

THE PUBLIC DISPLAY RIGHT: THE COPYRIGHT ACT'S NEGLECTED SOLUTION TO THE CONTROVERSY OVER RAM "COPIES"

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Although the public display right has not played a significant role in copyright law to date, in this article Professor Reese proposes that this role should become increasingly important in light of rapid computer technology advancements and the emergence of transmissions over digital-computer networks. First, Professor Reese examines the statutory text of the display right as granted by the 1976 Copyright Act, providing specific examples that illustrate the type of control the display right gives copyright owners over transmissions of their texts and images. He explores the legislative history surrounding the public display right and concludes that the drafters of the 1976 Act principally intended the right to address transmissions over computer networks. Professor Reese considers the relationship between the display right and the traditional reproduction right prior to the digitally networked era, recognizing and discussing reasons why the public display right has rarely been implicated in television transmissions. He then presents various strategic uses of the public display right for copyright owners, emphasizing its importance as a complement to the better-established reproduction right. Professor Reese moves on to explore why the display right holds even greater strategic value in the context of transmissions of works over digital computer networks. He analyzes the use of the display right, specifically in comparison to the distribution right and the "RAM copy" doctrine. Ultimately, Professor Reese concludes that the display right is a superior alternative for copyright owners, and courts, to control transmissions of copyrighted work over computer networks.

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I. INTRODUCTION

United States copyright law grants to owners of copyrighted works a specific set of exclusive rights in those works. The most familiar of these rights is the right to reproduce copies of a copyrighted work, while the least familiar is probably the right “to display the copyrighted work publicly.”¹ The display right—first expressly granted to copyright owners in the Copyright Act of 1976²—has largely been neglected for a quarter century. Few reported cases involve the right, commentators have not discussed it in any depth, and until recently it was not needed to resolve any important controversies.

Changing technology is now presenting precisely the problem that the display right was designed to solve, but courts and lawyers continue to neglect the right. The controversial doctrine of “RAM copies”—the notion that accessing a work on a computer infringes the reproduction right because it requires temporary storage in the computer’s random-access memory (RAM)—is a strained and problematic attempt to solve the problems of computer technology with the familiar reproduction right instead of the unfamiliar display right. But it turns out that Congress intended the display right for exactly this purpose.

In a remarkable act of foresight, Congress and the Copyright Office in the 1960s predicted the development of computer or other electronic networks that would be capable of displaying a copyrighted work at a distance without making a new copy. Congress designed the public display right to address this anticipated technology, and it built into the right a sensible balance between the interests of copyright owners and those of users of copyrighted works. Because early methods of transmitting displays generally required making a copy, few cases depended on the display right. By the time computer networks began to emerge in the 1990s as a significant medium for transmission and use of copyrighted works, increasingly without making a permanent copy of the work, the display right seemed largely forgotten.

Copyright holders and some courts have urged the “RAM copy” doctrine in an attempt to extend copyright to computer networks. But the doctrine threatens to create significant problems as more and more works are used in digital form and has the potential to give copyright owners excessive control over the use of their works. Reinvigorating the public display right—the tool Congress intended and designed to address this particular technological advance—would provide a more balanced mechanism for protecting copyright owners’ incentives to create and ex-

1. Copyright Act of 1976, 17 U.S.C. § 106(5) (1994).

2. “Clause (5) of section 106 represents the first explicit statutory recognition in American copyright law of an exclusive right to show a copyrighted work, or an image of it, to the public. The existence or extent of this right under the present statute is uncertain and subject to challenge.” H.R. REP. NO. 94-1476, at 63 (1976) [hereinafter 1976 HOUSE REPORT].

exploit works in a digitally networked world without unduly diminishing access to those works.

Part II examines the statutory text and the legislative history of the public display right to show that the right was intended as a right to control transmissions of images and texts of copyrighted works to the public. The drafters specifically designed the right to encompass transmissions over computer networks such as the Internet because they foresaw the potential for such transmissions to substitute for the sale of physical copies of a copyrighted work.

Part III considers application of the public display right to the two primary technologies for transmitting displays that have existed since the right was adopted. Until the advent of widespread computer networks, television transmission was the principal activity covered by the public display right. Television transmissions, however, have generally required making a copy of a work in order to transmit it, and because the exclusive right to reproduce a work in copies is the most fundamental right in copyright law, copyright owners have generally been able to control television transmissions using the reproduction right. The display right therefore has been useful primarily as a strategic complement to the reproduction right. The development of computer networks has dramatically increased the amount of activity within the scope of the public display right, but computer networks have so far, like television, generally required making a copy of a work in order to transmit it, so the display right has remained largely a strategic complement to the reproduction right, though of somewhat more value in the computer context than in the television context. The need to make a copy of a copyrighted work in order to transmit it may, however, be diminishing, which could make the public display right more independently useful to copyright owners in controlling computer network transmissions in coming years.

Part IV examines two other developments in copyright law that have so far largely displaced the display right in controlling network transmissions. Several courts have interpreted such transmissions as infringements of the copyright owner's exclusive distribution right, and other courts have interpreted the operation of the random-access memory (RAM) of a computer to make every act of processing a copyrighted work in a computer an act of reproduction potentially infringing on the copyright owner's exclusive reproduction right. These interpretations, however, are not consistent with the text of the copyright statute and have significant negative consequences for the operation of copyright law. Courts could use the public display right to discard these interpretations, avoid their negative consequences, and still protect copyright owners against infringement on computer networks.

II. THE DISPLAY RIGHT AS A RIGHT TO TRANSMIT

A. *Statutory Text*

The 1976 Act grants the public display right to owners of copyright in most categories of copyrightable works, including, importantly, literary works and works of visual art.³ What does the public display right protect? A careful reading of three related provisions of the 1976 Act—the definitions of “display” and of “publicly” display, and the principal limitation on the display right⁴—shows that, despite very broad language in the definitions, the public display right primarily encompasses transmissions of displays to the public—such as television broadcasts or Internet transmissions.

1. *Definition of “Display”*

The definition of “display” explains the basic scope of the right: “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.”⁵ Understanding this definition properly requires knowing the meaning of “copy,” a term of art in copyright law. The statute defines “copies” as “material objects . . . in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”⁶ Examples of “direct” displays of copies would thus include placing a printed copy of a book on a bookshelf, posting a printed copy of a *New Yorker* cartoon or article on a refrigerator door,⁷ or hanging an original painting on a wall.⁸ Examples

3. See 17 U.S.C. § 106(5). Some of the rights granted in § 106, such as the rights of reproduction and distribution of copies and phonorecords, apply to all copyrighted works, while others apply only to certain types of works. See *id.* § 106. The public display right is granted for “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.” *Id.* § 106(5). The most significant categories of works to which the display right does not extend are sound recordings and architectural works. See *id.* § 102(a)(7)–(8).

4. See 17 U.S.C. §§ 101, 109.

5. *Id.* § 101 (“display”). In addition, the definition specifies that to display a work means, “in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.” *Id.* This special definition of display of a motion picture or audiovisual work distinguishes *displaying* such a work from *performing* it, which is defined as “to show its images in any sequence or to make the sounds accompanying it audible.” *Id.* (“perform”).

6. *Id.* (“copies”) (emphasis added). Because “[t]he term ‘copies’ includes the material object . . . in which the work is first fixed,” what is colloquially called an “original” is, for copyright purposes, a “copy.” *Id.* The definition of “copies” expressly excludes “phonorecords,” which are material objects in which *sounds* are fixed. See *id.* For example, printed sheet music is a copy of a musical work, and a recording of someone singing a song is a phonorecord of that musical work. The display right by definition applies only to copies, not phonorecords, because a display is the showing of a *copy*. This article therefore will not generally consider issues related to sound recordings and the musical works that they embody.

7. See *Ringold v. Black Entm’t Television, Inc.*, 126 F.3d 70, 74 & n.2 (2d Cir. 1997) (discussing Pierre N. Leval, *Nimmer Lecture: Fair Use Rescued*, 44 UCLA L. REV. 1449, 1457 (1997)).

of “indirect” displays would include using a slide projector to project onto a screen a slide of a *New Yorker* cartoon, using an opaque projector⁹ to project onto a screen a printed *New Yorker* article or cartoon, or making visible on a computer monitor an image of that article or cartoon stored on a CD-ROM.¹⁰

2. Definition of “Publicly”

Although the Act defines “display” in very broad terms that encompass a great many activities, the copyright owner’s exclusive right is not a right to make all displays but only a right “to display the copyrighted work *publicly*.”¹¹ The definition of “publicly” displaying a work sets out two ways in which a display can be public and introduces the concept of transmission into the public display right.¹²

First, one displays a work publicly by displaying a copy in a public or semipublic place.¹³ Thus, if a *New Yorker* cartoon is hung not on a refrigerator in a private home but on the wall of an art museum open to anyone willing to pay the admission fee, then the cartoon has been displayed publicly.¹⁴

Second, a display can be public if it is transmitted: it is a public display of a work “to transmit or otherwise communicate a . . . display of the work” if the transmission is either (a) to a public or semipublic place or (b) “to the public.”¹⁵ The term “the public” is never defined in the Copy-

8. See 1976 HOUSE REPORT, *supra* note 2, at 64 (“Since ‘copies’ are defined as including the material object ‘in which the work is first fixed,’ the right of public display applies to original works of art as well as to reproductions of them.”); see also *id.* at 79.

9. An opaque projector is a device that projects a nontransparent image, such as a printed page or a photograph, onto a screen.

10. See 1976 HOUSE REPORT, *supra* note 2, at 64. The Report noted:

In addition to the direct showings of a copy of a work, ‘display’ would include the projection of an image on a screen or other surface by any method, . . . 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.

Id.

11. 17 U.S.C. § 106(5) (emphasis added).

12. See *id.* § 101 (“publicly”). The definition simultaneously defines what it means either to display or perform a work “publicly,” because the copyright owner’s exclusive right to perform a work, like the right to display a work, is limited to the right to perform the work publicly. See *id.* § 106(4). Because I am concerned in this article only with the display right, the text generally does not discuss the corresponding performance right.

13. “Publicly” displaying a work is defined to include displaying it either “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.” *Id.* § 101 (“publicly,” clause (1)). The second category of place described in clause (1) is usually referred to as a “semipublic place.”

14. See Leval, *supra* note 7, at 1457. Similarly, if a slide of the *Mona Lisa* is projected onto a screen in front of a classroom full of students taking an introductory survey course in art history, rather than, for example, on a screen in a private living room as part of a slide show depicting a traveler’s recent trip to Paris, then the *Mona Lisa* has been displayed publicly, albeit “by means of a . . . slide” rather than “directly.” 17 U.S.C. § 101 (“display”).

15. 17 U.S.C. § 101 (“publicly,” clause (2)); see 1976 HOUSE REPORT, *supra* note 2, at 63 (“[T]he concept[] of . . . public display cover[s] not only the initial . . . showing, but also any further act by which that . . . showing is transmitted or communicated to the public.”).

right Act, but the definition of “publicly” display states that a transmission is a public display “whether the members of the public capable of receiving the . . . display receive it in the same place or in separate places and at the same time or at different times.”¹⁶ Read together with the definition of “transmit” — “to communicate [a display] by any device or process whereby images . . . are received beyond the place from which they are sent”¹⁷—this provision sweeps all types of visual transmissions into the category of public display, as the drafters of the statute explained:

[T]he concept[] of . . . public display include[s] not only . . . displays that occur initially in a public place, but also acts that transmit or otherwise communicate a . . . display of the work to the public by means of any device or process. The definition of “transmit” . . . is broad enough to include *all conceivable forms and combinations of wired or wireless communications media, including but by no means limited to radio and television broadcasting as we know them*. Each and every method by which the images . . . comprising a . . . display are picked up and conveyed is a “transmission,” and if the transmission reaches the public in [any] form, the case comes within the scope of [the public display right].

...
[T]he 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.¹⁸

So, for example, broadcasting over television (or transmitting over a cable television system) an image of a *New Yorker* cartoon would constitute a public display of the cartoon. Similarly, transmitting the text of a law review article between computers via a telephone line (or other wired or wireless connection) so that multiple recipients can each read the text on their computer screens—even if they do so in different places and at different times—would be a public display of the article.¹⁹ Thus, the definition of “publicly” brings transmissions of images and text squarely within the public display right.

3. *Exemption for Most Nontransmitted Public Displays*

Although a display can be made “publicly” either by transmission or by being made in a public or semipublic place, a third provision of the 1976 Act ensures that few displays that are not transmissions will fall

16. 17 U.S.C. § 101 (“publicly,” clause (2)).

17. *Id.* (“transmit”).

18. 1976 HOUSE REPORT, *supra* note 2, at 64, 80 (emphasis added).

19. The 1976 HOUSE REPORT explains that a display is “public” if “the potential recipients of the transmission represent a limited segment of the public, such as the occupants of hotel rooms or the subscribers of a cable television service.” 1976 HOUSE REPORT, *supra* note 2, at 65. A single transmission of a text to a single recipient might not, however, be a “public” display.

within the scope of the copyright owner's right. Like all rights granted to the copyright owner in U.S. law, the public display right is expressly subject to specific limitations set forth in the Act.²⁰ The most important limitation on the public display right effectively restricts the scope of the right to transmissions to the public. Section 109(c) provides that:

Notwithstanding the [exclusive right of public display], the owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located.²¹

The committee report accompanying the 1976 Act explains this provision in detail:

[Section 109(c)] deals with the scope of the copyright owner's exclusive right to control the public display of a particular "copy" of a work Assuming, for example, that a painter has sold the only copy of an original work of art without restrictions, would it be possible for him to restrain the new owner from displaying it publicly in galleries, shop windows, on a projector, or on television?

Section 109[(c)] adopts the general principle that the lawful owner of a copy of a work should be able to put his copy on public display without the consent of the copyright owner. . . .²²

The exclusive right of public display granted by section 106(5) would not apply where the owner of a copy wishes to show it directly to the public, as in a gallery or display case, or indirectly, as through an opaque projector. Where the copy itself is intended for

20. Section 106 expressly makes its grant of rights "[s]ubject to sections 107 through 121." 17 U.S.C. § 106. In addition to the limitation of § 109(c), discussed in the text, the Copyright Act contains several other limitations on the public display right. Some are limitations, such as the right to make fair use of a copyrighted work, that apply to all exclusive rights—including the public display right—in all types of copyrighted works. *See id.* § 107. Other express limitations apply more specifically to restrict the display right for certain types of works in certain circumstances. Various provisions exempt certain public displays from the control of the copyright owner entirely. *See id.* § 110(1) (allowing teachers and students to make displays in the course of face-to-face teaching activities); *id.* § 110(2) (allowing displays of certain types of works by transmission in the context of certain educational broadcasts); *id.* § 110(3) (allowing displays of certain works in the course of services at a place of worship); *id.* § 110(5) (allowing public displays by means of public reception of transmission "on a single receiving apparatus of a kind commonly used in private homes"). Additional limitations allow or provide compulsory licenses for display by certain secondary transmissions of copyrighted works, such as by cable or satellite television systems. *See id.* §§ 111, 119. Another section creates a system of compulsory licensing for public broadcasting entities to engage in specified kinds of public displays of certain works. *See id.* § 118. Finally, the public display of pictures or photographs of useful articles that lawfully reproduce a copyrighted work will not infringe so long as such displays are in connection with advertisements or commentaries related to the distribution of those useful articles or are in connection with news reports. *See id.* § 113(e).

21. *Id.* § 109(c). The House Report explains that "[t]he concept of 'the place where the copy is located' is generally intended to refer to a situation in which the viewers are present in the same physical surroundings as the copy, even though they cannot see the copy directly." 1976 HOUSE REPORT, *supra* note 2, at 80.

22. 1976 HOUSE REPORT, *supra* note 2, at 79. This does not mean that contractual restrictions on display between a buyer and seller would be unenforceable as a matter of contract law. *See id.*

projection, as in the case of a photographic slide, negative, or transparency, the public projection of a single image would be permitted as long as the viewers are “present at the place where the copy is located.”²³

Section 109(c) thus allows most “in-person,” as opposed to transmitted, public displays of a copyrighted work.²⁴ Permitting such in-person displays—allowing the owner of a copy of a work to display *that copy* publicly by *direct* means—is essential to prevent millions of technical instances of copyright infringement from occurring each day, given the very broad scope of the public display right. For example, anyone who wears an item of clothing, such as a tie or dress, made from a copyrighted fabric design publicly displays the copyrighted design merely by walking down the street. Similarly, anyone who reads a copyrighted newspaper on a commuter train publicly displays her copy of the paper, and anyone who tapes a cartoon to her office door publicly displays her copy of the cartoon. Absent § 109(c), such activities would technically infringe the owner’s public display right.²⁵ By allowing any public display made “to viewers present at the place where the [displayed] copy is located,” § 109(c) effectively exempts such activities from infringement.²⁶

23. *Id.* at 79–80, as corrected by, 122 CONG. REC. H31,676–77 (daily ed. Sept. 21, 1976) (“Correction of Errors”).

24. See *supra* notes 21–23 and accompanying text.

25. Such public displays might be excused as fair uses or as having been impliedly licensed by the copyright owner when the copy of the work was sold. See 17 U.S.C. § 107 (1994) (fair use); *Oddo v. Ries*, 743 F.2d 630, 634 (9th Cir. 1984) (implied license based on copyright owner’s conduct). It seems undesirable to leave the question of whether the daily activities of millions of Americans constitute copyright infringement to the notoriously imprecise and unpredictable affirmative defense of fair use or to a determination of what the parties intended as to public displays when the transfer of the copy occurred. With respect to the fair use doctrine, such public displays might not be “for purposes such as criticism, comment, news reporting, teaching . . . , scholarship, or research”, as set forth in the statute. See 17 U.S.C. § 107. With respect to the implied license defense, the party selling the copy might, in some cases, not own any right of public display that it could license, impliedly or otherwise, to the purchaser. A clothing manufacturer, for example, might buy fabric printed with a copyrighted design on the open market. Producing clothing from that fabric would not implicate any of the copyright owner’s exclusive rights, and the manufacturer’s sale of finished clothing made with the fabric would be allowed under the first sale doctrine. See 17 U.S.C. § 109(a). In the absence of any transfer of rights from the owner of the copyright in the fabric design, though, the clothing manufacturer would have no right to display the fabric publicly and could not license the buyer of the finished garment, expressly or impliedly, to make such a display (unless, perhaps, the copyright owner is held to have impliedly licensed the manufacturer to impliedly license the buyer to exercise the public display right).

26. Section 109(c) goes further and permits certain “indirect” displays by projection. See 17 U.S.C. § 109(c). The portion of § 109(c) that allows for the indirect display of copies that the HOUSE REPORT describes as “intended for projection,” such as slides and transparencies, seems compelling. See 1976 HOUSE REPORT, *supra* note 2, at 80. Copies “intended for projection”—e.g., slides—would be of little use to the owner if she could not project those copies. Both the buyer and the seller of such copies presumably know that a major part of the value of such copies is their usefulness in making public displays and understand that such copies are often bought primarily for that purpose. The sale price for such items could thus normally be expected to take into account the value of using them to make public displays. This part of the § 109(c) limitation is not inevitable, though, as the scope of the performance right shows. A compact disc of recorded music is presumably known to its buyer and seller to be useful only when the music recorded on the disc is performed, that is, made audible. Nonetheless, a buyer of such a disc is free under copyright law only to make *private* performances of the music (such as playing it on a stereo system in her own home), and has no general right to perform

That exemption, though, also effectively limits the public display right to displays that are made by transmission. Showing a copy of a work is a public display if done in a public (or semipublic) place or by transmission to the public. But if a copy is shown in a public place without any transmission, the viewers and the copy displayed will be located in the same place, and the display will generally be allowed under § 109(c). If, on the other hand, the work is publicly displayed by transmission, then § 109(c) will not apply to allow the display.²⁷ Therefore, § 109(c) largely excludes nontransmitted displays from the copyright owner's control, leaving transmissions as the primary activity subject to the public display right.²⁸

The statute's restriction of the public display right to *transmitted* displays can be seen in sharp contrast to the scope of the public performance right. Section 106(4) grants an exclusive right for owners of most copyrighted works "to perform the copyrighted work publicly,"²⁹ and the definition of "publicly" performing a work exactly parallels that of "publicly" displaying a work, encompassing both performances in public and semipublic places and transmissions of performances to such places or to the public.³⁰ So, for example, projecting a motion picture onto a screen

the music *publicly*, even by using her own CD. See 17 U.S.C. § 106(4). Thus, the § 109(c) limitation on indirect in-person displays could have been omitted without rendering useless the purchase of a copy that is intended to be projected, since the copy could be used for private displays without infringing the copyright owner's rights.

27. See 1976 HOUSE REPORT, *supra* note 2, at 80. The Report stated:

[T]he public display of an image of a copyrighted work would not be exempted from copyright control [under § 109] 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.

