cable system by enhancing its ability to attract subscribers and increase revenues.\textsuperscript{261}]
\end{quote}

These concerns justifying compulsory licenses in exchange for protection are not present with all types of carriers, especially since not all entities providing "conduit services" (such as university computing centers transmitting computer network data) are "commercial enterprises whose basic retransmission operations are based on the carriage of copyrighted program material."\textsuperscript{262} The Copyright Act even acknowledges this, and allows hotel and apartment complex management some copyright infringement immunity for unedited retransmission of local signals, and without requiring a compulsory license fee.\textsuperscript{263}

Section 111(a) would be a reasonable place to start in giving computer operators the required protection from copyright infringement claims for merely providing a conduit for their user's actions. The first necessary step is to acknowledge that, now that even cable companies can transmit individual-specific computer data over their systems via

\begin{footnotes}
\textsuperscript{258} See, e.g., Hubbard Broadcasting, 777 F.2d at 403-04. See also Capital Cities Cable, Inc. v. Crisp, 467 U.S. 691, 709-10 (1984).
\textsuperscript{259} Eastern Microwave, 691 F.2d at 130-31.
\textsuperscript{260} 17 U.S.C. § 111(b).
\textsuperscript{261} House Report, supra note 44, at 90.
\textsuperscript{262} Id. at 89.
\textsuperscript{263} 17 U.S.C. § 111(aX).
\end{footnotes}
cable modems, section 111's limitation on the transmission of performances and displays\textsuperscript{264} should simply be removed.

Next, a new section should be added to section 111(a) which addresses the operation of a computer communications provider, perhaps with something like the following language:

(a) Certain Secondary Transmissions Exempted.— The secondary transmission of a primary transmission of a work is not an infringement of copyright if—

* * *

(6) the secondary transmission is made by a computer system whose operator has no direct or indirect control over the content of the primary transmission, and whose activities with respect to the primary transmission consists solely of providing a conduit and facilities necessary for the content's dissemination. The computer system operator may also make copies of the works covered under this section if the copies are reasonably necessary (i) for proper transmission of the work; (ii) to facilitate the initial transmission of the work by a computer system user; (iii) to facilitate access to the primary transmission by the transmission's recipient; or (iv) for the archival preservation of any copies made for purposes (i)-(iii): provided, that the provisions of this clause extend only to the activities of said computer operator and do not exempt from liability the activities of others with respect to their own primary or secondary transmissions; and provided further that nothing in this clause shall exempt the computer operator for any liability resulting from its primary transmissions.

An amendment such as this would allow network (and non-network) computer systems to provide communications facilities, including e-mail and web software allowing message origination, without the system operator assuming liability, as long as the operator does not exercise control over the works being transmitted. Furthermore, any necessary archival copies of any works stored by the computer user or sent to the user, could be made without incurring liability on the part of the system operator.

VI. CONCLUSION

This paper has tried to demonstrate that, although electronic publishing and digital distribution of copyrighted works creates some tough questions for the current copyright law to address, the copyright law can be made to adapt to this technology without requiring a substantial overhaul. Radical changes are not required to protect the balance between

\textsuperscript{264} 17 U.S.C. § 111(a), which begins with: "The secondary transmission of a primary transmission embodying a performance or display of a work is not an infringement if" could simply be changed to, "The secondary transmission of a primary transmission of a work is not an infringement if."
the rights of users of copyrighted works and the rights of producers of copyrighted works. What is important is that this balance of interests be maintained. Authors should be provided with the incentive to create, but not at a usurious cost to society.