28. The § 109(c) limitation does not cover *all* nontransmitted displays. Even if a copy is shown only to viewers in the physical presence of the copy, such a display will infringe if the copy is not "lawfully made" or if the display is made by projecting more than one image at a time. See 17 U.S.C. § 109(c). An example of the former situation would occur if the *New Yorker* were to print a cartoon without the permission of the owner of the cartoon's copyright. Every copy of that issue of the magazine would then be an infringing copy of the cartoon, and one who bought a copy of that issue and then displayed the cartoon in a public place (for example, by using an opaque projector to show the cartoon to the audience in an auditorium) will not be using a "lawfully made" copy and will not come within the terms of § 109(c). The HOUSE REPORT offers an example of the latter situation: "where each person in a lecture hall is supplied with a separate viewing apparatus, the copyright owner's permission would generally be required in order to project an image of a work on each individual screen at the same time." 1976 HOUSE REPORT, *supra* note 2, at 80. While § 109(c) thus leaves some room for copyright owners to control public displays that do not involve transmissions to the public, such instances seem unlikely to be particularly numerous or significant.

29. 17 U.S.C. § 106(4). The most important category of work to which the general public performance right does not apply is sound recordings, although a limited right of public performance by digital audio transmission was granted to sound recordings in 1995. See *id.* § 106(6). The Act defines performances as follows:

To "perform" a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.

Id. § 101 ("perform").

30. See *id.* § 101 ("publicly").

at a cinema and transmitting that motion picture over television airwaves both constitute public performances of that movie. Projecting the motion picture in the cinema without permission would infringe the public performance right, even though the performance is made to viewers present at the place where the copy (the actual film) is located, because the public performance right is not restricted by any limitation parallel to the § 109(c) limit on the public display right. Thus, while both transmitted and in-person public *performances* are subject to the copyright owner's control, § 109(c) excludes most in-person *displays* from such control.³¹

Read together, the basic provisions of the 1976 Act defining the scope of the public display right make clear that the right fundamentally gives copyright owners control over the transmission of their images or texts from one place to another. Since much communication over computer networks such as the Internet consists precisely of transmitting images and texts from one place to another, the public display right is likely to be extremely significant to the exploitation and control of copyrighted works on the Internet.³²

B. *Legislative History*

The application of the public display right to transmissions over networks such as the Internet is entirely consistent with the intent of those who drafted the provisions embodying the right in the 1976 Act. The entirety of the extensive legislative history³³ of the public display provisions confirms that the public display right was principally intended to encompass transmissions of displays of images and text to the public. The history further reveals that the drafters specifically intended the display right to address transmissions over computer networks, and it explains that the motivation behind the display right was a concern that transmitted displays could substitute for the sale of physical copies of a work.

1. *Public Display Right Principally Intended to Encompass Transmissions*

The earliest version of the display right appeared in the Register of Copyright's first published draft for a revised copyright law in the early

31. The different treatment may stem from the fact that very significant markets exist for in-person public performances as major means of exploiting copyrighted works protected by the performance right—whether by showing a movie, playing a song (live or from a recording), or performing a play—while the markets for in-person public displays—displaying art works in museums and galleries, or holding public slide shows—seem much less significant.

32. Similarly, the public performance right can be expected to be extremely significant to Internet exploitation of works that are generally performed, rather than displayed, such as musical works, sound recordings, and motion pictures.

33. For a discussion of the lengthy revision process leading to the enactment of the 1976 Act, see Jessica Litman, *Copyright Legislation and Technological Change*, 68 OR. L. REV. 275, 305–42 (1989).

1960s,³⁴ and the concern with transmissions was evident from the very beginning. Indeed, transmissions appear to have prompted the inclusion of the display right in the first place, according to Barbara A. Ringer, then an Assistant Register of Copyrights,³⁵ who explained that uncertainty over the application of copyright to “visual showings on . . . TV” and to live television broadcasts were primary motivating factors in the proposal of the display right.³⁶ The Register’s initial draft would have granted copyright owners “the exclusive right to exhibit copies by broadcasting or retransmission, over wires or otherwise, or by showing them in a public place, either directly or through motion pictures, slides, or any other means,”³⁷ though the right would have applied only to “pictorial,

34. The draft was published in HOUSE COMM. ON THE JUDICIARY, 87TH CONG., COPYRIGHT LAW REVISION, PART 3: PRELIMINARY DRAFT FOR REVISED U.S. COPYRIGHT LAW AND DISCUSSIONS AND COMMENTS ON THE DRAFT 6 (Comm. Print 1964) [hereinafter PRELIMINARY DRAFT]. Neither the studies commissioned by the Copyright Office nor the Register’s 1961 report summarizing the Office’s tentative recommendations for revising the law discussed the issue of a display right. See HOUSE COMM. ON THE JUDICIARY, 87TH CONG., COPYRIGHT LAW REVISION: REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW 21–24, (Comm. Print 1961) [hereinafter REGISTER’S REPORT] (recommending that statute accord copyright owners rights to make and publish copies, to make new versions, to give public performances, and to make records); see also PRELIMINARY DRAFT, *supra*, at 157 (statement of Barbara A. Ringer) (“This right—the right to exhibit—was not discussed in the Report, so we really haven’t had any comments on it.”).

35. Ringer was later Register of Copyrights from 1973 to 1980.

36. See PRELIMINARY DRAFT, *supra* note 34, at 157–58 (statement of Barbara A. Ringer) (“[Q]uestions have been coming up increasingly as to the rights of a copyright owner in a book or map, for example, with respect to visual showings on educational TV.”). Ringer noted at a later point that the then-current law on the question of exhibition was unclear and that “it’s particularly unclear in the television area with respect to live exhibitions.” *Id.* at 186; see also HOUSE COMM. ON THE JUDICIARY, 87TH CONG., COPYRIGHT LAW REVISION PART 6: SUPPLEMENTARY REPORT OF THE REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW: 1965 REVISION BILL 20 (Comm. Print 1965) [hereinafter SUPPLEMENTARY REPORT] (“[I]t is certainly arguable that, for example, the showing of a copyrighted photograph or musical score on television or a projector is not infringement today.”). Indeed, as the proposals for the display right were being discussed, one court ruled that the live television broadcast of a brief scene featuring copyrighted hand puppets did not infringe the copyright in the puppets. See *Mura v. Columbia Broad. Sys., Inc.*, 245 F. Supp. 587, 590 (S.D.N.Y. 1965). In *Mura*, the defendant’s *Captain Kangaroo* program had “broadcast a television image” of the plaintiff’s hand puppets for about thirty-five seconds. *Id.* at 588. Applying the 1909 Act, the court found that the defendant’s acts did not constitute the making of a “copy” (a term the 1909 Act, unhelpfully, failed to define): “The evanescent reproduction of a hand puppet on a television screen or on the projected kinescope recording of it is so different in nature from the copyrighted hand puppet that I conclude it is not a copy.” *Id.* at 590. The court also concluded that if the defendant had made a “copy,” that copying was a fair use. See *id.* at 590.

37. PRELIMINARY DRAFT, *supra* note 34, § 5(d), at 6. In early drafts, the display right was termed a right to “exhibit.” *Id.* at 6. Concerns later arose about potential confusion from “the well-established use of the word ‘exhibit’ in the motion picture industry to refer to the performance of a motion picture,” and from the use of the term “exhibit” in the draft revision bills not to mean the performance of a film but “to refer to the display of a copy of the copyrighted work or of an image of a copy of it.” SUPPLEMENTARY REPORT, *supra* note 36, at 23. The Register “agree[d] that using this term in a sense contrary to its usage in the film industry is likely to result in confusion and misunderstandings [and] . . . that ‘display’ might be a better operative word than ‘exhibit’ . . .” *Id.* at 23. Starting in 1966, the draft revision bills referred to the right as a right to “display” rather than “exhibit.” *E.g.*, H.R. 4347, 89th Cong. (1966); see also HOUSE JUDICIARY COMM., COPYRIGHT LAW REVISION, H.R. REP. NO. 89-2237, at 56 (2d Sess. 1966) (reporting out H.R. 4347 as amended).

In the bill as introduced the operative word in clause (5) was “exhibit.” This term proved confusing and objectionable because of its common usage in referring to the performance of motion

graphic, and sculptural works.”³⁸ This language shows the centrality of transmissions from the beginning: the *first* type of display described in the initial draft was display by “broadcasting or retransmission, over wires or otherwise”, followed secondly by in-person displays made “by [a] showing . . . in a public place.”³⁹

While the primary concern of the display right from the very beginning was the transmission of images to the public, the initial draft of the right, despite its broad language, effectively would have given copyright owners little control over such transmissions. The Register’s initial proposal provided that a copyright owner’s exclusive display right would “end with respect to a particular copy as soon as its first sale or other transfer of ownership has taken place.”⁴⁰ Thus, the owner of a particular *copy*, rather than the owner of the copyright in the *work*, would enjoy the ability to display that particular copy, and Ringer explained that the limitation would cover not only showing the owner’s copy in a public place, but also “would include exhibition over television.”⁴¹ Thus, while the initial draft purported to grant copyright owners a new exclusive right, in fact the result would not have been to give copyright owners control over most displays of their works, including transmissions of such

pictures. As recommended by the Register of Copyrights, therefore, the committee has substituted the word “display” here and throughout the bill.

Id.

38. This class of works was not defined in the draft, but was identified as a category within the subject matter of copyright that included “two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and reproductions, maps, globes, charts, plans, diagrams, and models, and works used in advertising or in labels for merchandise.” PRELIMINARY DRAFT, *supra* note 34, § 1(a)(5), at 1. As these examples would suggest, the drafters appear to have intended the right to cover primarily works of visual art, such as painting, sculpture, photography, and so forth, a suggestion reinforced by the early drafts’ use of the term “exhibition.” *See also id.* at 183 (statement of Barbara A. Ringer) (“the general effect of this provision would be that: (1) up to the time he sells a particular copy of his *art work*, the copyright owner can control public exhibitions of that copy”) (emphasis added). Ringer also stated

Under section 5(d), the author up to the time he parts with the physical object would have the right to control public exhibition. In other words, if Rouault, to take the classic example, doesn’t want his works exhibited—if he wants to suppress them and has never parted with the physical property in them—then he should have this right. This is the *artist’s* prerogative.

Id. at 158 (emphasis added).

39. PRELIMINARY DRAFT, *supra* note 34, § 5(d), at 6; *see also Copyright Law Revision: Hearings Before Subcomm. No. 3 of the Comm. on the Judiciary on H.R. 4347, H.R. 5680, H.R. 6831, H.R. 6835, Part 1*, 89th Cong. 53 (1966) [hereinafter *1965 House Hearings, Part I*] (statement of Abe Goldman) (“A simple example of this [the right to publicly display a work] would be the display of the work in a television show.”).

40. PRELIMINARY DRAFT, *supra* note 34, § 5(d), at 6. This limitation would not have applied “in the case of copies made in violation of the exclusive right” of reproduction. *Id.* The language of the limitation also made clear that the rental, lease, or lending of a copy would not impair the copyright owner’s right to exhibit, so long as no sale or transfer of ownership had occurred with respect to the copy. *See id.*

41. PRELIMINARY DRAFT, *supra* note 34, at 157; *see also HOUSE COMM. ON THE JUDICIARY, 89TH CONG., COPYRIGHT LAW REVISION, PART 5: 1964 REVISION BILL WITH DISCUSSIONS AND COMMENTS 66* (Comm. Print 1965) [hereinafter *1964 REVISION BILL*] (statement of Barbara A. Ringer) (“Under the provisions of the previous draft the owner of a copy of a pictorial, graphic, or sculptural work—the owner of a physical object embodying the work of art—could have shown it freely without the permission of the copyright owner by any method, including broadcasting.”).

displays to the public, but rather to allow the owner of each copy of the work to make most displays, including transmissions, without the consent of the copyright owner. Copyright Office officials acknowledged as much: “Of course, the *main impact* of this provision—its *principal effect*—would be that, once an authorized copy has been sold under the authority of the copyright owner, *the new owner could exhibit it as his property in any way. And, under the draft, this would include television.*”⁴² In sum, the owner of copyright in a work of visual art would have received a right analogous to the traditional common-law right of first publication in a literary work,⁴³ or to the moral right of divulgation in continental law,⁴⁴ but that right would cease as soon as a copy of the work was transferred.⁴⁵

Just as the issue of transmission motivated the initial proposal for the display right, transmitted rather than in-person displays generated almost all of the controversy over the right from the time it was proposed until the 1976 Act was adopted. Very little opposition was expressed against granting copyright owners the exclusive right to display their

42. See PRELIMINARY DRAFT, *supra* note 34, at 183 (statement of Barbara A. Ringer) (discussion of Apr. 11, 1963) (emphasis added).

43. Before the 1976 Act, state copyright law protected an author against another party’s unauthorized first publication of an unpublished work, and federal copyright law generally protected a work only upon publication. The PRELIMINARY DRAFT, like the 1976 Act as finally adopted, provided that federal copyright law would protect a work immediately upon creation (§ 20) and preempted state copyright law protection (§ 19). See *id.* at 18. While the exclusive distribution right effectively guaranteed the right of first publication to copyright owners of works disseminated by the distribution of multiple copies, the initially proposed display right would have provided an equivalent right of first publication for works made public by showing a single copy, as is the case with many pictorial, graphic, and sculptural works.

44. The right of divulgation (or disclosure) in continental law includes the right to decide when a work is completed and whether to disclose the work to the public. See Raymond Sarraute, *Current Theory on the Moral Right of Authors and Artists Under French Law*, 16 AM. J. COMP. L. 465, 467 (1968); cf. JOHN HENRY MERRYMAN & ALBERT ELSÉN, *LAW, ETHICS AND THE VISUAL ARTS* 339–40 (3d ed. 1998). For instance, Merryman and Elsen note:

The “exclusive right to display the work publicly” is a statutory restatement of the right of divulgation. In other nations (e.g. France, Germany and Italy) the right of divulgation is a moral right. . . . In the United States, however, under “common law copyright,” the artist had a comparable right to divulge or not to divulge. On “federalization” of the common-law copyright in the 1976 law, this statutory provision resulted. As with the common-law copyright, the right of divulgation does not survive a transfer of ownership of the work.

Id.

45. Ringer’s explanation of the initial draft of the display right shows that the right was essentially limited to divulgation or first publication. Under the draft, Ringer explained, “the author up to the time he parts with the physical object would have the right to control public exhibition.” PRELIMINARY DRAFT, *supra* note 34, at 158. She cited the case of Georges Rouault, the French painter who brought a lawsuit in the late 1940s that established the right of an artist to control works that had not been sold and who used the right to reclaim over 800 works and then publicly burn over 300 paintings with which he felt dissatisfied. See *id.*; Sarraute, *supra* note 44, at 469–70; see also PIERRE COURTHION, *GEORGES ROUAULT* 295–96 (1962). Ringer said that if the author wanted to suppress his works and keep them from being exhibited, he could do so if he “has never parted with the physical property in them. . . . [H]e should have this right, . . . [t]his is the artist’s prerogative.” PRELIMINARY DRAFT, *supra* note 34, at 158. But, she continued, “when the ownership in the physical property has changed hands, our feeling was that it should be free for exhibition.” *Id.* (statement of Barbara A. Ringer).

works, including display by broadcast.⁴⁶ But the proposal to allow the owner of each copy to transmit displays of that copy came under attack immediately. In the Copyright Office's public discussions on the draft revision bill, authors declared themselves "delighted" at the proposal to grant them a new exclusive right but "extremely dismayed" about the limitation on the right in the context of display by transmission.⁴⁷ Harriet F. Pilpel, representing photographers, artists, and graphic artists,⁴⁸ said that these authors did not object to allowing the in-person display of a copy by the owner of that copy; indeed, the authors felt that limit was appropriate: "if someone buys a print of a photograph, or buys a painting, we do not feel that the copyright proprietor should be able to prevent the exhibition of that painting or photograph in the immediate presence of viewers, such as in a gallery."⁴⁹ The authors, however, opposed allowing a copy's owner to show the copy on television or in a film, and argued that particular copies "should not be transmissible by broadcasting or by any other mechanical or artificial means" without the copyright owner's consent.⁵⁰ Pilpel therefore suggested amending the draft so that after the transfer of ownership of a particular copy, the right of display "shall cease with reference only to the exhibition of that copy in the immediate presence of viewers," a proposal supported by other author and publisher representatives.⁵¹

Other statements during the discussion meetings suggest the reasons for the concern about allowing broadcast displays without the copyright owner's consent. Franklin Waldheim, representing Walt Disney Productions, echoed Pilpel's concerns and emphasized that "this isn't just an academic objection."⁵² He argued that displays by transmission could satisfy consumer demand for the work displayed and thereby reduce the sales of copies of that work. "Suppose that a publisher publishes a book of drawings. This [proposed language] would give a television station the right to show this entire book, page by page, to the public, so that people

46. During the discussions on the first draft of the display right, a representative of the broadcast industry did express concern that granting the right as proposed, including the right to exhibition by broadcast, "would be a very serious draw-back to any live telecast. For example, I question whether or not the White House tour could be televised, because a sweep of a camera might take into the camera's lens a copy of a picture for which no release had been obtained." PRELIMINARY DRAFT, *supra* note 34, at 186 (statement of Douglas A. Anello for the National Association of Broadcasters) (discussion of Apr. 11, 1963). That representative appeared to agree, however, that copyright law under the 1909 Act was unclear on the question and that "the doctrine of incidental use or fair use" might cover the case of live telecasts. *Id.* at 186-87.

47. *Id.* at 184-85 (statement of Harriet F. Pilpel) (discussion of Apr. 11, 1963).

48. Pilpel was identified as representing the American Society of Magazine Photographers and stated that she was collating comments she had received from that society and from the Society of Magazine Writers, the American Federation of Artists, the American Institute of Graphic Arts, and the National Education Association. *See id.* at 184.

49. *Id.* at 185 (statement of Harriet F. Pilpel) (discussion of Apr. 11, 1963).

50. *Id.*

51. *Id.* Pilpel's proposal was supported by Franklin Waldheim (on behalf of Walt Disney Productions) and Horace Manges (on behalf of book publishers' associations). *See id.* at 185, 186.

52. *Id.* at 185-86 (statement of Franklin Waldheim) (discussion of Apr. 11, 1963).

don't have to buy the book; they can see it on television."⁵³ Indeed, Waldheim suggested, a TV station could buy a copy of the Sunday comics section and show each frame of the printed comic strips sequentially, so that "children don't have to have their parents buy the paper, because the television station bought it."⁵⁴ Other participants in the meetings⁵⁵ and written comments on the preliminary draft echoed Waldheim's concern about copies.⁵⁶

The first bill introduced in Congress in the revision process leading to the 1976 Act responded to the "very strenuous objections" of copyright owners "who felt that [the initial proposal] would substantially cut down on their rights" and who were particularly concerned with "being able to control the television use of their pictorial works."⁵⁷ The limitation on the public display right was narrowed to allow the owner of a particular copy of a work to display the copy publicly only "by showing it to viewers present at the place where the copy is located."⁵⁸ The effect of

53. *Id.* at 186.

54. *Id.* (statement of Franklin Waldheim) (discussion of Apr. 11, 1963). Waldheim suggested addressing this concern by providing that the owner's copyright should not prevent transmitting a display of "an original work of art which is not reproduced in copies," but that "if it's something which is multiplied in copies—then there should be no right to show a copy on television." *Id.* Thus, the owner of a painting by Picasso could presumably show the painting on TV (assuming posters or postcards of the painting had not been made) but the owner of a copy of a Mickey Mouse comic book could not do so.

55. *E.g., id.* at 186 (statement of Horace S. Manges, on behalf of the Joint Committee of the American Book Publishers Council and the American Textbook Publishers Institute). Manges stated: If [the "first sale" limitation on the exhibition right] is allowed to stand, certainly the business of publishing art books would be encouraged to come to a complete stoppage. And the publication of maps, the publication of charts, would be greatly prejudiced, because after one sale no one could estimate the damage that could be done by the use in broadcasting.

Id.

56. *E.g.,* HOUSE COMM. ON THE JUDICIARY, 88TH CONG., COPYRIGHT LAW REVISION, PART 4: FURTHER DISCUSSIONS AND COMMENTS ON PRELIMINARY DRAFT FOR REVISED U.S. COPYRIGHT LAW 272 (Comm. Print 1964) [hereinafter PRELIMINARY DRAFT II] (June 12, 1964 statement of American Book Publishers Council, Inc. and American Textbook Publishers Institute); *id.* at 394–95 (July 10, 1964 statement of National Audio-Visual Association, Inc.) (stating that limitation "would mean that, once an individual filmstrip had been sold to a school system, that school system would then have the right to exhibit the filmstrip by means of a television network, and . . . instead of buying thirty copies of the filmstrip, the system would need only one" and giving admittedly "extreme" example of rebroadcast of educational television programs from airplane in flight over Indiana such that broadcasts could be received by schools in six adjacent states).

57. 1964 REVISION BILL, *supra* note 41, at 66 (statement of Barbara A. Ringer).

58. *Id.* § 7(b), at 5. Aside from the change in the scope of the "first sale" limit on the public display right, the 1964 REVISION BILL changed the structure and language of the public display right but not the basic substance of the right. Section 5 of the bill granted the author the exclusive right, "in the case of pictorial, graphic, or sculptural works, to exhibit the copyrighted work publicly." *Id.* § 5(b), at 4. The bill defined the term "[t]o 'exhibit' a work" to mean "to show a copy of it, either directly or by means of motion picture films, slides, or any other device or process." *Id.* § 5(b)(2), at 5. The bill also defined "copy" and "[p]ictorial, graphic, and sculptural works" in terms virtually identical to the definitions eventually adopted in the 1976 Act. *Compare id.* § 54, at 30–31, with 17 U.S.C. § 101 (1994). While the definition of "exhibit" had evolved and did not expressly include transmissions such as broadcasts, the new definition of what it meant to exhibit a work "publicly" made clear that the public exhibition right indeed included broadcasts and other transmissions. *See* 1964 REVISION BILL, *supra* note 41, § 5(b)(3)(B) & (C), at 5 (defining "to . . . exhibit a work 'publicly'" to include "to broadcast a[n] . . . exhibition of the work to the public," to "transmit to the public a broadcast of any . . . exhibi-

the new, narrower limitation was to allow the owner of a copy to “show it in a public place, but . . . not . . . to use it on television.”⁵⁹ By essentially adopting the copyright owners’ proposed reformulation of the limitation, the new draft placed transmitted displays within the control of the copyright owner, even where the broadcaster was making the transmission from a copy that it had acquired lawfully, while continuing to exempt most in-person displays.⁶⁰ The legislative history of the public display right thus confirms that the right was created primarily to cover transmitted, not in-person, displays and that the principal concern with such displays was their potential to substitute for the sale of copies of a work.⁶¹

2. *Display Right Intended to Cover Computer Network Transmissions*

Concerns that transmitted displays could threaten the sale of copies of copyrighted works led the drafters to see the importance of the display right with respect to the anticipated development of computer networks and the need to extend the display right beyond works of visual art. As the Register of Copyrights explained in his 1965 Supplementary Report:

In our earlier drafting efforts we had assumed that . . . the only classes of works that needed the exhibition right were those created to be looked at (“pictorial, graphic, and sculptural works”), as distinguished from works intended to be read or performed. We have

tion.” or “to communicate a[n] . . . exhibition of the work to the public by means of any device or process”).

59. 1964 REVISION BILL, *supra* note 41, at 66 (statement of Barbara A. Ringer); *see also* 1965 House Hearings, Part I, *supra* note 39, at 55 (statement of Abe A. Goldman, U.S. Copyright Office) (“[T]he person who owns a copy may exhibit it under [the limitation] to viewers who are physically present in the place where the copy is located, but he would not be privileged, simply because he owns the copy, to use it in a television broadcast.”).

60. In the remainder of the revision process, copyright owners, having obtained the right to control transmitted displays of their work as part of the general public display right, shifted their attention to specific exemptions from the display right for certain educational uses. *E.g.*, 1964 REVISION BILL, *supra* note 41, § 8, at 6; SUPPLEMENTARY REPORT, *supra* note 36, at 196 (reprinting 1965 Revision Bill § 109) (precursor provisions to current educational exemptions for certain performances and displays in 17 U.S.C. § 110 (1994 & Supp. III 1997)). They urged, largely unsuccessfully, that such exemptions be narrowed because of the concern that transmitted displays could substitute for the sale of copies. *E.g.*, 1965 House Hearings, Part I, *supra* note 39, at 134 (memorandum of American Book Publishers Council, Inc.; American Guild of Authors & Composers; American Society of Composers; Authors and Publishers; American Textbook Publishers Institute; The Authors League of America, Inc.; Composers and Lyricists Guild of America, Inc.; Music Publishers’ Protective Association, Inc.; and Music Publishers Association of the United States) (proposing restricting exemptions on the display right for educational, religious, and charitable purposes to allow the user only “to display a material object in which the work or a copy of it is embodied” and to apply only to pictorial, graphic, and sculptural works); *id.* at 69, 74–75, 406–17; *Copyright Law Revision: Hearings Before Subcomm. No. 3 of the Comm. on the Judiciary on H.R. 4347, H.R. 5680, H.R. 6831, H.R. 6835, Part 2*, 89th Cong. 1074–76, 1081–82, 1184–93 (1965) [hereinafter 1965 House Hearings, Part II]; 1964 REVISION BILL, *supra* note 41, at 234–35 (Feb. 1, 1965 letter of American Textbook Publishers Institute) (arguing that because a “page of type . . . projected on a . . . screen, can be read as easily by a large group as though each one in the group had a copy in his hand . . . [p]rojection . . . becomes a device for circumventing the copyright owner’s exclusive right ‘to reproduce the copyrighted work’”).

61. On the plausibility of such concerns, see discussion *infra* notes 124–29 and accompanying text.

now come to realize, however, that *in the future, textual or notated works (books, articles, the text of the dialogue and stage directions of a play or pantomime, the notated score of a musical or choreographic composition, etc.) may well be given wide public dissemination by exhibition on mass communications devices.*⁶²

As a result, the 1965 Revision Bill granted the public display right to all classes of works then mentioned in the bill except for motion pictures and sound recordings.⁶³

The Supplementary Report made clear that among the future “mass communication devices” that might widely disseminate textual works were computer networks.⁶⁴ The Register stated that “[s]ince the *Report* was issued in 1961, we have become increasingly aware of the enormous potential importance of showing, rather than distributing, copies as a means of disseminating an author’s work,” and mentioned the potential “drastic effects for copyright owner’s rights” of future use of television to present material to large audiences.⁶⁵ But of possibly more concern than television, the Register felt, was another likely new technology:

*Equally if not more significant for the future are the implications of information storage and retrieval devices; when linked together by communications satellites or other means, these could eventually provide libraries and individuals throughout the world with access to a single copy of a work by transmission of electronic images. It is not inconceivable that, in certain areas at least, “exhibition” may take over from “reproduction” of “copies” as the means of presenting authors’ works to the public, and we are now convinced that a basic right of public exhibition should be expressly recognized in the statute.*⁶⁶

Thus, as early as 1965, the drafters of the public display right had become aware of the possible development of computer networks. Although the terminology seems dated today, the Register’s description of “information storage and retrieval devices . . . linked together by communications satellites or other means” remains an apt description of the Internet, a network of individual computers (“information storage and retrieval devices”) connected by a variety of communications links.⁶⁷ The drafters

62. SUPPLEMENTARY REPORT, *supra* note 36, at 20 (emphasis added). An earlier suggestion for expanding the proposed display right beyond only pictorial, graphic, and sculptural works was made in a written comment on the 1964 REVISION BILL: “As to section 5(a)(5), is it not possible that a literary work such as a book (poem) might be exhibited on TV and should not rights of this sort be extended to a literary work?” 1964 REVISION BILL, *supra* note 41, at 285 (letter of Joseph Gray Jackson).

63. See SUPPLEMENTARY REPORT, *supra* note 36, at 186 (reprinting 1965 Revision Bill § 106(5)); see also *id.* at 20–21 (explaining that “the bill regards the showing of motion pictures as a ‘performance’ rather than an ‘exhibition,’ and an exhibition right would, of course, be inapposite with respect to sound recordings which are purely aural in nature”).

64. See *id.* at 20.

65. See *id.*

66. *Id.* (emphasis added).

67. Indeed, throughout the 1965 hearings, discussions of the display right and the limitations on that right drew attention to problems of computers and computer networks. *E.g.*, *Copyright Law Re-*

saw that such networks might allow the public to view an image of a copyrighted work in ways that would satisfy the traditional need to buy tangible copies of the work. And they viewed the public display right as guaranteeing the copyright owner control over the use of their works across such networks:

It has been pointed out that . . . computers now, and increasingly in the future, will display the work temporarily on a television screen or the equivalent. *Under the bill this would be an infringement only if the image of the work is transmitted beyond the location of the computer in which the copy is stored. . . .* The bill would not exempt the ordinary transmission of an image from one place to another, whether by computers or otherwise⁶⁸

Transmitting a display of a work from one computer to another would be a public display that would be subject to the copyright owner's control.

Legislators responsible for the revision process adopted the Register's conclusions about the need for a display right to protect copyright owners' rights in light of the development of computer networks and the language of the House Judiciary Committee reports on various revision bills between 1966 and 1976 echo those conclusions.⁶⁹ Those reports made clear that a "display" included both "the showing of an image on a cathode ray tube or similar viewing apparatus connected with any sort of information storage and retrieval system" and "the transmission of an image by electronic or other means."⁷⁰

The House committee reports also stressed that access to copyrighted works over computer networks could substitute for the purchase of copies of those works and that the display right would allow copyright owners to control such substituting access:

[The limitation allowing the owner of a copy to publicly display that copy] takes account of the potentialities of the new communications

vision: Hearings Before Subcomm. No. 3 of the Comm. on the Judiciary on H.R. 4347, H.R. 5680, H.R. 6831, H.R. 6835, Part 3, 89th Cong. 1420-61 (1966) [hereinafter 1965 House Hearings, Part III] (statement of Bella Linden). The drafters of the 1976 Act were not the only ones who foresaw the possibility of the development of digital networks. Benjamin Kaplan, in his Carpentier Lectures at Columbia University in March 1966, imagined:

[There will be] linked or integrated systems or networks of computers capable of storing faithful simulacra of the entire treasure of the accumulated knowledge and artistic production . . . and transmitting them to any distance, where they will be converted as desired to forms directly or indirectly cognizable, whether as printed pages, phonorecords, tapes, transient displays of sights or sounds.

BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 119 (1967).

68. *1965 House Hearings, Part III, supra* note 67, at 1861 (statement of Hon. Abraham L. Kaminstein, Register of Copyrights) (emphasis supplied).

69. The language on the subject in the final House Report on the bill adopted as the 1976 Act varied little from the language of the 1966 House Report on the first revision bill reported out of committee. No relevant substantive changes were made to the display right, the definitions of "display" and "publicly," or to § 109(c)'s limit on the display right between the 1965 revision bill as reported out of the House Judiciary Committee and the enactment of the 1976 Act.

70. H.R. REP. NO. 89-2237, at 57 (1966); 1976 HOUSE REPORT, *supra* note 2, at 64.

media, notably television and *information storage and retrieval devices, for replacing printed copies with visual images.*

....

The committee's intention is to preserve the traditional privilege of the owner of a copy to display it directly, but to place reasonable restrictions on his ability to display it indirectly in such a way that the copyright owner's market for reproduction and distribution of copies would be affected. Unless [excused under some other provision of the Copyright Act], . . . transmission of an image to the public over television or other communication channels, would be an infringement for the same reasons that reproduction in copies would be.⁷¹

At the end of the revision process, the main subject of the display right was, as it had been at the outset, transmitted displays. But concern had shifted from television transmissions of works of visual art to the potential for transmissions of all types of visually perceptible works over computer networks. The drafters clearly believed that computer networks were likely to develop in the future, that images and texts of copyrighted works would be transmitted over such networks, that such transmitted displays could take the place of tangible copies, and that such substitution could be detrimental to copyright owners. The drafters granted copyright owners the exclusive public display right to allow them to extract revenue from such transmitted displays in order to replace revenue lost from the decline in the sale of copies.⁷² The 1966 House Report summed up the drafters' view of the public display right: "With the growing use of projection equipment, closed and open circuit television, and computers for displaying images of textual and graphic material to

71. H.R. REP. NO. 89-2237, at 68 (1966) (emphasis added); 1976 HOUSE REPORT, *supra* note 2, at 80; *see also id.* at 63 ("[I]t is worth noting that performances and displays are continuing to supplant markets for printed copies.")

72. Between January 1, 1978 (the effective date of the 1976 Copyright Act) and December 12, 1980, the exclusive rights enumerated in § 106 of the Copyright Act, as codified, did not necessarily extend to computers and computer networks. As originally enacted, the 1976 Act contained a provision stating that it

[did] not afford to the owner of copyright in a work any greater or lesser rights with respect to the use of the work in conjunction with automatic systems capable of storing, processing, retrieving, or transferring information . . . than those afforded to works under the law . . . in effect on December 31, 1977, as held applicable and construed by a court in action brought under this title.

Copyright Act of 1976, Pub. L. No. 94-553, § 117, 90 Stat. 2541, 2565 (1976). The House Report explained that the purpose of the provision was to preserve the status quo while the Commission on New Technological Uses (CONTU), which had been established in 1974, was engaged in studying the issue of computers and copyright and making recommendations to Congress. *See* 1976 HOUSE REPORT, *supra* note 2, at 116; Pub. L. No. 93-573, 88 Stat. 1873 (1974) (establishing CONTU). CONTU submitted its final report in 1978. *See* NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, July 31, 1978 (1979). In 1980, Congress amended section 117, making the rights and limitations on copyrighted works fully applicable to computer uses and enacting certain specific limitations on those rights with respect to computer programs. *See* Pub. L. No. 96-517, § 10(b), 94 Stat. 3015, 3028 (1980). On the CONTU process generally, *see* Pamela Samuelson, *CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form*, 1984 DUKE L.J. 663.

‘audiences’ or ‘readers,’ this right is certain to assume great importance to copyright owners.”⁷³

III. INTERACTION OF THE REPRODUCTION AND DISPLAY RIGHTS AS APPLIED TO TRANSMISSIONS

The public display right primarily addresses transmissions of images and text to the public, and the drafters intended the right to encompass such transmissions over computer networks once such networks developed. But despite the drafters’ prediction of its “great importance,” the display right to date has been probably the least important of the copyright owner’s rights, with respect to both television transmissions and the computer networks, such as the Internet, that the drafters foresaw as the main arena for exercise of the display right. Instead, the display right has been overshadowed by the reproduction right. There is a substantial relationship between the display right and the reproduction right, and the particular technology used to transmit displays to the public will determine whether the display right offers copyright owners significant independent control over such transmissions or is merely a sometimes useful strategic complement to the control over such transmissions that the reproduction right provides.

A. *Before the Digital Networked Era*

1. *Few Cases Involve the Display Right and Few of Those Involve Transmissions*

Before computer networks emerged, cases alleging infringement of the display right should primarily have involved television transmissions. Section 109(c) generally exempts in-person displays and narrows the effective scope of the right to transmitted displays,⁷⁴ and in the years following 1978,⁷⁵ television (broadcast, cable, or satellite) was the primary significant means for transmitting displays to the public. Given the very active television industry during this period—indeed, an industry expanding with new broadcast networks and an increasing number of cable and satellite channels—we might expect a fairly developed body of case-law involving the public display right and television transmission. In fact, though, very few reported cases involve allegations of infringement of the exclusive public display right—counting generously, I have found only eight such cases reported to date that do not involve transmissions over computer networks—and of these, cases involving allegations of in-

73. H.R. REP. NO. 89-2237, at 55–56 (1966) (reporting out H.R. 4347 as amended).

74. 17 U.S.C. § 109(c) (1994).

75. The 1976 Act took effect on January 1, 1978. Pub. L. No. 94-553, § 102, 90 Stat. 2541, 2544–45 (1976).

person displays outnumber those involving allegations of transmitted displays.⁷⁶

a. Television Transmission Cases

Two reported cases involve allegations of infringement of the public display right by television transmission, although none of the opinions in those cases offers any real discussion of the display right issue. In *Triangle Publications, Inc. v. Knight-Ridder Newspapers, Inc.*,⁷⁷ the *Miami Herald* advertised a new television supplement for the paper's Sunday edition using two television commercials that compared the new supplement to *TV Guide* and that showed the cover of a back issue of *TV Guide*.⁷⁸ The publisher of *TV Guide* sued for infringement, alleging that showing the *TV Guide* cover in the commercials violated its exclusive right of public display.⁷⁹ Both the trial and appeals courts found that any use of the *TV Guide* cover by the defendant was excused (either as fair use or on First Amendment grounds) and therefore gave little attention to whether the alleged infringement constituted a public display.⁸⁰ The defendant's acts, though, clearly come within the scope of the plaintiff's public display right: a showing of a copy of the plaintiff's copyrighted work, the cover of an issue of *TV Guide*, was transmitted to the viewing public.

The other case involving a claim for infringement of the display right by television transmission is *Ringgold v. Black Entertainment Television, Inc.*⁸¹ The plaintiff there alleged that a poster of her copyrighted quilt was used as a set decoration in an episode of the sitcom *Roc* that was produced by defendant HBO Independent Productions and shown on cable television by defendant Black Entertainment Television

76. Reported cases are not, of course, the only measure of the importance of the right; for example, the right might be effectively licensed so that infringement cases are generally unnecessary. On the licensing of the display right, see *infra* notes 108–09 and accompanying text.

77. 626 F.2d 1171 (5th Cir. 1980), *aff'g on other grounds*, 445 F. Supp. 875 (S.D. Fla. 1978).

78. *Triangle Publ'ns*, 445 F. Supp. at 876–77.

79. *Id.* at 877.

80. The district court concluded, without discussion, that “[d]efendant’s use of TV Guide constitutes a ‘display’ within the ambit of the Copyright Act,” citing to the then newly effective provisions of § 106, though it held that the *Herald’s* unauthorized display was protected by the First Amendment. *Id.* at 879. On appeal, the Fifth Circuit noted that it was undisputed that “unless protected by fair use or the First Amendment, Knight-Ridder’s use of TV Guide covers constitutes an infringement under the copyright law.” *Triangle Publ'ns*, 626 F.2d at 1173. The court noted some confusion, however, over the nature of the infringement:

Knight-Ridder contends that reproductions of the TV Guide covers were not “displays” under § 106(5). See § 101 (defining display). However, Knight-Ridder conceded at oral argument that it “reproduced” TV Guide covers. Section 106(1). Consequently, while Knight-Ridder’s argument that no display is involved seems rather specious, we need not conclusively rule on it here. *Triangle Publ'ns*, 626 F.2d at 1173 n.8. Without more information, it is impossible to know exactly what “reproduction” the defendant was admitting and whether the argument that reproduction but not display had occurred was persuasive.

81. 126 F.3d 70 (2d Cir. 1997), *rev'g*, 40 U.S.P.Q.2d 1299 (S.D.N.Y. 1996).

(BET).⁸² “[A]t least a portion of the poster is shown a total of nine times [in the background for a total on-screen time of] 26.75 seconds.”⁸³ The Second Circuit provided almost no explicit discussion of the nature of the infringement at issue in the case,⁸⁴ but the opinion clearly shows that the court considered that the acts complained of constituted alleged infringements of the public display right.⁸⁵ However, because the opinion focused almost exclusively on evaluating and rejecting the defenses of de minimis use and fair use, it sheds almost no light on the display right itself.⁸⁶ Nonetheless, the actions alleged against BET clearly would, unless otherwise excused, constitute infringement of the public display right: BET transmitted to the viewers of its cable network a display of Ringgold’s quilt included in HBO’s sitcom episode.

b. In-Person Display Cases

Despite the fact that § 109(c) ordinarily shields from liability the display of a copy to viewers in the physical presence of that copy, several reported cases involve allegations of exactly such displays. In most of these cases, the exemption for in-person displays would not have protected the alleged infringer because that party was allegedly not “the owner of a particular copy lawfully made” under the Copyright Act as

82. See *id.* at 72.

83. *Id.* at 73.

84. The district court’s opinion similarly provides little clarity on the question, merely noting that “[a]mong [the copyright owner’s] rights are the right to reproduce the copyrighted work and the right to display the work publicly” before turning immediately to considering the fair use defense raised by the defendants. *Ringgold*, 40 U.S.P.Q.2d at 1300.

85. The court pointed out that a copyright owner has the exclusive rights of reproduction, distribution, preparation of derivative works, and public display, and that these rights allow a copyright owner to license others to make these uses of her copyrighted work in return for royalties. See *Ringgold*, 176 F.3d at 73. The court said that “Ringgold contends that the defendants violated *this licensing right* by using [her] poster to decorate the set of their sitcom without her authorization,” but it never indicated which exclusive right or rights had allegedly been infringed. *Id.* (emphasis added). The court went on to state that “[t]he caselaw provides little illumination concerning claims that copyright in a visual work has been infringed by *including it* within another visual work,” but again it did not specify which § 106 right was violated by “including” an existing work in another work. *Id.* at 74 (emphasis added). Nonetheless, the court treated the alleged infringement as an infringement of the display right. See *id.* In considering whether the complained-of use could be considered de minimis, the court referred to Copyright Office regulations that implement a compulsory license for public broadcasters. See *id.* at 77; see also 17 U.S.C. § 118(b) (1994). That license expressly covers such entities’ public display of pictorial, graphic, and sculptural works in broadcast transmissions, see *id.* § 118(d)(1), and the regulations distinguish for rate purposes between background *displays* and featured *displays*. See *Ringgold*, 126 F.3d at 77 (discussing 37 C.F.R. § 253.8(b)(2)). And in considering the defendants’ fair use defense, the court discussed and distinguished two prior cases, one of which “was decided before the 1976 Act afforded copyright proprietors a *display right*” and one of which, “though decided under the 1976 Act, did not consider a *display right*.” *Id.* at 77 n.8 (emphasis added). In addition, in evaluating the “purpose and character” of the defendants’ use for fair use purposes, the court noted that “unauthorized *displays* of a visual work might often increase viewers’ desire to see the work again.” *Id.* at 79 (emphasis added).

86. See *id.* at 74–80.

required by § 109(c).⁸⁷ Rather, the copy displayed had itself been made without the permission of the copyright owner.

Two of the in-person display cases involve the exhibition of products at trade shows.⁸⁸ In the first, wicker mirrors shown at the National Housewares Exhibition allegedly infringed a copyrighted design for such a mirror and the court held that plaintiff's allegation adequately stated a claim for infringement of the public display right, noting that the definition of "display" was "to show a 'copy' of the work" and that "by exhibiting the accused mirrors at the Housewares Exhibition, [defendant] clearly displayed them."⁸⁹ In the second trade show case, in which the defendant exhibited storage jars decorated with designs that allegedly infringed the plaintiff's copyrighted designs, the parties did not contest (and the court did not discuss) "the characterization of the trade show display as a 'display.'"⁹⁰

In a third case, the defendant used a copy of the plaintiff's copyrighted wild turkey decoy in a hunt, and the court held, without any explanation, that "defendant's use of plaintiff's decoy in a hunt . . . was not a 'public display' and not an infringement on plaintiff's copyright."⁹¹ In the last reported case alleging infringement by a direct in-person display, it appears that the defendant's actions were noninfringing under § 109(c)'s exemption but neither court involved in the case ever considered that issue.⁹²

87. 17 U.S.C. § 109(c).

88. See *Thomas v. Pansy Ellen Prods., Inc.*, 672 F. Supp. 237 (W.D.N.C. 1987); *Burwood Prods. Co. v. Marsel Mirror and Glass Prods., Inc.*, 468 F. Supp. 1215 (C.D. Ill. 1979). *Burwood* was apparently the first reported case involving the display right after the 1976 Act became effective. See *id.* at 1218 n.4 ("The instant case . . . appears to be one of first impression with respect to this issue.").

89. *Burwood*, 468 F. Supp. at 1218 & n.5. The court said that the display was clearly "public," citing a previous case involving the Housewares Exhibition in which the court took judicial notice that national and international exhibitors and customers were present at that exhibition. See *id.* at 1218 n.5 (citing *Crossbow, Inc. v. Glovemakers Inc.*, 265 F. Supp. 202 (N.D. Ill. 1967)).

90. *Thomas*, 672 F. Supp. at 239–40. The court held that the display at the trade show was a "public" display. See *id.* at 240.

91. *Streeter v. Rolfe*, 491 F. Supp. 416, 421 (W.D. La. 1980). It is unclear whether the court concluded that the use of the decoy in a hunt was not a "display" within the meaning of the Copyright Act or, perhaps more likely, that any display that occurred during the hunt was not a "public" display subject to the copyright owner's control.

92. See generally *Gracen v. The Bradford Exch., Ltd.*, 698 F.2d 300 (7th Cir. 1983) (Posner, J.). The public display claim here was actually a counterclaim. See *id.* at 302. The plaintiff, Gracen, created a painting of Judy Garland as Dorothy from *The Wizard of Oz* as part of a contest to choose artwork for a planned series of collector's plates. See *id.* at 301. Although Gracen's painting won the contest, the parties could not agree on terms for the use of her work, and Gracen later sued, alleging that the plates as eventually produced infringed her copyright in her paintings. See *id.* at 301–02. MGM, owner of the copyright in the film, counterclaimed and alleged that Gracen had "infringed the copyright on the movie by showing her drawings and a photograph of her painting to people whom she was soliciting for artistic commissions." *Id.* at 302. The district court granted MGM summary judgment on the counterclaim, holding that Gracen had infringed and awarding \$1500 in damages. See *Gracen v. The Bradford Exch., Ltd.*, 217 U.S.P.Q. (BNA) 940 (N.D. Ill. 1982); see also *Gracen*, 698 F.2d at 302. The appeals court reversed, holding that defendants had licensed Gracen to make her painting and that "she infringed MGM's copyright by displaying [the painting] publicly" only if the license did not permit her to do so. *Id.* at 303. Finding a genuine issue of material fact as to the scope of the license to Gracen, the court remanded. See *id.* at 303, 305 ("We do not say she actually had the right [to ex-

Finally, two cases appear to involve in-person displays by projection of a motion picture rather than by direct showings of a copy.⁹³ In *Sandoval v. New Line Cinema Corp.*,⁹⁴ the plaintiff photographer owned the copyright in photographs that appeared briefly and largely out of focus in the background of one scene in the defendant's motion picture *Seven*, and plaintiff's suit for infringement clearly raised a claim of violation of the display right.⁹⁵ In *Jackson v. Warner Bros., Inc.*,⁹⁶ the plaintiff painter owned the copyright in two lithographs used briefly in the background in one scene in the defendant's film *Made in America*, and the court opinion suggests that a display claim was raised.⁹⁷ Because in both cases the courts found that the defendants' use of plaintiffs' works was excused (as either de minimis or fair use), none of the opinions in either case discussed whether those uses constituted public displays of the works.

2. *The Relationship of Reproduction and Public Display Rights Explains the Lack of Transmission Cases*

As this survey shows, there are few reported display right cases, and cases involving in-person displays predominate over cases involving transmitted displays. This seems contrary to what one might expect from the scope of the public display right and the intent behind its adoption, but can perhaps best be explained by the relationship between the display right and the reproduction right. The facts of the cases reveal that, in most circumstances, an infringing display by television transmission or

hibit her painting], but only that there is a genuine issue of material fact concerning the scope of her implied license to make a derivative work.”). Gracen, however, would not generally need any license to make in-person public displays, since the court had determined Gracen was the owner of her original painting, and that that painting was lawfully made because the defendants had licensed its making. *See id.* at 303. As owner of a lawfully made copy, § 109(c) would allow Gracen to show her original painting to potential customers in person.

93. One other case, *Amsinck v. Columbia Pictures Industries, Inc.*, might be read to raise the issue of a public display by means of a motion picture. 862 F. Supp. 1044 (S.D.N.Y. 1994). That case involved the plaintiff's copyrighted artwork of pastel-colored teddy bears, which she had licensed for use on various items, including a mobile. *See id.* at 1045. The defendants' film *Immediate Family* contained scenes filmed in a family's nursery in which one of the licensed mobiles was hung. *See id.* at 1046. The court stated that the defendants had not sought permission to “display” the mobile and its copyrighted artwork. *See id.* The opinion, however, does not indicate whether the plaintiff's complaint included a specific allegation of violation of the display right. Furthermore, the court treated the infringement question purely as one of whether the defendants' “use [of the mobile] constitutes a copy,” and it answers that question not by reference to the definition of “copies” in the 1976 Copyright Act but by adhering to a 1965 decision applying the 1909 Copyright Act (which did not expressly define the term “copy”) to a single live television broadcast. *Id.* at 1047–48. The decision seems clearly wrong on this point, as under the 1976 Act it seems clear that filming the mobile is an act of reproducing that work in a “copy”—the actual film in which the image of the mobile hanging on the set is fixed.

94. 973 F. Supp. 409 (S.D.N.Y. 1997), *aff'd on other grounds*, 147 F.3d 215 (2d Cir. 1998). Neither opinion indicates *how* the defendant distributed the movie, but the district court makes clear that the plaintiff saw the film in a cinema, not on television. *See Sandoval*, 973 F. Supp. at 411.

95. *See Sandoval*, 973 F. Supp. at 412–13.

96. 993 F. Supp. 585 (E.D. Mich. 1997).

97. *See id.* at 587–88.

in-person showing will be preceded by a reproduction. Because copyright owners have always had the exclusive right to reproduce their works, the reproduction right alone has so far generally allowed them to control infringing displays—even displays transmitted by television.

A display of a copyrighted *work*, by definition, requires the use of a *copy*, a material object in which a work is fixed: in order to display a copyrighted work, one must show a copy of the work.⁹⁸ That copy, like any copy, can either be lawfully made or unlawfully made.⁹⁹ If the displayed copy is lawfully made, then by hypothesis no infringing reproduction has occurred. In addition, in-person displays of that copy will generally be noninfringing under § 109(c).¹⁰⁰ A copyright owner's only possible infringement claim will be against the transmission of a display of such a copy to the public. If, on the other hand, the displayed copy is not lawfully made, then the making of the copy will infringe the copyright owner's reproduction right, and *any* public display of the copy, whether in person or transmitted, will infringe the public display right.

The display right therefore seems likely to be most important to copyright owners in cases of transmitted displays made using lawfully made copies—a situation where the display right provides the copyright owner with her only opportunity to control the displaying party's activity—rather than displays made using unlawful copies, where the copyright owner will also have a claim for violation of the reproduction right. Virtually all of the reported display-right cases, however, involve the display of an allegedly infringing copy.¹⁰¹ This is not surprising for *in-person* displays, since such displays are generally infringing only if made by showing an unlawfully made copy. The lack of cases alleging infringe-

98. It might seem logical that all of a *copyright* owner's rights would involve *copies*, but that is not the case. Section 106 grants the copyright owner certain rights in her copyrighted *work*. See 17 U.S.C. § 106 (1994). Most of those rights do involve *copies* (e.g., the right "to reproduce the copyrighted work in copies"). See *id.* But not all of them do. The right most often linked to the public display right, the right "to perform the copyrighted work publicly," does not require that any copy be involved in infringement. See *id.* § 106(4). Someone can stand on stage in front of an audience and sing and play a song without any physical copy of the song being involved. Indeed, if the performer learned the song by listening to other people's live or broadcast performances, the performer need never have come in contact with a *copy* of the work at all. Nonetheless, her performance will clearly infringe the § 106(4) right of public performance unless authorized or otherwise excused.

99. The copy might be made by the copyright owner, by the party displaying the copy, or by a third party.

100. See 17 U.S.C. § 109(c).

101. Indeed, in the reported cases, the plaintiffs generally alleged infringements of the reproduction and/or distribution rights, as well as of the display right. *E.g.*, Triangle Publ'ns v. Knight-Ridder Newspapers, Inc., 626 F.2d 1171, 1173 n.8 (5th Cir. 1980) (noting that the defendant conceded reproducing *TV Guide* covers); Sandoval v. New Line Cinema Corp., 973 F. Supp. 409, 412 (S.D.N.Y. 1997) (explaining that the plaintiff's claims included unauthorized copying and displaying violations); Thomas v. Pansy Ellen Prods., Inc., 672 F. Supp. 237, 239 (W.D.N.C. 1987) ("[I]n her briefs Plaintiff claims that the only infringements at issue in this case are 'the *reproducing* of the copyrighted work in copies, the preparation of derivative works . . . and the *distribution* of copies of the copyrighted work to the public. . . .'" (emphasis added); Burwood Prods. Co. v. Marsel Mirror and Glass Prods., Inc., 468 F. Supp. 1215 (C.D. Ill. 1979) ("The complaint alleges that defendant . . . has infringed this copyright by *producing, displaying and selling* certain wicker mirrors.") (emphasis added).

ment by the *transmission* of lawfully made copies, however, seems more surprising. The reason for this lack of cases appears to be that few real-world activities fit this description: TV transmission generally involves making a copy in order to transmit a display.

Virtually all TV programming is not shown live but is transmitted from a recording, so infringements of the public display right in cases of TV transmission will almost always involve infringement of the *reproduction* right as well. A television program will generally be recorded (e.g., on film or videotape) for broadcast, and making that recording will constitute a fixation of any copyrighted work visible in the program (such as Ringgold's quilt or a *TV Guide* cover) in a *copy*—e.g., the material object of the film or videocassette—as a precursor to any *display* of such copyrighted work. Thus, any infringement claim for displaying a work by transmitting the program would be in addition to a claim for reproducing the work in the copy of the program used for the transmission.¹⁰² Indeed, in both *Triangle Publications* and *Ringgold*, it appears that the defendants committed, and the plaintiffs sued over, acts of reproduction as well as display; the TV commercial and the sitcom at issue in those cases were broadcast repeatedly (and later viewed by the courts considering the cases), demonstrating that the broadcasts were made from a fixed copy.¹⁰³

Live television transmissions, of course, allow transmission of a display of a copy of a work (for example, a poster hung on the wall of a television set) without the need to make a further copy of that work, since the program has not been previously recorded. The display right may therefore be useful to copyright owners in controlling such transmissions.¹⁰⁴ Given the relatively small amount of television programming

102. The drafters of the 1976 Act seem to have recognized that television transmission will usually involve *both* display and reproduction. *E.g.*, PRELIMINARY DRAFT, *supra* note 34, at 185 (statement of Harriet F. Pilpel) (“Barbara Ringer has explained that putting [a work] on video tape or on a film would probably be another copy and that this language [in the initial draft allowing the owner of a particular copy to display that copy by means of transmissions] would not permit that, although it would permit what we now call ‘live television.’”); *see also id.* at 183. For example, the 1976 Act provides an exemption under certain conditions for “ephemeral recordings” of transmission programs if the transmitter is authorized to display or perform the work recorded, and the compulsory license for public broadcasters to use certain works in noncommercial broadcasting allows those broadcasters *both* to display published pictorial, graphic, and sculptural works, *and* to reproduce and distribute copies of a transmission program incorporating such works. *See* 17 U.S.C. §§ 112(a), 118(d).

103. *See Triangle Publ'ns*, 445 F. Supp. at 876–77 (alleging infringement both by reproduction and display); *Ringgold v. Black Entm't Television, Inc.*, 126 F.3d 70, 73 (2d Cir. 1997). The Herald had run newspaper advertisements that included an actual-sized picture of *TV Guide* covers, so it is possible that the reproduction claim dealt only with these print reproductions and not with the recording of the television commercials. *See Triangle Publ'ns*, 445 F. Supp. at 876–77.

104. As a practical matter, even a television program that is initially broadcast live will usually be recorded for later rebroadcast. For example, *Saturday Night Live* is broadcast live but is recorded so that it can be shown later on the evening of its original broadcast to viewers in different time zones, and so that it can be rebroadcast at later dates. Sports events that are broadcast live are recorded so that highlights from the game can be used in later broadcasts. Newscasts that are broadcast live are often similarly recorded for later rebroadcast or archival purposes. Thus, even in the case of live tele-

that is transmitted live, however, this use of the display right seems unlikely to be of major importance to copyright owners. In addition, because much live television transmission involves coverage of news, sporting, or entertainment events as they are in progress, the display of copyrighted works in the course of such transmissions will often be incidental and fortuitous, and the legislative history suggests that such uses would generally be considered fair uses.¹⁰⁵

The same analysis explains why few cases allege infringement of the display right by the showing of a motion picture. Incorporating a copyrighted work, such as Sandoval's photographs, into a motion picture will always involve a reproduction, since motion pictures are, by definition, *fixed* in copies that are then performed, rather than being performed or transmitted live. Therefore, the copyright owner of a work incorporated in a motion picture will have an action for the infringing reproduction in addition to one for any infringing public display. Indeed, the plaintiff in *Sandoval* sued for infringement of both the reproduction and public display rights.¹⁰⁶

The relative paucity of display cases, in particular cases involving transmitted displays, in the years following the adoption of the display right seems to be explained by the fact that television has been the primary means of transmitting displays to the public and the television industry has generally transmitted recorded programming. Even if no display right existed, copyright owners would be able, using the reproduction right, to control the use of their works in television transmissions. Because the reproduction right is the most fundamental and familiar of the copyright owner's exclusive rights—indeed, is the original right protected by Anglo-American copyright continuously since 1709—plaintiffs may be more likely to sue for, and courts may be more likely to

vision transmissions, the transmitting entity will ordinarily engage in an act of reproduction in addition to any act of display by transmission.

105. See 1976 HOUSE REPORT, *supra* note 2, at 65 (listing, as an example of an activity that courts might regard as fair use, "incidental and fortuitous reproduction, in a newsreel or broadcast, of a work located in the scene of an event being reported") (quoting Register's 1961 Report); see also PRELIMINARY DRAFT, *supra* note 34, at 186–87; cf. *Coleman v. ESPN, Inc.*, 764 F. Supp. 290 (S.D.N.Y. 1991) (holding that unresolved questions of whether network's broadcast of musical works publicly performed during athletic events were substantial takings precluded summary judgment on issue of infringement); *Italian Book Corp. v. Am. Broad. Co., Inc.*, 458 F. Supp. 65, 72 (S.D.N.Y. 1978) (holding that television newscast of report of newsworthy parade, including performance of plaintiff's musical work by band on parade float, was fair use and not infringement of public performance right in plaintiff's composition).

106. See *Sandoval v. New Line Cinema Corp.*, 973 F. Supp. 409, 412 (S.D.N.Y. 1997) (listing the rights involved as reproduction and display and restating defendant's argument that its activities did not involve either "copies" or "public display"). While infringement claims against successful motion pictures are quite common, even those alleging infringement of visual work (rather than, for example, of a screenplay) generally seem to be decided without any express reference to a claim of infringement of the display right. *E.g.*, *Woods v. Universal City Studios, Inc.*, 920 F. Supp. 62, 64 (S.D.N.Y. 1996) (finding set design in film *12 Monkeys* infringed copyright in plaintiff's drawing).

find, violation of the reproduction right than violation of the display right.¹⁰⁷

Another possible reason for the lack of reported display right cases might be that copyright owners are effectively exploiting the right by licensing transmitted displays of their works, obviating any need to sue for infringements.¹⁰⁸ Indeed, licensing copyrighted works for use in TV programs and films—through what is known as the “clearance” process—is a routine part of producing such programs.¹⁰⁹ The relationship between reproduction and display operates in the licensing context as well. Because films and television programs are recorded before being displayed, the companies that produce them *reproduce* the copyrighted works that appear in those programs.¹¹⁰ Even without a public display right, a pro-

107. Several cases under the 1909 Act held that projecting a film on a screen in a theater was making a “copy.” *E.g.*, *Patterson v. Century Prods., Inc.*, 93 F.2d 489, 493 (2d Cir. 1937). Although these cases were much criticized and were expressly rejected in formulating the 1976 Act, they show the tendency to assimilate activities using a copyrighted work into the category of reproduction. *E.g.*, REGISTER’S REPORT, *supra* note 34, at 28–29; SUPPLEMENTARY REPORT, *supra* note 36, at 20.

108. Indeed, the Second Circuit’s opinion in *Ringgold* suggests that this may be the case: “Ringgold . . . stated in an affidavit that . . . she is often asked to license her work for films and television.” *Ringgold*, 126 F.3d at 81 (citations omitted); *see also* Brief of Plaintiff-Appellant at 6, *Ringgold*, 126 F.3d 70 (2d Cir. 1997) (“Ringgold is often asked to license the images of her original artworks owned by museums and collectors for use in books, films, and television programs. Ringgold’s [sic] derives substantial revenues, not only from the sale of her original works of art but from the licensing of the images of the original art . . . occasionally for use in film and television.”) (emphasis added). Nor does Ringgold appear to be the only artist who engages in such licensing. The Artists Rights Society (ARS), which claims to represent thousands of American and international artists, filed an *amicus curiae* brief in Ringgold’s appeal in which it stated that it “actively exploit[s] this secondary market and [is] paid on a regular basis for this very type of use” at issue in *Ringgold*, such as, for example, “the use of a Georgia O’Keefe creation in ‘Men Behaving Badly,’ the use of an Andy Warhol creation as a ‘set dressing’ in ‘Grace Under Fire’ and an Andy Warhol poster as ‘set dressing’ in ‘Murphy Brown.’” *Amicus Brief of ARS and Picasso Administration* at 4, *Ringgold*, 126 F.3d 70 (2d Cir. 1997). The president of ARS stated in 1999 that requests “for permission to reproduce works in films” have steadily increased since 1987 and have tripled in 1997 and 1998. Mary Louise Schumacher, *Canvassing the Silver Screen: If the Movie Isn’t a Work of Art, Check Out the Paintings*, WASH. POST, Aug. 28, 1999, at C1.

Licensing the public display of a copyrighted work may not be particularly lucrative—one commentator states that “[t]raditionally, copyright holders granted permission for the display of their work without compensation” but the opportunity to license does allow a copyright owner to attempt to earn revenue from the use and to control the use. Adrienne D. Herman, *Lights! Camera! Legal Action!—Use of Copyrighted Works as Set Dressing*, 91 ENT., PUB. & ARTS HANDBOOK 113 (John D. Viera et al. eds., 1998). *But see* Schumacher, *supra*, at C1 (“Artists’ estates and museums may charge from \$500 to \$5000 to show a single ‘original’ work in a film.”).

109. *E.g.*, Simon J. Frankel, *Using Visual Art in Film and Television: Ya Gotta Have Art—And Permission, Too*, ENT. & SPORTS LAW., Summer 1998, at 27 (reprinted in Simon J. Frankel, *Using Visual Art in Film and Television: Ya Gotta Have Art—And Permission, Too*, 45 ENT., PUB. & ARTS HANDBOOK 57 (Robert Thorne et al. eds., 1999–2000)) (“[I]n fact, most television series do obtain permission to use the works of visual art that appear on their regular sets.”); Herman, *supra* note 108, at 111–13 (suggesting that “the actual consequences [of *Ringgold*] are likely to be minimal” because “production companies already obtaining clearance on a regular basis have already proven that it is not unreasonably difficult to obtain permission for the use of a copyrighted work as a set dressing”).

110. Indeed, in some cases the production company will produce its *own* copy of the copyrighted work to place on the set. “Copies would have to be made because real paintings and drawings could not be fried under hot lights for six weeks, and nobody wanted to guarantee security for a few million dollars’ worth of irreplaceable objects.” Avis Berman, *In the Script, the Art Says ‘They’re Rich’*, N.Y. TIMES, Nov. 3, 1996, § 2, at 43.

duction company would still need a license to reproduce, for example, a poster, a photograph, or a magazine cover in its film or television program. This would give the copyright owner the opportunity to capture the value to the producer *both* of creating the reproduction (by filming the program) *and* of displaying the reproduction (by distributing the film or broadcasting the TV show). Because the film or TV program generally has commercial value to the producer only if the producer can show the film or program to the public, the price the producer would be willing to pay to reproduce a copy of a work should reflect the value to the producer of displaying that copy, even if the display right did not exist and the producer would be free to make such displays once the licensed reproduction was made.

3. *The Display Right Remains of Strategic Value to Copyright Owners*

With respect to the primary object of the public display right—transmitting displays to the public—the display right so far does not seem to have been essential to copyright owners in controlling the use of their works in such transmissions, in large part because television, the primary medium for such transmissions in the display right era, generally involves acts of reproduction, long subject to the copyright owner’s control, prior to any public display. But even though the copyright owner will usually have an independent claim for infringement of the reproduction right when an infringing display occurs, the display right will likely be of some importance to copyright owners not as an independent source of control over displays to the public but rather as a strategic complement to the better established reproduction right.

The most important strategic value of the display right in such cases is probably where it offers the copyright owner a choice of defendants. In situations where the displaying party has acquired an infringing copy from a third party, a copyright owner will be able to sue the displaying party for infringement of the public display right and to sue the party that made the displayed copy for infringement of the reproduction right.¹¹¹ Because one defendant might be more conveniently sued than another, or might have more financial resources with which to satisfy any judgment in favor of the copyright owner, the display right, by exposing multiple defendants to suit, may be useful to the copyright owner.¹¹²

111. The party who made the infringing reproduction might also be contributorily liable for the infringing public display, if that party knowingly materially contributed to the display. Since providing the copy to be displayed would likely qualify as a material contribution to the infringing display, the reproducing party’s liability would turn on whether it knew or had reason to know that the infringing copy would be displayed when it supplied that copy. See discussion *infra* notes 133–42 and accompanying text.

112. The display right may also allow different parties to bring suit. Because copyright is divisible and the exclusive rights granted to the copyright owner may be owned separately, the party entitled to sue for infringement of the reproduction right might be different from the party entitled to sue for infringement of the public display right. In some circumstances, however, a party entitled to publicly

Another important strategic use of the display right is allowing the copyright owner to sue for an infringing display when suit for the infringing reproduction would be time barred. This may have been the situation in the *Ringgold* case. In that case, defendant HBO Independent Productions, which produced the *Roc* episode containing Ringgold's poster, would appear to be directly liable only for reproducing Ringgold's quilt by filming the sitcom, and not for transmitting that display to the public because the episode was transmitted not by HBO but by a broadcast network and Black Entertainment Television (BET).¹¹³ However, by the time Ringgold filed suit the statute of limitations might have barred any claim by Ringgold for the reproduction committed by HBO in originally recording the sitcom episode.¹¹⁴ In that event, the display right would be strategically valuable to Ringgold: although suit for the infringing reproduction would be time-barred, suit for the later infringing display (and to enjoin any future display) would not be barred.

Even where the same party makes the unlawful reproduction and the infringing display and does so at roughly the same time, the display right may assist the copyright owner in establishing personal jurisdiction or venue in a convenient location. In *Burwood Products Co. v. Marsel Mirror and Glass Products, Inc.*,¹¹⁵ for example, the alleged displays at the National Housewares Exhibition in Chicago were cited to show that the plaintiff had alleged a tort that had occurred in Illinois so as to create personal jurisdiction over the allegedly infringing corporate defendant under the Illinois long-arm statute.¹¹⁶

display a work will be entitled, without the permission of the owner of the reproduction right in the work, to reproduce a copy of the work in order to make the display. See 17 U.S.C. § 112(a) (1994) (allowing transmitting entity to make single "ephemeral" copy of transmission program under specified conditions); *id.* § 112(b) (allowing governmental and nonprofit organizations to make up to thirty "ephemeral" copies under certain conditions); *cf.* *Effects Assoc., Inc. v. Cohen*, 908 F.2d 555, 558–59 (9th Cir. 1990) (finding implied license to copy and distribute film footage).

113. See *Ringgold v. Black Entm't Television, Inc.*, 126 F.3d 70, 73 (2d Cir. 1997) (explaining that HBO might have been liable for contributory infringement for authorizing BET to transmit a display of the copy of the quilt incorporated in the sitcom episode).

114. The episode was "produced" at "[s]ome time prior to 1992." *Id.* at 72. Although the episode was shown on broadcast television in 1992 and first transmitted by BET in October 1994, Ringgold did not see the episode until it was shown again on BET in January 1995, after which time she brought suit. See *id.* at 73. The statute of limitations for civil copyright infringement actions requires that suit be commenced "within three years" after the claim accrued. See 17 U.S.C. § 507(b). If the claim for infringing reproduction accrued at the time that HBO recorded the episode "prior to 1992," then the statute of limitations would have barred a suit for that reproduction brought after January 1, 1995, as Ringgold's suit was. See *Ringgold*, 126 F.3d at 73. Ringgold may nonetheless have named HBO as a defendant for its act of allegedly infringing reproduction on the theory that the claim did not accrue until she could have learned of the reproduction, which might not have been until the episode was first broadcast "sometime" in 1992, possibly within the limitations period at the time Ringgold filed suit. *E.g.*, *Taylor v. Meirick*, 712 F.2d 1112, 1117 (7th Cir. 1983) ("[W]hether or not the defendant has done anything to conceal from the plaintiff the existence of the cause of action, the statute of limitations is tolled until the plaintiff learned or by reasonable diligence could have learned that he had a cause of action.").

115. 468 F. Supp. 1215 (1979).

116. See *id.* at 1218.

The availability of separate reproduction and public display right claims might also afford copyright owners remedial advantages. Where an infringing copy has been made by one party and displayed by another party, a copyright owner who sued for infringement and elected to recover statutory damages would be entitled to a statutory damage award against each infringer. The Copyright Act provides that copyright owners may recover a single statutory damage award “for all infringements involved in the action, with respect to any one work, for which any one infringer is liable individually”¹¹⁷ So, for example, if a production company recorded a television program with a copyrighted work on the set and a television network broadcast that program, the owner of the copyright in the work might be able to recover one statutory damage award from the production company for its infringing reproduction and a separate statutory damage award from the television network for its infringing display. In addition, separate claims for infringement of the reproduction and the display right might allow a copyright owner to recover statutory damages and attorney’s fees where such recovery would otherwise be barred. Availability of those remedies to a copyright plaintiff depends on the plaintiff registering the work before the infringement is “commenced.”¹¹⁸ If the production company recorded its television episode prior to a plaintiff’s registering a work, but the television network broadcast the episode after registration, the plaintiff would be unable to recover statutory damages or attorney’s fees for the production company’s infringing reproduction but would be able to recover such amounts for the network’s infringing display.¹¹⁹

117. 17 U.S.C. § 504(c)(1). The statute also provides that the single award shall be for all infringements “for which any two or more infringers are liable jointly and severally” *Id.* If, therefore, the reproducing and the displaying party were each jointly and severally liable for the other party’s infringement—for example, if the reproducing party was contributorily liable for the displaying party’s infringing display and if the displaying party were contributorily liable for the reproducing party’s infringing reproduction—the copyright owner would only be entitled to a single statutory damage award.

118. 17 U.S.C. § 412(1). In the case of published works, the copyright owner is given a three-month grace period after publication in which to register the work and obtain statutory damages and attorney’s fees for infringement that commenced after the work’s publication. *See id.* § 412(2). In *Thomas*, the *defendant* asserted that its conduct at the trade show constituted infringement of the public display right in order to argue that because the displays constituted the “commencement” of any infringement by it, and because the plaintiff did not register her claim to copyright in her designs until ten months after those displays, the Copyright Act barred her from recovery of statutory damages or attorney’s fees for the defendant’s infringement. *See Thomas v. Pansy Ellen Prods.*, 672 F. Supp. 237, 240 (W.D.N.C. 1987).

119. Separate reproduction and display right claims might confer remedial advantages on a copyright owner against even a single defendant. Because reproduction and display are separate infringements, one could be completed before registration but the other could be “commenced” after registration, thereby allowing statutory damages and attorney’s fees for that later infringement.

4. Conclusion

The reported display right cases involving pre-computer-network technology highlight the significant interaction of the reproduction and public display rights with respect to transmitted displays. The display right is likely to be important to copyright owners primarily for *strategic* reasons when displaying a copyrighted work requires making a copy of that work and is likely to be significant to copyright owners as an independent means of controlling the use of their works where a display can be transmitted from an existing, lawfully made copy. Thus, the nature of the usefulness of the display right to copyright owners with respect to any given transmission technology will turn on whether that technology requires the making of a new copy in order to transmit a display. With television, that has generally been the case, so the display right has primarily been valuable for strategic reasons, while the reproduction right alone confers significant control over TV transmissions.

B. Transmissions over Computer Networks

As Congress foresaw when it enacted the 1976 Act, the emergence of digital computer networks has greatly increased the potential universe of transmitted displays within the scope of the public display right.¹²⁰ *Nimmer on Copyright* states that “the important function of the display right . . . can be found in its application to the transmission of the manuscript or printed version of [literary, musical and dramatic] works so that they can be read by electronic means on cathode ray tubes or otherwise through computer technology.”¹²¹ Other commentators have suggested that “an owner’s right to display may be the broadest of all the exclusive rights in the context of [computer networks] because a majority of uses constitute a public display.”¹²²

The emergence of computer networks has vastly increased the number of transmitted displays that take place. A web page that provides access to, for example, a *New Yorker* cartoon transmits a display of a copy of that cartoon to everyone who accesses that web page. The copy that is displayed is a computer file containing information in digital format that can be interpreted by a computer program (such as a web browser) to make the image visible on a computer screen. That file is

120. The mere display of a work on a computer screen using a copy of the work (e.g., a file on a diskette or CD) that is *not* transmitted would likely not be an infringing public display. Even if such a display occurs in public (e.g., at a library or office), § 109(c) will likely shield it, since the display will occur to viewers physically present at the place where the displayed copy (the diskette or CD) is located. *E.g.*, *Tasini v. The New York Times Co.*, 972 F. Supp. 804, 816–17 & n.8 (S.D.N.Y. 1997), *rev’d on other grounds*, 206 F.3d 161 (2d Cir. 1999), *cert. granted*, 121 S. Ct. 425 (2000).

121. 2 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 8.20[A], at 8-280 (1993).

122. Michael D. McCoy & Needham J. Boddie II, *Cybertheft: Will Copyright Law Prevent Digital Tyranny on the Superhighway?*, 30 WAKE FOREST L. REV. 169, 189 (1995).

generally stored on the hard drive of the website's computer (or "server"). When a user accesses the cartoon on the website, the information in that file is transmitted to the user's computer, which can interpret the information in order to make the cartoon visible on the user's screen. The website has thus transmitted a display of its copy of the cartoon to the end user. As computer networks—not only the Internet, but proprietary computer networks such as Lexis and Westlaw—have become more common, millions of transmitted displays now occur on a daily basis.¹²³

In addition, transmissions of copyrighted works over computer networks are more likely than previous transmission technologies (such as television) to replace the sale of copies of those works. The concerns raised during the drafting of the 1976 Act that *broadcast* transmissions would substitute for the sale of copies seem rather implausible.¹²⁴ It is hard to imagine, for example, that the sale of printed maps would be significantly harmed by the television broadcast of images of maps.¹²⁵ In the first place, given the limited number of stations available on the broadcast spectrum, it seems hard to imagine that much air time would be devoted to the broadcast of maps.¹²⁶ In addition, given the primary use of maps for the practical purpose of locating some particular place, it seems unlikely that anyone considering buying a map for that purpose would consider broadcasts a suitable substitute. How likely is it that the particular map one needs would be available by broadcast at the time one needs it? How likely is it that the broadcast would include precisely the portions of the map needed? How useful would it be to see a map on a television screen but not be able to consult it while en route to your destination? The broadcast of text from literary works seems equally unlikely to cut into the sale of printed copies of such books—after all, the viewer would have to read on screen the particular book chosen by

123. See Fred H. Cate, *The Technological Transformation of Copyright Law*, 81 IOWA L. REV. 1395, 1433 (1996) (“[N]etworked digital expression cannot be viewed on a computer monitor . . . without violating the exclusive right to display . . . the work publicly.”). It is not clear that every computer network transmission of a visually perceptible work to the public will constitute a public display. In some cases, the transmission might not result in the work being made visible on the recipient's screen. For example, a web surfer might download a photograph such that a file containing the photograph is stored on the user's hard drive but the photograph is not shown on the screen as part of the transmission, although the user can view the stored photograph at any later time. The analogous question of whether downloading a sound recording of a song constitutes a public performance of that song even if the recipient does not hear the recording as it is transmitted has generated substantial controversy. *E.g.*, AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 104–10 (2d ed. 1996 & Supp. 2000). Even if such download transmissions do not constitute displays, a very significant proportion of computer transmissions will be public displays because the work transmitted is shown on the recipient's computer screen as the transmission is received.

124. See discussion *supra* notes 52–56 and accompanying text.

125. See PRELIMINARY DRAFT, *supra* note 34, at 186 (statement of Horace Manges on initial proposal for display right) (“[T]he publication of maps . . . would be greatly prejudiced, because after one sale no one could estimate the damage that could be done by the use in broadcasting.”).

126. Even in a world of several hundred cable or satellite channels, an “all maps” station seems unlikely.

the broadcaster at the time chosen by the broadcaster, and would have to read the text at the pace and in the sequence that it was transmitted.¹²⁷ In short, a viewer's lack of control over the viewing experience would seem to make television transmissions unlikely to interfere significantly with the sale of copies of most types of works.

Transmissions over computer networks, however, can replicate for the user much of the control over the viewing experience that possessing a physical copy offers.¹²⁸ A literary work posted on the World Wide Web, for example, is generally available to a user on demand (assuming no technical failures)—the web user can access the text whenever she wants. In addition, the user can read the text at her own pace and can jump back and forward in the text as she can with a printed copy. And far more such works can be transmitted over the Web than over television because the network does not face the constraints of being able to transmit only a relatively small number of programs. In short, transmitted displays of a work over computer networks might well substitute for the sale of copies of that work to viewers, and therefore raise precisely the concern that the display right was intended to address.¹²⁹

Because transmissions over computer networks are so different in quantity and quality from television transmissions, we might expect the display right to be of increased importance to copyright owners in licensing the use—and policing the infringement—of their works on computer networks. Indeed, since 1993, cases alleging infringement of the public display right by means of transmissions over computer networks have come at a somewhat faster pace than those involving earlier technologies, although perhaps not at the pace that one would expect for a technology that has exploded at the rate that the Internet has over the last

127. The broadcast of images from art books might pose something more of a threat to the sale of copies, though it is not clear that someone who is willing to view those images at a time, pace, and sequence chosen by the broadcaster rather than by the viewer (who would be able to make those decisions by having a printed copy) would be likely to purchase a copy of the book. The example of a broadcast of the Sunday newspaper comic section seems somewhat more realistic. *See supra* note 54 and accompanying text. For example, when a strike stopped newspaper delivery in New York City, Mayor Fiorello La Guardia read the comics over the radio. *See* THOMAS KESSNER, FIORELLO H. LA GUARDIA AND THE MAKING OF MODERN NEW YORK 575 (1989).

128. Consider, for example, the difference between a television station that transmits the text of court opinions and a computer network such as Lexis or Westlaw that also transmits such texts.

129. In the related context of digital transmissions of performances of recorded music, Congress predicted in 1995 that the coming availability of digital-quality transmissions of particular sound recordings on request was "likely to have a significant impact on traditional record sales" because such transmissions (predicted to come from a service often referred to as a "celestial jukebox") would be a much closer substitute for the purchase of a prerecorded phonorecord of a sound recording than would traditional, noninteractive transmissions such as radio broadcasts. S. REP. NO. 104-128, at 13-16 (1995). As a result, when Congress granted sound recording copyright owners a limited right of public performance by means of digital audio transmissions, 17 U.S.C. § 106(6) (Supp. I 1995), it provided for exemptions and statutory licenses for various *noninteractive* public performances but imposed almost no limitations allowing *interactive* transmissions without the consent of the copyright owner. *See generally* 17 U.S.C. § 114(d).

five years.¹³⁰ But as with the television cases, the importance of the display right in the digital networked environment will likely turn on whether computer-transmitted displays involve transmitting the display of an existing lawfully made copy or making a new copy to transmit.

1. *Display of a Newly Made Copy*

As with displays made over television, transmitting a display over a computer network will, in many cases, require an act of reproduction to produce the copy that is displayed. Imagine, for example, that I want to put five *New Yorker* cartoons on my website. If I have physical, “analog,” directly perceptible copies of the cartoons—perhaps printed copies of the issues of the magazine in which they originally appeared—then I can scan those copies to make digital copies of the cartoons, place those digital copies on my web server, and transmit them to anyone who requests my web page. Doing so involves at least two acts of reproduction for which I would need the copyright owner’s permission (or some other excuse or justification): scanning the cartoons into digital files and copying those files onto the web server.¹³¹ Alternatively, the cartoons might already exist in a digital format in which they are not directly visually perceptible but from which they can be perceived using a machine or device. For example, I may own a CD-ROM or a diskette that contains digital files that I can use, by means of a computer and appropriate software, to show the cartoons on a computer screen. To incorporate those cartoons into my website, I will generally copy the existing digital files from the CD-ROM to my web server—again, engaging in an act of reproduction subject to the control of the copyright owner.¹³² Thus, as in

130. See generally *Piaggio & C.S.p.A. v. Scooterworks United States, Inc.*, No. 98-C7573, 1999 U.S. Dist. LEXIS 13296 (N.D. Ill. Aug. 19, 1999) (alleging violation of display right by displaying posters on website); *Playboy Enters. v. Webworld, Inc.*, 991 F. Supp. 543 (N.D. Tex. 1997) (ruling that Webworld infringed Playboy’s copyright by selling copyrighted images over the Internet); *Playboy Enters. v. Russ Hardenburgh, Inc.*, 982 F. Supp. 503 (N.D. Ohio 1997) (holding that the posting of copyrighted material on a computer bulletin board service available only to paying customers was a direct and contributory copyright infringement); *Playboy Enters. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993) (explaining that Frena infringed Playboy’s copyright by displaying copyrighted material on its subscription computer bulletin board service).

131. See generally *Marobie-FL, Inc. v. Nat’l Ass’n of Fire Equip. Distribs.*, 983 F. Supp. 1167, 1173 (N.D. Ill. 1997) (copying digital file to hard drive of web server constitutes reproduction). This situation mirrors the situation discussed above with television and motion picture displays: the party using recorded television or a film to display a work will have to reproduce the work—have to take an existing, directly visually perceptible copy, such as a poster of a quilt or a magazine cover, and fix an image of that work in a new copy that is not directly visually perceptible (such as a film print, a video recording, or, increasingly, a digital file) but that can be transmitted or projected and made visually perceptible.

132. See *Sega Enters. v. MAPHIA*, 948 F. Supp. 923, 931–33 (N.D. Cal. 1996) (holding that uploading and downloading a copyrighted computer game to a computer bulletin board constituted the making of copies of the work); *Sega Enters. v. Sabella*, No. C93-04260 CW, 1996 U.S. Dist. LEXIS 20470, at *18, 23 (N.D. Cal. Dec. 18, 1996) (“[C]opies were made when the Sega game files were uploaded to or downloaded from Sabella’s BBS” and the making of those copies constituted “direct copyright infringement by [the defendant’s] BBS users.”).

the television cases, the need to reproduce a copy to be displayed by a transmission over a computer network will allow the copyright owner an opportunity to control the displayer's activity using the reproduction right, and the public display right is likely to be mostly of strategic use.¹³³

The strategic value of the display right may, however, be greater for computer-transmitted displays than it has been with respect to television transmissions because the two different rights give copyright owners different types of infringement claims against different defendants, and the claim and defendant offered by the public display right may be preferable. In some cases in which a copyrighted work is copied and displays of that copy are transmitted to the public over computer networks, the party reproducing the work by copying a digital file to the computer network's server may not be the operator of the network but a *user*. In early cases involving computer bulletin board services (BBS),¹³⁴ the operator of the BBS network allowed end-user subscribers to the network to place files on the bulletin board that were then available for viewing by all users of the BBS.¹³⁵ The same situation is possible in cases involving World Wide Web sites, now much more common than computer bulletin boards.¹³⁶ In such instances, the posting user will have reproduced the work in a copy stored on the BBS or website server, but the operator of the BBS or the website will have transmitted displays of that copy to other users. Therefore, the operator will not be *directly* liable for the posting user's infringing reproduction, but may be *contributorily* liable for that reproduction.¹³⁷ In such cases, though, the transmission itself will

133. The reproduction and *performance* rights interact in a similar way on computer networks. For example, when major record labels sued MP3.com over its "MyMP3.com" service that allowed users to listen to songs over the Internet, the record companies were successful in their claim that MP3.com had infringed the labels' *reproduction* right by copying songs from compact discs it had purchased onto the MP3.com web server. *See* UMG Recordings, Inc. v. MP3.com, Inc., 92 F. Supp. 2d 349, 353 (S.D.N.Y. 2000).

134. "A bulletin board system is an on-line service that allows users to exchange messages, texts, computer programs, photographs, music, and other forms of information by uploading materials from the user's computer to the system and by downloading materials from the BBS to his own computer." Niva Elkin-Koren, *Copyright Law and Social Dialog on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 CARDOZO ARTS & ENT. L.J. 345, 347 & n.5 (1993).

135. *E.g.*, *Playboy Enters. v. Frena*, 839 F. Supp. 1552, 1554 (M.D. Fla. 1993).

136. *E.g.*, *Los Angeles Times v. Free Republic*, 54 U.S.P.Q.2d 1453, 1455-56 (C.D. Cal. 2000) (website allowed users to post news articles copied from plaintiffs' copyrighted publications).

137. For example, in *Sega Enterprises v. MAPHIA*, 948 F. Supp. 923 (N.D. Cal. 1996), a case involving the uploading and downloading of video games to and from a computer BBS, the court stated that "copies [of Sega's copyrighted games] were made when unauthorized copies of Sega game files were . . . uploaded to [the defendant's] BBS by [defendant's] BBS users" and that the making of those copies constituted "direct copyright infringement by [defendant's] BBS users." *Id.* at 932-33. The court found, however, that the plaintiff had not established that the defendant, the BBS operator, had "himself uploaded or downloaded the files, or directly caused such uploading or downloading to occur," and that therefore *direct* infringement by the defendant had not been shown. *Id.* at 932. The court, however, found the defendant BBS operator liable for contributory infringement. *See id.* at 933. The court found that the operator knew or had reason to know that the uploading and downloading BBS users were making copies of the plaintiff's copyrighted video games and the operator had induced, caused, or materially contributed to the end users' infringing acts of reproduction "by provid-

infringe the public display right. The copyright owner can therefore sue the transmitting operator for *direct* infringement of the public display right, rather than having to prove that the operator is *contributorily* liable for a user's acts of reproduction.¹³⁸ Copyright owners will generally prefer to sue the website operator rather than the end user, and will prefer to sue for direct infringement rather than for contributory infringement, so the display right claim will be a welcome one.

Copyright owners will generally prefer to sue the operator rather than a user for several reasons. First, it is usually easier to locate the entity that runs a website or a BBS than it is to locate users of the website who may have posted material anonymously or pseudonymously.¹³⁹ Second, in the case of infringements of multiple copyrights by multiple individuals, a copyright owner can obtain relief for all infringements involved in a single suit against the website operator instead of bringing suits against a multiplicity of end users who may be located throughout the United States or, indeed, the world. This may be particularly useful with respect to injunctions, giving the copyright owner relief against future infringements of her work by any user of the website. Third, the operator of a website may have greater financial resources to satisfy any monetary judgment obtained than would individual web users. Finally, in some cases the infringing end user may also be a customer of the copyright owner, and the owner may wish to stop the infringing activity without unnecessarily alienating the end-user customer and similarly situated customers.

Copyright owners will generally prefer to sue for direct infringement rather than for contributory infringement because proving contributory infringement is more difficult. The *prima facie* elements of a direct infringement claim are ownership of a valid copyright in a work and copying by the defendant of protected material from that work in violation of one of the exclusive rights granted by § 106.¹⁴⁰ In order to prove a case of contributory infringement, however, a plaintiff must prove not only that a direct infringement has been committed by someone,¹⁴¹ but also that the defendant materially contributed to or induced

ing, monitoring, and operating the BBS software, hardware, and phone lines necessary for the users to upload and download games." *Id.*; see also *Sega Enters. v. Sabella*, No. C93-04260 CW, 1996 U.S. Dist. LEXIS 20470, at *25 (N.D. Cal. Dec. 18, 1996) (defendant BBS operator contributorily liable for infringing reproductions made by uploading and downloading plaintiff's copyrighted video games to BBS).

138. In such cases, a copyright owner could sue the users for direct infringement of the reproduction right and contributory infringement of the public display right and could sue the website or BBS operator for direct infringement of the public display right and contributory infringement of the reproduction right.

139. In addition, where website users are located outside the United States, the website operator may be the only defendant over whom the court has personal jurisdiction.

140. See 2 PAUL GOLDSTEIN, COPYRIGHT § 7.1, at 7:1-7:2 (2d ed. 1995).

141. See *id.* § 6.3.2, at 6:44 (2d ed. 1995 & Supp. 2000) ("Courts, including the United States Supreme Court, have universally held that, for a defendant to be contributorily . . . liable, a direct copyright infringement must have occurred.").

the infringement, and that the defendant knew or should have known of the infringing activity.¹⁴²

So in this category of cases—situations in which the transmitting entity displays an unauthorized copy that has been made by a third party—the public display right should be more useful to copyright owners than the reproduction right, because it allows a copyright owner to bring a suit for direct rather than contributory infringement and because it allows the owner to sue the most convenient defendant, the transmitting entity, rather than the party who made the infringing reproduction.¹⁴³

2. *Display of an Existing, Lawfully Made Copy*

The discussion so far has assumed that someone—either the website operator or a user of the site—engaged in an act of reproduction to create the copy (i.e., the file on the server) that is used to transmit the display of a work to recipients of the transmission. That is generally the way websites and other computer networks operate today. We may be moving, however, to a world in which more and more displays are transmitted over the web without anyone—either the displaying party or anyone else—engaging in an unauthorized act of reproduction. If this happens, the display right should become more important to copyright owners in controlling computer-transmitted displays, because no reproduction claim will be available in such cases.¹⁴⁴

In some cases, a party transmitting a display of a work will do so using an existing copy rather than reproducing a new copy on the network's server. For example, I might buy a copy of a *New Yorker* cartoon on a CD-ROM. Instead of copying the cartoon from the CD-ROM to the hard drive of my web server, I might place the disc in the CD drive of that server, and use the copy on the CD-ROM—a copy that I purchased and did not create by means of an unauthorized act of reproduction—to transmit the cartoon over the web to anyone who requested it.¹⁴⁵ This

142. *E.g.*, *Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971) (establishing contributory infringement when “one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another” and stating that the standard of knowledge is objective) (footnote omitted). If the defendant's contribution to the infringement is in the form of copying equipment, the defendant will not be liable if the equipment has substantial noninfringing uses. *See Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 442 (1984).

143. The choice between direct and contributory infringement actions and between reproducing and displaying defendants can also exist for public displays by television transmission. In *Ringgold v. Black Entertainment Television*, for example, HBO had produced the *Roc* episode and reproduced Ringgold's quilt, while BET had shown the episode on cable and displayed the quilt. *See* 126 F.3d 70 (2d Cir. 1997). The nature of the television industry, however, generally means that both defendants will be relatively large companies that are fairly easy to locate and take to court, making the choice a less important one.

144. As discussed below, a reproduction claim would be available if mere temporary storage in RAM is considered to be the making of a “copy.” *See infra* Part IV.B.

145. Another type of transmission in this category might be live “webcam” transmissions that are in many ways analogous to live television. For several years now, an increasing number of websites

might be useful, for example, for transmitting over a network requested sections of a large reference work stored on several CD-ROMs, such as a large encyclopedia or a set of legal reporters.

In other cases, the party transmitting the display may make a copy onto the network's server, but that act of reproduction may be authorized. For example, instead of buying a CD-ROM with a digital file of a *New Yorker* cartoon, I might instead download such a digital file over the Internet directly from the publisher's or artist's website to the hard drive of my own web server.¹⁴⁶ This may be a perfectly legitimate transaction in which I pay the copyright owner for the digital file, just as I would pay for the file on CD-ROM or for a printed copy of the cartoon. My act of reproduction would therefore not be an infringement.¹⁴⁷ Once the digital file—a copy of the cartoon—resides on my web server, I can transmit the cartoon to anyone who requests my website—thus publicly displaying it—without any need for further reproduction such as would be required if I bought the cartoon in a printed magazine issue or on CD-ROM, formats that would require an additional act of reproduction in order to place the cartoon on the web server.¹⁴⁸

have offered real-time transmission of pictures taken by cameras installed by the site. *E.g.*, *Jennicam*, at <http://www.jennicam.com> (last visited Oct. 9, 2000) (on file with *University of Illinois Law Review*); *The Nerdman Show*, at <http://www.nerdman.com> (last visited Oct. 9, 2000) (on file with *University of Illinois Law Review*); *Web Cams*, at http://www.dir.yahoo.com/computers_and_Internet/Internet/Devices_Connected_to_the_Internet/ (listing several hundred such sites) (last visited Oct. 9, 2000) (on file with *University of Illinois Law Review*). See generally Marshall Sella, *The Electronic Fishbowl*, N.Y. TIMES, May 21, 2000 (Magazine), at 50 (explaining how viewers of Big Brother could watch participants in real time with no disruption by logging on to the website at any hour). Typically these cameras are simply pointed at a person's home or office, or at a street corner or campus location, and they transmit whatever images the camera picks up at that location. Usually the webcam captures a new image at preset intervals (e.g., every two minutes) and the site transmits the new image when it is captured. Presumably, each image is actually stored on the hard drive of the website's server to be transmitted to web browsers until the next image is captured. If, however, the images were transmitted by the website as they are taken and without being stored on the website's server, any copyrighted work included in the picture transmitted—a poster hanging on the wall, for example—would be publicly displayed but not reproduced.

146. *E.g.*, *Cartoonbank.com*, at <http://www.cartoonbank.com> (offering to license cartoons that appeared in the NEW YORKER) (last visited Oct. 9, 2000) (on file with *University of Illinois Law Review*).

147. Because in this example I am acquiring my copy of the cartoon directly from the copyright owner, she would have the opportunity, as part of the transaction, to enter into a contract with me in which I promised not to use the copy I was acquiring for the purpose of transmitting displays of the work to the public over the Internet. It is possible to see the grant of the public display right to copyright owners in the 1976 Act as reflecting a Congressional conclusion that most such transactions would be likely to include such contractual restrictions and that it would be more efficient to protect against such uses through a single grant of an exclusive right to copyright owners rather than through individual contractual negotiation and enforcement at the time of the sale of a copy or the licensing of the reproduction right.

148. A work might also be displayed to the public by a transmission over a computer network without an unauthorized act of reproduction occurring in situations involving "inline linking" or "framing." See Allison Roarty, Note, *Link Liability: The Argument for Inline Links and Frames as Infringements of the Copyright Display Right*, 68 FORDHAM L. REV. 1011, 1048–49, 1055–56 (1999). In those situations, a text or image appears on one website and the file containing that work is stored on the server for that website, and a second website incorporates the text or image into its own web page, but does so by including in the HTML code for the website a reference that instructs an end user's

In both these situations, there would be no unauthorized reproduction for which the copyright owner could sue, but the public displays by transmission would be unauthorized, and the display right would allow the copyright owner to prevent or license the transmissions even though the copyright owner would have no claim for violation of the reproduction right. This would appear to be precisely the kind of case that the drafters of the display right intended the right to deal with: a purchaser of a single copy of a work could, without engaging in further reproduction, display the work to anyone with a connected computer in a way that could adequately substitute for the sale of copies.

IV. THE DISPLAY RIGHT AS AN ALTERNATIVE TO DISTRIBUTION AND RAM COPIES

Two recent developments in the application of copyright law to computer networks could substantially eliminate the usefulness to copyright owners of the public display right in controlling transmissions of copyrighted works over such networks. Some courts have held that transmitting a work over the Internet violates the copyright owner's exclusive distribution right, and other courts have held that temporary storage of a copyrighted work in the random-access memory of a computer violates the copyright owner's exclusive reproduction right.¹⁴⁹ Although these interpretations of the distribution and reproduction right give copyright owners control over computer network transmissions, as the display right does, each presents serious disadvantages that the display right does not. This part examines each development and argues that the public display right is a better means to give copyright owners appropriate control over transmissions of their works over computer networks.

A. *Computer Network Transmissions and the Distribution Right*

Courts have begun to hold that transmissions over computer networks violate the copyright owner's *distribution* right. This interpretation of the distribution right contravenes the language and intent of the 1976 Act, poses serious problems for the application of copyright to computer networks, and is unnecessary to protect copyright owners.

browser to contact the first website in order to have the referenced image or text transmitted to the end user and displayed by the end user's browser, often surrounded (or "framed") by content created by the second website. Because the actual transmission of the copyrighted work is made by the server for the first website, it is unclear that the second website, by incorporating the reference to the linked or framed content, is itself engaged in any act of public display.

149. See *infra* notes 150–65, 215–22 and accompanying text.

1. *Courts Have Interpreted the Distribution Right to Cover Computer Transmissions*

Perhaps the most significant case involving application of the distribution right to the transmission of copyrighted works over computer networks is *Playboy Enterprises v. Frena*.¹⁵⁰ Frena operated a computer network known as a bulletin board service (BBS), which was accessible by modem to computer users who paid a subscription fee.¹⁵¹ A subscriber could connect to Frena's network and upload computer files from the subscriber's computer to the BBS computer, so that the uploaded files would be stored on a storage medium (such as a hard drive) at the BBS computer.¹⁵² Similarly, a user could download material stored on the BBS computer to the user's computer, so that the material would be stored on, for example, the user's hard drive.¹⁵³ The material stored on Frena's BBS included 170 images taken from Playboy's copyrighted publications, and Playboy sued Frena for copyright infringement.¹⁵⁴ Frena admitted that the images were stored on the BBS computer without Playboy's consent, were substantially similar to copyrighted Playboy photographs, and had each been downloaded at least once by a BBS customer.¹⁵⁵

In granting Playboy summary judgment on its copyright infringement claim, the court concluded that Frena's activities implicated the public display right.¹⁵⁶ Quoting the House Report on the breadth of the display right, the court stated that the right "precludes unauthorized transmission of the display from one place to another, for example, by a computer system."¹⁵⁷ After considering the definition of "publicly" display, the court concluded that Frena's display had been public and therefore in violation of Playboy's exclusive right under § 106(5).¹⁵⁸

150. 839 F. Supp. 1552 (M.D. Fla. 1993).

151. *See id.* at 1554.

152. *See id.*

153. *See id.*

154. *See id.*

155. *See id.* Frena denied that he himself had placed any of the images on the BBS computer and stated that the images had been uploaded by subscribers. *See id.*

156. *Id.* at 1556–57.

157. *Id.* Transmissions from Frena's BBS apparently included transmissions of "displays"—that is, the end user who connected to the BBS could actually see photographs, rather than merely being able to download files which, once stored on the end user's computer, could later be viewed. *See supra* note 123. The court said that a user of Frena's service "may browse through different BBS directories to look at the pictures," in addition to being able to download files. *Frena*, 839 F. Supp. at 1554 (emphasis added). *But see* David J. Loundy, *Revising the Copyright Law for Electronic Publishing*, 14 J. MARSHALL J. COMPUTER & INFO. L. 1, 26–27 (1995) (arguing no public display occurs in BBS transmissions such as those in *Frena*).

158. *See Frena*, 839 F. Supp. at 1557. The *Frena* court reached the right conclusion on the display being public but by the wrong reasoning. *See* Niva Elkin-Koren, *Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 CARDOZO ARTS & ENT. L.J. 345, 357–60 (1993). The *Frena* court said that Frena's display to subscribers was public because, "[t]hough limited to subscribers, the audience consisted of 'a substantial number of persons outside the normal circle of family and its social acquaintances.'" *Frena*, 839 F.

The court also held that Playboy's right "to distribute copies to the public ha[d] been implicated by . . . Frena."¹⁵⁹

Section 106(3) grants the copyright owner "the exclusive right to sell, give away, rent or lend any material embodiment of his work."

There is no dispute that Defendant Frena supplied a product containing unauthorized copies of a copyrighted work.¹⁶⁰

Rejecting Frena's fair use and innocent infringement defenses, the court concluded that "the undisputed facts mandate partial summary judgment that Defendant Frena's unauthorized *display and distribution* of [Playboy]'s copyrighted material is copyright infringement."¹⁶¹ Thus, the court found that Frena's transmission of Playboy's copyrighted works over his computer network infringed both the distribution and public display rights.

Other courts have followed *Frena* and held that transmissions of copyrighted works over computer networks infringed the copyright owner's distribution rights.¹⁶² At least one court has reached the same

Supp. at 1557 (citation omitted). The definition of "publicly" displaying a work seems to contemplate two distinct ways in which a display can be public. First, it can be made in a *physical* place that is either open to the public or that is semipublic (that is, a place where "a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered"). 17 U.S.C. § 101 (Supp. IV 1998). Frena's displays of Playboy's images do not appear to have been made at such a *physical* place, but rather to have been made by means of a transmission from Frena's BBS computer, over telephone lines, to a subscriber's computer. See *Frena*, 839 F. Supp. at 1554. The Copyright Act, however, expressly contemplates that a display can be made publicly, even if it is not made in a physical place open to the public, if it is made by transmission. See 17 U.S.C. § 101. Transmitting or otherwise communicating a display either (a) to a public or semipublic place or (b) "to the public, by means of any device or process" constitutes a public display or performance. *Id.* Assuming that none of Frena's subscribers received a transmitted display in a public or semipublic place (by, for example, connecting to Frena's BBS using a computer at a public library or a semipublic office), the transmissions from the BBS computer would still qualify as "to the public" under established law that transmissions of performances to a limited group of customers or subscribers constitutes public performance. *E.g.*, 1976 HOUSE REPORT, *supra* note 2, at 65 (transmission is "to the public" if potential recipients are limited segment of public such as subscribers to cable TV service); *Columbia Pictures Indus., Inc. v. Redd Horne, Inc.*, 749 F.2d 154, 159 (3d Cir. 1984); *On Command Video Corp. v. Columbia Pictures Indus., Inc.*, 777 F. Supp. 787, 789-90 (N.D. Cal. 1991).

159. *Frena*, 839 F. Supp. at 1556.

160. *Id.* (quoting 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.11[A], at 8-124.1 (1993)).

161. *Id.* at 1559 (emphasis added). The *Frena* court's opinion never considered whether the defendant was liable either for direct or contributory infringement based on acts of reproduction in violation of the plaintiff's exclusive right of reproduction under § 106(1).

162. *E.g.*, *Playboy Enters. v. Russ Hardenburgh, Inc.*, 982 F. Supp. 503, 512-15 (N.D. Ohio 1997). Other courts, in contexts other than copyright infringement actions, have followed *Frena*'s conclusion that transmission over a computer network constitutes "distribution," usually without much analysis beyond a citation to and summary of the *Frena* opinion. *E.g.*, *Playboy Enters. v. Chuckleberry Publ'g, Inc.*, 939 F. Supp. 1032, 1039 (S.D.N.Y. 1996). The court noted:

Here, Defendant . . . provides its own services, PLAYMEN Lite and PLAYMEN Pro, and supplies the content for these services. Moreover, as in *Frena*, these pictorial images can be downloaded to and stored upon the computers of subscribers to the service. In fact, Defendant actively invites such use: the Internet site allows the user to decide between viewing and downloading the images. Thus this use of Defendant's Internet site constitutes a distribution.

Id. (interpreting the term "distributing" in a previously issued injunction, not in the Copyright Act); *State v. Perry*, 697 N.E.2d 624, 628 (Ohio 1998) (finding state statute preempted by 1976 Copyright Act). The *Perry* court noted that "[p]osting software on a bulletin board where others can access and

conclusion with respect to the posting and transmission of material on the World Wide Web,¹⁶³ an entirely logical extension given the significant similarities in the technology involved between computer bulletin board systems and the World Wide Web. In other cases involving transmissions of visually perceptible works over computer networks, courts have found infringement of the distribution right and have not even mentioned the display right.¹⁶⁴ Indeed, the view that transmission of a copyrighted work over a computer network constitutes infringing distribution of that copyrighted work has led some plaintiffs not even to allege violation of the public display right by transmissions of displays over the Internet.¹⁶⁵

2. *Frena and Its Progeny Misinterpret the Distribution Right*

The conclusion that transmissions over computer networks constitute a violation of the copyright owner's distribution right appears poised to make the public display right superfluous in the context of the very technology that the drafters of the display right were targeting. The dis-

download it is distribution" and such posting may also be contributory infringement by facilitating a third party's unauthorized copying and may also violate exclusive public display right. *Id.* (citing *Frena*).

163. See *Playboy Enters. v. Webbworld, Inc.*, 991 F. Supp. 543, 550–53 (N.D. Tex. 1997).

164. *E.g.*, *Perry v. Sonic Graphic Sys., Inc.*, 94 F. Supp. 2d 616 (E.D. Pa. 2000). In *Perry*, a professional photographer licensed to a defendant the one-time, nonexclusive right to use certain photos in 2,000 copies of a locally distributed six-page brochure for a one-year period. *See id.* at 617. When the plaintiff found the photographs posted on the defendant's website, he sued for copyright infringement. *See id.* at 617–18. The court concluded that the use of the photographs on the website was not authorized by the license, and that the defendant had therefore "violate[d] Plaintiff's exclusive rights under 17 U.S.C. § 106(1)–(3)"—the rights of reproduction, preparation of derivative works, and distribution—not the § 106(5) right of public display. *Id.* at 621. The absence of any discussion of a display claim is all the more striking since the case also involved allegations that the defendant had hung a large poster-sized print of one of the plaintiff's photographs in the defendant's waiting room—an activity that would appear to infringe *only* the public display right and no other right. *See id.* Nevertheless, the court's discussion of this activity entirely omits any mention of the public display right: "Plaintiff has also shown that Sonic used his photographs in a large-sized poster *displayed* in Sonic's waiting room, which was not authorized by the Licensing Agreement. This violates Plaintiff's exclusive rights under 17 U.S.C. § 106(1) [reproduction] and (2) [preparation of derivative works]." *Perry*, 94 F. Supp. 2d at 621 (emphasis added).

165. *E.g.*, *Marobie-FL, Inc. v. Nat'l Ass'n of Fire Equip. Distribs.*, 983 F. Supp. 1167, 1172–79 (N.D. Ill. 1997). *Marobie* involved an allegation that the defendants had placed the plaintiff's copyrighted collection of digital clip art on a defendant's web page. *See id.* at 1171. The court held, following *Frena*, that in addition to infringing acts of reproduction, the defendant had engaged in infringing acts of distribution:

The placement of the files containing the clip art on [defendant's] Web Page also violated plaintiffs [sic] exclusive right to publicly distribute the clip art. See *Playboy [v. Frena]*, 839 F. Supp. at 1556–57 (operator of computer bulletin board service which included files containing digitized copies of plaintiffs [sic] copyrighted photographs was liable for unauthorized public distribution).

Id. at 1173. The *Marobie* court in a footnote pointed out that the *Frena* decision had also found an infringement of the public display right, and noted that "[a]lthough plaintiff [in *Marobie*] does not allege [defendant] violated its right to publicly display the clip art, [defendant] appears to [be] liable for violating this right as well." *Id.* at 1173 n.4.

tribution right as currently framed, however, does not appear to encompass transmissions of copyrighted works over computer networks.

a. Plain Language and Legislative History of the Distribution Right

Considering computer transmissions as acts of distribution is inconsistent with the plain language of § 106(3), which states that “the owner of copyright . . . has the exclusive right[] . . . to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.”¹⁶⁶ This provision does not grant an exclusive right to distribute a copyrighted *work*. Instead, it grants the right to distribute “copies or phonorecords of the copyrighted work.”¹⁶⁷ Although the term “distribute” is not defined in the Copyright Act, the Act defines “copies” as “material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”¹⁶⁸ The House Report emphasizes the definition of copies as *physical* items:

The definition[] of [“copies”] in section 101, together with [its] usage . . . throughout the bill, reflect[s] a fundamental distinction between the “original work” which is the product of “authorship” and the multitude of material objects in which it can be embodied. Thus, in the sense of the bill, a “book” is not a work of authorship, but is a particular kind of “copy.” Instead, the author may write a “literary work,” which in turn can be embodied in a wide range of “copies” and “phonorecords,” including books, periodicals, computer punch cards, microfilm, tape recordings, and so forth.¹⁶⁹

In copyright terms, then, a copy is a tangible, physical thing—a book, a newspaper, a magazine, a CD-ROM, a computer diskette, a set of computer punch cards, etc.—and the copyright owner’s exclusive right of distribution is a right to distribute such tangible, physical things. The distribution can be by sale, rental, lease, or lending of those material objects, but to constitute distribution a party’s act must involve some *transfer* of,

166. 17 U.S.C. § 106(3) (1994).

167. In granting exclusive rights to the copyright owner, Congress distinguished between rights that involved copies and phonorecords—both the reproduction and distribution rights are expressly limited to reproduction in, and distribution of, copies or phonorecords—and rights that involved the work itself, regardless of any copy or phonorecord. See *supra* note 98.

168. 17 U.S.C. § 101 (Supp. IV 1998) (definition of “copies”). The definition of “phonorecords” is virtually identical, except that phonorecords are material objects in which *sounds* are fixed. See *id.* Examples of “phonorecords” are an audio cassette, a long-playing record album, and a music CD. Because a “display” by definition requires the use of a *copy* and not a phonorecord, the following discussion focuses only on copies, although the same principles are generally applicable to works that are fixed in phonorecords.

169. 1976 HOUSE REPORT, *supra* note 2, at 53; see also 17 U.S.C. § 202 (1994) (differentiating copyright ownership from ownership of material objects).

or at least some “*transfer* of ownership” or possessory rights in, a material object.

Interpreting the distribution right to encompass computer network transmissions not only conflicts with the plain language of the right but also with its legislative history:

Under this provision [§ 106(3)] the copyright owner would have the right to control the first public distribution of an authorized *copy or phonorecord* of his work, whether by sale, gift, loan, or some rental or lease arrangement. Likewise, any unauthorized public distribution of *copies or phonorecords* that were unlawfully made would be an infringement.¹⁷⁰

The House Report thus emphasizes what the language of the distribution right makes clear: the right is confined to transfers of tangible objects. Transmissions over computer networks, such as the one in *Frena* and the cases that follow it, do not involve such transfers and therefore do not violate the distribution right.

The activities involved in transmitting copyrightable works over a computer network such as the Internet do not involve any *transfer* of such material objects. A website that transmits a display of, for example, a photograph from *Playboy* magazine, uses a “copy” of that photograph, the computer file of a digital version of the photograph, generally stored on the web server’s hard drive. That file is clearly a “copy” within the definition of the Copyright Act: the work—the copyrightable photograph—is “fixed”¹⁷¹ in a material object—the hard drive—and can be perceived or reproduced from that material object with the aid of a ma-

170. 1976 HOUSE REPORT, *supra* note 2, at 62 (emphasis added).

171. The Copyright Act provides that “[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 transitory duration.” 17 U.S.C. § 101. This definition explains when a work is “fixed” in a tangible medium of expression—one of the basic requirements for copyright protection under 17 U.S.C. § 102(a)—and not when a work is fixed in a “material object” within the terms of the definitions of “copies” and “phonorecords.” *Id.* Indeed, reading this definition of “fixed” to apply directly to the use of the term “fixed” in the definitions of “copies” and “phonorecords” poses a circularity problem, because the definition of “fixed” in a tangible medium of expression” itself refers to “embodiment in a copy or phonorecord.” *Id.* In addition, this definition requires that the fixation be by or under the authority of the author; if that requirement applied to the fixation required for a material object to be a “copy,” all reproductions made without the author’s permission would not be “copies” under the definition of the Copyright Act and such reproduction would not literally violate the terms of the copyright owner’s § 106(1) right to reproduce the work “in copies or phonorecords.” *Id.* Nonetheless, it seems appropriate, given the lack of any indication that the drafters intended “fixed” to have a different meaning in the context of the definitions of “copies” and “phonorecords” than in the context of the requirement that a work be “fixed in a tangible medium of expression,” to find that a work is “fixed” in a “material object” for purposes of constituting a copy or phonorecord when the work’s embodiment in a material object “is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” *Id.* But see Ira L. Brandriss, *Writing in Frost on a Window Pane: E-Mail and Chatting on RAM and Copyright Fixation*, 43 J. COPYRIGHT SOC’Y U.S.A. 237, 278 (1996) (arguing for different meanings for different statutory uses of term “fixed”). That is clearly the case for a computer file stored on a hard drive, which can be viewed or copied as long as the file remains on the hard drive (usually until it is removed, intentionally or inadvertently, by the user or until the hard drive fails).

chine or device—the appropriate computer and software. When a user requests a transmission of the photograph on the website, the website does not transfer its *copy*—the hard drive in which the file is fixed—to the user.¹⁷² The website’s computer file containing the image remains on the hard drive of the website’s server, but the information in that file is transmitted to the user’s computer, which uses the information to make the photograph visible on the user’s screen. No transfer of any existing *material object*, or of an ownership or possessory interest in such an object, occurs in the process of transmitting information over the Internet. But a transfer of a material object is the essence of the exclusive right to distribute copies of a copyrighted work as stated in § 106(3).¹⁷³ The cases that conclude that a transmission over a computer network *is* a distribution offer no explanation for how such activity constitutes a transfer of a material object within the scope of § 106(3).¹⁷⁴

172. See Mark S. Torpoco, *Mickey and the Mouse: The Motion Picture and Television Industry’s Copyright Concerns on the Internet*, 5 UCLA ENT. L. REV. 1, 39–40 & n.186 (1997); see also INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 92 (1995) [hereinafter WHITE PAPER]. The WHITE PAPER states:

[T]he first sale doctrine does not allow the transmission of a copy of a work (through a computer network, for instance), because, under current technology the transmitter retains the original copy of the work while the recipient of the transmission obtains a reproduction of the original copy (*i.e.*, a *new* copy), rather than the copy owned by the transmitter.

Id.

173. See 17 U.S.C. § 106(3).

174. The *Frena* court simply states that “[t]here is no dispute that Defendant Frena supplied a product containing unauthorized copies of a copyrighted work.” *Frena*, 839 F. Supp. at 1556. Supplying a product, however, is not the same as transferring ownership of a material object, particularly in the context of computer networks, where the “product” offered is *access* to copyrighted works. A cinema that screens motion pictures to paying customers could be described as “supplying a product” containing a copyrighted work, but the cinema is, rather clearly, not distributing copies to the public. *Playboy Enters. v. Russ Hardenburgh, Inc.* was another case involving the posting and downloading of *Playboy* photographs on a computer BBS. See 982 F. Supp. 503, 506 (N.D. Ohio 1997). The primary factual difference between *Frena* and *Russ Hardenburgh* is that in the latter case, files uploaded by subscribers to the BBS computers were briefly screened by a BBS employee to ascertain if the image in the file was “acceptable,” in which case the file was “released” or “moved” to the general files of the BBS available to all subscribers. The court concluded that the defendants “*distributed and displayed* copies of [Playboy] photographs in derogation of [Playboy]’s copyrights.” *Id.* at 513. The court discussed its conclusion as to infringement of the distribution right as follows:

In order to establish “distribution” of a copyrighted work, a party must show that an unlawful copy was disseminated “to the public.” . . . Defendants disseminated unlawful copies of PEI photographs to the public by adopting a policy in which RNE employees moved those copies to the generally available files instead of discarding them.

Russ Hardenburgh, 982 F. Supp. at 513 (citations omitted). Similarly, in *Playboy Enterprises v. Webworld, Inc.*, defendants downloaded image files from Usenet newsgroups, produced two “thumbnail” versions of each image, and copied the files for the original image and the two thumbnails to the storage devices of twelve web servers. See 991 F. Supp. 543, 551 (N.D. Tex. 1997). Subscribers could access the company’s World Wide Web site and view and download the image files. See *id.* at 550. The court held that the defendants violated *Playboy*’s exclusive rights of reproduction, distribution, and display in its copyrighted photographs, stating that defendants “‘distributed’ PEI’s copyrighted works by allowing its users to download and print copies of electronic image files.” *Id.* at 551. Neither case offered any explanation of how the activities involved—making a computer file available for viewing and reproduction over a computer network—came within the language delimiting the distribution right, which requires the *transfer* of a *material object*.

Typically, one whose activities facilitate the making of a copy by another has not been liable as a direct infringer of the distribution right. In the age of off-the-air recording technology, it is quite common for people who receive over-the-airwaves transmissions to record radio or television broadcasts of copyrighted works, thus creating a new copy or phonorecord of the work transmitted.¹⁷⁵ Radio and television stations that transmit such copyrighted works are clearly publicly performing the works and generally need permission to do so. If those recipients who record the transmissions are engaged in infringing reproduction, the transmitters might be contributorily liable if they were found to know (or have reason to know) of the recipients' infringing activity. No case suggests, however, that radio and television stations are directly engaged in infringing *distribution* in such cases, and need a license from the owner of the distribution right in the works in order to make their transmissions, no doubt because the transmitter has not transferred any material object to the recipients of the transmission.

Although the website does not transfer its copy in the transmission process, an end user who views a transmitted display of a copyrightable work over the World Wide Web may make a *new* copy of the work from the existing copy on the website's computer.¹⁷⁶ For example, if the user stores or prints the photograph,¹⁷⁷ the user has fixed the transmitted work in a material object (such as the user's hard drive or the print-out paper) and thereby made a new "copy." This activity is basically the same as photocopying a printed volume: the user takes an existing copy of a work and mechanically fixes the work in a new material object, thus creating a new copy. This, of course, is a quintessential act of reproduction that will infringe the copyright owner's exclusive right "to reproduce the copyrighted work *in copies*" if not authorized or otherwise excused.¹⁷⁸ The downloading or printing end user would be directly liable for infringement of the reproduction right, while the party transmitting the

175. Such recording may constitute fair use if it is for purposes of "time shifting," that is, "the practice of recording a program [that one cannot view as it is being broadcast in order] to view it once at a later time and then erasing it." *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 423, 454–55 (1984). The Court in *Sony* did not reach the question of whether recording off-the-air broadcasts in order to compile a library of recordings would constitute fair use.

176. See *Cate*, *supra* note 123, at 1422 ("In the digital context . . . there is really no such thing as a distribution. Virtually all transfers of digital files result in a new copy being created, rather than the original copy being transferred."); *WHITE PAPER*, *supra* note 172, at 92.

177. For example, the user could issue a command to print the displayed page, or to save to a storage medium such as her hard drive or a diskette the displayed page (for example, by choosing the "File/Save As . . ." command in Netscape Navigator for Windows) or the photograph itself (for example, if she is using Netscape Navigator for Windows, by right-clicking on the photograph and choosing the "Save Image As . . ." command). In addition, web browsing software often automatically stores (or "caches") received information on the user's hard drive for efficient repeat access. Even if the user does not store or print the photograph, the photograph will be stored temporarily in the random-access memory (RAM) of the user's computer, and at least two federal appellate courts have held that such storage in RAM constitutes the making of a "copy" under the terms of the Copyright Act. This issue is discussed in Part IV.B, *infra*.

178. 17 U.S.C. § 106(1) (emphasis added).

display to the end user might be contributorily liable for the end user's reproduction.¹⁷⁹

While analogies can sometimes be misleading in analyzing copyright questions in the digital networked environment, one may be helpful here. Consider a professor who posts an article on the cork bulletin board outside her office. A student then stands in front of the board and copies the article longhand. Has the professor "distributed" a copy of the article? It seems not. A new copy of the article has indeed been created—the student has reproduced the article. The student might be liable for infringing the reproduction right, and the professor might have contributed to that reproduction and might potentially be liable for contributory infringement. The professor, however, has not *transferred* any copy to the student. The professor may in some sense have transferred the *information* contained in the article to the student, but the professor has not transferred a copy—the professor's copy remains tacked to the bulletin board.¹⁸⁰

In many of the cases in which courts have found transmissions of copyrighted works over computer networks to constitute a *distribution* of the work, the transmitting party seems to have encouraged transmission recipients to make their own copies of the transmitted works. Transmitters made the works available not only for *viewing* by transmission recipients, but also expressly for "downloading." Downloading in this context means receiving a transmission over a computer network and recording the data as it is received so that, at the end of the transmission, the recipient has a complete copy of the transmitted work stored on her computer.¹⁸¹ In such instances, it may seem natural to hold the transmitting party responsible for the creation of the new copies of the work by the downloading recipients of the transmission. Construing the distribution right to cover such transmissions allows courts to do so, and may explain in part why courts have applied the distribution right (rather than, or in addition to, the display right) in these cases.

But finding a "distribution," despite the absence of the transfer of a material object, whenever a transmitter expressly makes a copyrighted work available for downloading makes little sense. Whether a visually perceptible work is expressly labeled for *downloading* or is simply transmitted to a user's computer for *viewing* generally has little impact on the recipient's ability to store a copy of the transmitted work, at least over the Internet. Once a work—say a photograph—is displayed on a web

179. *E.g.*, *Sega Enters. v. MAPHIA*, 948 F. Supp. 923, 931–33 (N.D. Cal. 1996) (holding that uploading and downloading a copyrighted work to a computer bulletin board constituted the making of copies of the work and holding bulletin board operator contributorily liable for user's infringing reproductions).

180. If the corridor outside the professor's office is a public or semipublic place, then the professor has clearly publicly displayed the article, but assuming that the professor owns her copy of the article and that copy was lawfully made, § 109(c) would allow her to do so.

181. *See Sega Enters.*, 948 F. Supp. at 927.

page by the user's browser, the user can, with the most common web-browser programs, position the cursor over the image and click on the right-hand mouse button to save the image to a file on the user's own computer, thus effectively "downloading" a work that was included in a webpage merely for display to transmission recipients. If a transmitter's liability for violation of the distribution right turns on whether the transmitter expressly labeled the transmission as being for "download," transmitters can be expected simply to avoid such labeling while in no way technically impeding a recipient from making a new copy of the transmitted work. If liability for violation of the distribution right turns merely on a user's *ability* to make a new copy of transmitted material, then any transmitter could be violating the distribution right merely by engaging in transmissions of displays.¹⁸²

The fact that the transmitters in the cases finding distribution by means of computer-network transmissions posted copyrighted works expressly for "downloading" by transmission recipients is not, however, irrelevant to the issue of those transmitters' liability for copyright infringement for the copies that downloading users make. Indeed, the fact that the defendants in many cases expressly posted plaintiffs' copyrighted works for "downloading" is strong evidence both that the defendants had reason to know that at least some of the recipients of their transmissions were making new copies of the transmitted works and that the defendants were inducing those recipients to do so, thus making the transmitting defendants contributorily liable for the infringing reproductions made by the recipients.

b. Language and Legislative History of Related Provisions of 1976 Act

Considering network transmissions as acts of distribution also conflicts with other provisions of the 1976 Act, most importantly, the definition of "publication" and the legislative history of that definition. The relevance of the definition of "publication" to the meaning of "distribute" in § 106(3) is emphasized in the discussion of the distribution right in the Register's Supplementary Report: "The language of [the distribution right] is virtually identical with that in the definition of 'publication' in section 101, but for the sake of clarity we have restated the concept here."¹⁸³ Because the concept of publication serves very distinctive purposes in the Copyright Act, the virtually identical language in the definition of "publication" and the grant of the "distribution" right might justi-

182. It is apparently possible for a website to block a user's ability to save an element of a web page by right-clicking. *E.g.*, <http://webhome.idirect.com/~bowers/copy/copy1.htm> (last visited Nov. 13, 2000). It is not clear that one who transmits a copyrighted work over the Web should be *required* to use such a technological protection measure in order to avoid liability for infringing distribution (as opposed to display) based on the transmission.

183. SUPPLEMENTARY REPORT, *supra* note 36, at 19.

fiably be interpreted differently. Nevertheless, the virtually identical language of the two provisions suggests the usefulness of each in understanding the other.¹⁸⁴

“Publication” is defined in the 1976 Act as “the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending.”¹⁸⁵ In addition, the definition expressly specifies that “[a] public . . . display of a work does not of itself constitute publication.”¹⁸⁶ The legislative history explains the drafters’ understanding of this definition:

Under the definition . . . , a work is “published” if one or more copies or phonorecords embodying it are distributed to the public . . . without regard to the manner in which the copies or phonorecords changed hands. The definition . . . makes plain that any form of dissemination in which *a material object does not change hands*—performances or displays on television, for example—is not publication no matter how many people are exposed to the work.¹⁸⁷

Thus, the definition of publication uses language identical to that granting the exclusive distribution right, and clearly contemplates that such “distribution” is limited to instances in which a material object is transferred. If a display—which the House Report expressly identifies as a “form of dissemination in which a material object does not change hands”¹⁸⁸—is not a publication (that is, not a “distribution of copies or phonorecords of a work to the public”) then such a dissemination would also not seem to violate the § 106(3) right to “distribute copies or phonorecords of the copyrighted work to the public.” Other provisions of the Act are also consistent with a reading of the distribution right as not extending to computer transmissions.¹⁸⁹

184. *E.g.*, *id.* at 91.

185. 17 U.S.C. § 101 (1994).

186. *Id.*

187. 1976 HOUSE REPORT, *supra* note 2, at 138 (emphasis added).

188. *Id.*

189. For example, the Act defines “transmit” as follows: “[t]o ‘transmit’ a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.” 17 U.S.C. § 101 (Supp. IV 1998) (“transmit”). As one commentator has noted, the fact that the definition of “transmit” is limited to transmissions of performances or displays suggests that Congress did not think that copies or phonorecords could be “transmitted”:

[T]he subjects of transmissions are limited to *performances* and *displays*; that is to say, neither *copies* nor *phonorecords* may be transmitted. There is a good reason for this: copies and phonorecords, by definition, are *material objects*. At least until the invention of a transporter device, such as the fictional device featured in the television program, *Star Trek*, a copy or phonorecord, each being material objects, are not capable of being transmitted.

AL KOHN & BOB KOHN, *KOHN ON MUSIC LICENSING* 1199 (2d ed. 1996). In addition, the first sale doctrine, which is the principal limitation in copyright law on the owner’s exclusive right of distribution, allows the owner of “a particular copy or phonorecord” to “sell or otherwise dispose of possession of that copy or phonorecord.” 17 U.S.C. § 109(a). This focus, in limiting the distribution right, on the ownership and transfer of possession of copies and phonorecords reinforces the understanding that the distribution right covers the transfer of possession of material objects and not the transmission of intangible signals across computer networks.

Against the weight of the statutory language and the legislative history of the distribution right and these other provisions, the Copyright Act offers relatively little support for the view that computer transmissions constitute acts of distribution. Two sections might be read to support that view, though both were enacted after the decision in *Frena*. First, § 115, which grants a compulsory license to make and distribute phonorecords of certain musical works,¹⁹⁰ was amended in 1995 to provide that the license “includes the right of the compulsory licensee to distribute . . . a phonorecord . . . by means of a digital transmission which constitutes a digital phonorecord delivery.”¹⁹¹ This language suggests that distribution can occur by a transmission that results in the creation of a new copy, although the fact that Congress created a new defined term (“digital phonorecord delivery”) to embody such activity might suggest that the existing term “distribution” in § 106 did not encompass it.¹⁹² The legislative history of the 1995 amendment makes clear, however, that the drafters were aware of the question of whether the distribution right encompassed transmissions and that they “expresse[d] no view on current law in this regard,” but instead intended to deal only with uncertainty regarding the application of the longstanding compulsory license for cover recordings to digital transmissions and to leave the broader issue of the scope of the distribution right for a later day.¹⁹³ Second, a 1997 amendment to the criminal provisions in the Copyright Act criminalized certain willful infringements “by the reproduction or distribution, *including by electronic means*, . . . of . . . copies or phonorecords” of copyrighted works.¹⁹⁴ Reading the phrase “including by electronic means” to apply to both reproduction and distribution, the amended § 506 suggests that distribution by electronic means is possible. Neither the amendment nor its legislative history, however, offers any guidance on what would constitute such “electronic means” or how to reconcile

190. The license is generally available once the copyright owner of a nondramatic musical work has distributed phonorecords of the work to the public. See 17 U.S.C. § 115(a)(1). This license allows musicians to make so-called cover recordings of songs written by others.

191. 17 U.S.C. § 115(c)(3)(A) (Supp. IV 1998). “A ‘digital phonorecord delivery’ is each individual delivery of a phonorecord by digital transmission of a sound recording which results in a specifically identifiable reproduction by or for any transmission recipient of a phonorecord of that sound recording.” *Id.* § 115(d).

192. The language of § 115 is, however, often quite imprecise with respect to categories and terms defined elsewhere in the Copyright Act. For example, the section consistently refers to the “making” of phonorecords of a musical work, and not of the *reproduction* of a musical work in phonorecords. See *id.* § 115. In addition, language added to the section at the same time as the expansion to cover digital phonorecord deliveries refers to the “writer” of a musical work, rather than its “author,” the term that is otherwise generally used in the Act. Compare 17 U.S.C. § 115(c)(3)(G) (Supp. IV 1998), with, e.g., 17 U.S.C. § 201(a) (1994) (vesting initial copyright ownership in work’s “author”), and 17 U.S.C. § 302(a) (fixing term of copyright by reference to life and death of “author”).

193. S. REP. NO. 104-128, at 17 (1995) reprinted in 1995 U.S.C.C.A.N. 357, 364. The Report quoted the Clinton administration’s *White Paper*, discussed *supra* note 172 and accompanying text. See *id.* at 380.

194. 17 U.S.C. § 506(a)(2) (Supp. IV 1998) (emphasis added) (amending 17 U.S.C. § 506(a) (1994)).

such a conclusion with the remainder of the Copyright Act, which contemplates distribution only by the transfer of material objects.

The bulk of the evidence in the statute and its history, then, supports the view that a transmission of a copyrighted work over a computer network does not constitute a distribution of copies or phonorecords of that work. This view comports with the traditional understanding of copyright specialists.¹⁹⁵ Some commentators have specifically suggested that transmissions over computer networks do not appear to constitute distribution¹⁹⁶ and at least one has specifically disagreed with the *Frena* court's contrary conclusion,¹⁹⁷ although other commentators have endorsed the *Frena* decision.¹⁹⁸ Indeed, the Clinton administration's 1995 *White Paper* on intellectual property rights in the digital networked envi-

195. Professor Goldstein points out that "[t]he distribution right . . . centers on tangible copies or phonorecords." 2 PAUL GOLDSTEIN, COPYRIGHT § 5.5, at 5:99 (2d ed. 1995). He also notes that "[t]he crux of the distribution right lies in the transfer, not the receipt, of a copy or phonorecord." *Id.* § 5.5.1, at 5:102 (Supp. 1999). NIMMER ON COPYRIGHT states that "[t]he copyright owner . . . has the exclusive right publicly to sell, give away, rent or lend any *material embodiment* of his work" and notes that "[i]nfringement of this right requires an actual dissemination of either copies or phonorecords." 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.11[A], at 8-148 to 8-149 (2000) (footnotes omitted) (emphasis added). The leading treatise on music copyright treats the issue as follows:

Section 106(3) refers to the distribution of *copies or phonorecords* of a copyrighted work, not the copyrighted work itself. This is consistent with the notion that the term *distribute* has traditionally denoted the changing of possession of tangible copies of the work. Thus, it is clear that under the copyright law, a distribution does not encompass the transmission of a work to a place beyond from which it is sent, because no tangible copy (or phonorecord) changes hands in connection with such a transmission.

AL KOHN & BOB KOHN, KOHN ON MUSIC LICENSING 1197 (2d ed. 1996 & Supp. 2000) (footnote omitted); see also *id.* at 1199 ("Thus, the term *distribute* (or *distribution*) or *publish* (or *publication*) denotes the changing of possession of a material object, such as a copy or phonorecord.").

196. See Jane C. Ginsburg, *Putting Cars on the "Information Superhighway": Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV. 1466, 1481-82 (1995). Ginsburg notes:

[W]hile a distributor of "hard" copies must part with the physical object embodying the copy, a distributor of digital copies may cause new copies to be made in the servers' and recipients' computers, all the while retaining her own copy. As a result, there may be no "transfer of ownership" of the distributor's copy, and the distribution right, as currently defined, may not be implicated.

Id.; see also Timothy F. Bliss, *Recent Developments: Computer Bulletin Boards and the Green Paper*, 2 J. INTELL. PROP. L. 537, 546 & n.56 (1995); cf. Nancy A. Bloom, *Protecting Copyright Owners of Digital Music—No More Free Access to Cyber Tunes*, 45 J. COPYRIGHT SOC'Y 179, 186 (1997) ("Usually, a distribution requires a physical transfer of ownership."); Niva Elkin-Koren, *Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 CARDOZO ARTS & ENT. L.J. 345, 356 (1993) (noting that "when a BBS user communicates information to other subscribers, the user transfers nothing tangible" and that BBS operators "do not transfer [copies] in any way"); Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 557 (1997) ("[T]he issue is certainly not free from doubt.").

197. David J. Loundy, *Revising the Copyright Law for Electronic Publishing*, 14 J. MARSHALL J. COMPUTER & INFO. L. 1, 21-22 (1995).

198. E.g., Jo Dale Carothers, *Protection of Intellectual Property on the World Wide Web: Is the Digital Millennium Copyright Act Sufficient?*, 41 ARIZ. L. REV. 937, 958 (1999); Victoria A. Espinel, *Music Distribution over the Internet: United States Copyright Law and the WIPO Performances and Phonograms Treaty*, 9 ENT. L. REV. 49, 52 (1998) (arguing that "the distribution right should be understood to include Internet transmissions"); Marc E. Mayer, *Do International Internet Sound Recording Infringements Implicate U.S. Copyright Law?*, 15 COMPUTER LAW. 11 n.5 (1998) (asserting that at least with respect to Internet music transmissions, transmissions constitute distributions).

ronment,¹⁹⁹ a report widely seen as extremely favorable to a maximalist interpretation of the rights of copyright owners, acknowledged that the distribution right “traditionally covered the right to convey a possessory interest in a *tangible copy* of the work,”²⁰⁰ and found it unclear “under current law” whether a transmission could constitute a distribution.²⁰¹ The *White Paper* recommended amending U.S. copyright law “to expressly recognize that copies or phonorecords of works can be distributed to the public by transmission, and that such transmissions fall within the exclusive distribution right of the copyright owner.”²⁰² No such amendment has been made.

3. *Applying the Distribution Right to Encompass Computer Transmissions Has Disadvantages*

The outcomes of the cases in which courts have found transmissions over a computer network to violate the distribution right would not likely have been significantly different if those courts had adhered more closely to the language of the statute and recognized that no transfer of a material object had occurred. In most of those cases, the court either also held, or indicated that it would have held, that the defendants’ conduct violated the public display right.²⁰³

Nonetheless, the courts’ “distribution approach” in these cases is objectionable. Fundamentally, these opinions misinterpret the statutory language and the Congressional intent that it represents. On a more practical level, the repercussions of this interpretation of the distribution right for copyright law are significant, as well. The Copyright Act grants copyright owners a set of independent exclusive rights as part of an elaborate complex of interacting rights, limitations, and procedures; misdrawing the boundaries among those rights, as *Frena* and its progeny do, has negative consequences.

First, under the 1976 Act, the copyright owner’s exclusive rights are fully divisible and independently transferable,²⁰⁴ and the distribution and public display rights may be owned by different parties.²⁰⁵ To the extent

199. See WHITE PAPER, *supra* note 172.

200. *Id.* at 69 (emphasis added).

201. *Id.*

202. *Id.* at 113.

203. See *supra* notes 161–65 and accompanying text. To the extent that a copyright owner was suing for the reproduction of its work by the recipient of a transmission, however, properly interpreting the distribution right would mean that any claim against the transmitting entity for such reproduction would probably have to be a claim for contributory, rather than direct, infringement, while the distribution right would give the copyright owner a direct infringement claim against the transmitter for such reproductions.

204. See 17 U.S.C. § 201(d)(2) (1994) (“Any of the exclusive rights comprised in a copyright, including any subdivision of any of the rights specified by section 106, may be transferred . . . and owned separately.”).

205. For a general discussion of the problems that divisibility of copyright presents for the Internet, see Lemley, *supra* note 196, at 568–72.

that transmissions over a computer network constitute a public display of a copyrighted work, the owner of the public display right in that work is entitled to license (or institute an infringement action against) such activity. Interpreting the distribution right also to cover such transmissions may mean that someone making such transmissions will need to seek licenses from (or possibly respond to infringement suits by) the owners of two separate exclusive rights.²⁰⁶ In cases of separate ownership, this will impose additional transactions costs on transmitting entities—locating and negotiating with two licensors—as well as the additional price for second license. It also provides a windfall to the owner of the distribution right, whose interest in the work should not, under the terms of the Copyright Act, extend to such computer transmissions. It may also allow the owner of the distribution right to prevent the owner of the public display right from exploiting her rights on computer networks, since the latter would not be able to effectively license a third party to transmit displays of the work over the Internet unless the owner of the distribution right also grants the third party a distribution license.²⁰⁷ Had Congress chosen to include computer network transmissions as part of both the distribution and the public display rights, then the problems that divisible ownership presents for transmitting entities—and the windfall it gives to owners of the distribution right—might be justifiable as the cost of providing what Congress considered adequate protection for copyright owners. But where Congress created the public display right specifically to encompass computer network transmissions, and crafted the distribution right in terms that exclude such transmissions, the negative consequences that flow from courts not respecting the statutory categories cannot be justified.

Second, properly identifying the particular exclusive right or rights under § 106 implicated by a particular activity is important because the precise scope of each right is determined by specific limitations, exemptions, and compulsory licenses that apply to that particular right.²⁰⁸ For example, § 110 states a number of limitations that restrict the copyright owner's rights of public display and public performance in specified circumstances, but those limitations in no way restrict an owner's other

206. Construing transmissions as distributions may impose a particularly unwelcome burden in this context, since the transmitting entity may already need to obtain a license both to publicly display and to reproduce the work, as discussed in Part III.A.2, *supra*, although in some cases a party entitled to transmit a public display may be able to make a copy of the work to use in making the transmission under the ephemeral copy exception of 17 U.S.C. § 112(a).

207. This problem may also prevent an owner of the public display right from exercising the right *herself*, because that owner would, in the course of its network transmissions, also be engaged in acts of distribution which would require permission from the owner of the distribution right. See Lemley, *supra* note 196, at 571–74 (discussing interpretation of preexisting licenses in light of subsequent technological developments).

208. Many limitations are also confined to particular categories of works. *E.g.*, 17 U.S.C. § 113 (setting out limits on certain rights in pictorial, graphic, and sculptural works). The primary example of a limitation that applies to all rights in all categories of works is fair use. See *id.* § 107.

rights, including the distribution right.²⁰⁹ If a computer network transmission is held to be a distribution as well as a public display, then a transmission that falls within one of the limitations of § 110 and would therefore not infringe the copyright owner's public display right will nonetheless infringe the copyright owner's distribution right. Activities that would otherwise be allowed under such limitations would require permission from the owner of the distribution right.

These effects of holding transmissions to constitute distribution would extend beyond the display right, since the logic of the *Frena* opinion offers no reason to distinguish between works entitled to the public *display* right, such as the photographs infringed in *Frena*, and works entitled to the public *performance* right, such as audiovisual works (e.g., motion pictures) and musical works.²¹⁰ Following *Frena*, the transmission of a performance of such a work over a computer network would constitute not only a public performance of that work but also a distribution of a copy or phonorecord of the work,²¹¹ posing the problems discussed above of divided ownership (separate ownership or administration of the performance and distribution rights is common with respect to, for example, musical works) and eroded limitations.

The disadvantages of applying the distribution right to computer network transmissions, despite the lack of a transfer of a material object, might be tolerable if the alternative would leave copyright owners without any remedy against activity, made possible by technological developments subsequent to the adoption of the Copyright Act, clearly analogous to conduct that would be infringing in the offline world and having the potential to seriously impair the value of the copyright owner's rights.²¹² But in enacting the 1976 Act, Congress had not, in this case, failed to see the potential for new technologies to create new uses for copyrighted works. Indeed, Congress had specifically foreseen and provided for the case of transmissions over computer networks. It did so,

209. See *id.* § 110. Similarly, the "first sale" limitation in § 109(a) restricts only the copyright owner's distribution right. See *id.* § 109(a). So, for example, when copyright owners sued a video store for infringement of the public performance right because the defendant had purchased legitimate video cassettes of the owners' films and rented to customers booths in the store in which to watch the films, the "first sale" doctrine provided a defense to a charge of infringement of the distribution right for the rental of the videocassettes but not to a charge of contributing to public performances by the booth-renting customers. See *Columbia Pictures Indus., Inc. v. Aveco, Inc.*, 800 F.2d 59 (3d Cir. 1986); *Columbia Pictures Indus., Inc. v. Redd Horne, Inc.*, 749 F.2d 154, 160 (3d Cir. 1984).

210. See *Playboy Enters. v. Frena*, 839 F. Supp. 1552, 1557 (M.D. Fla. 1993).

211. See *id.* at 1556-57.

212. E.g., Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 373 (1996) (suggesting there is "no reason to cling to hard copy distinctions in the digital network environment. Digital network technologies will radically alter copyright markets") (footnote omitted). Of course, even if a more faithful interpretation of the distribution right would leave copyright owners unprotected, it might be preferable to allow Congress to address the problem and bring the law up-to-date for new technological developments. E.g., *Sony Corp. of Am. v. Universal City Studios*, 464 U.S. 417, 456 (1984) ("It may well be that Congress will take a fresh look at this technology, just as it so often has examined other innovations in the past. But it is not our job to apply laws that have not yet been written.").

however, not by means of the distribution right, which it limited to transfers of material objects, but by means of the public display right. That right would have adequately protected the plaintiff copyright owners in the computer network cases, and the courts in those cases did not need to stretch the distribution right beyond the statutory language—with all the potential problems that may cause.

B. Computer Network Transmissions and Storage in RAM as Reproduction

A more significant development in the application of copyright law to computer networks is the nascent RAM copy doctrine. Several courts have interpreted copyright law in such a way that every transmission of copyrighted material inherently involves the making of “copies” of that material in the course of the transmission by means of the necessary temporary storage of the material in the RAM of the computers involved in the transmission. Such RAM “copies,” these courts have held, infringe the copyright owner’s exclusive reproduction right. The consequences of treating all storage in RAM as the making of a copy, though, are extremely significant as information is increasingly used in digital form. The public display right offers an alternative that protects copyrighted works on the Internet without treating RAM storage as the making of a copy.

In the operation of a computer, all data is processed by being stored temporarily in the RAM of the computer.²¹³ For example, when a computer user opens an image file stored on the hard drive of a computer or on a CD-ROM, the computer stores the file’s contents in RAM in order for the photograph contained in the file to be displayed on the computer screen. The same is true for a text file opened in a word processing program. Such storage is usually quite temporary both because the material stored in RAM is often quickly replaced with new material and because this type of memory is generally “volatile,” as anyone who has ever experienced a computer crash has discovered—material stored in RAM

213. See NAT’L RESEARCH COUNCIL, COMM. ON INTELLECTUAL PROP. RIGHTS AND THE EMERGING INFO. INFRASTRUCTURE, THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE 28–31 (2000) [hereinafter DIGITAL DILEMMA] (“When information is represented digitally, access inevitably means making a copy, even if only an ephemeral (temporary) copy. This copying action is deeply rooted in the way computers work”); WHITE PAPER, *supra* note 172, at 65–66; TROTTER HARDY, PROJECT LOOKING FORWARD 16, 128–30 (1998) (“[A] computer must make ‘copies’ of some sort [in RAM] in order to function.”); RON WHITE, HOW COMPUTERS WORK 35 (1st ed. 1995) (“Before a PC can do anything useful, it must move programs from disk to RAM. The data contained in documents, spreadsheets, graphics, databases, or any type of file must also be stored in RAM, if only momentarily, before the software can use the processor to manipulate that data.”); Cate, *supra* note 123, at 1397, 1415–16 (“[D]igital expression cannot be accessed without being copied into computer memory”).

generally disappears when the power supply to the RAM is turned off or otherwise interrupted.²¹⁴

At least two federal appellate courts have held that temporary storage of a copyrighted work in RAM constitutes reproducing the work in a “copy” under the terms of the Copyright Act.²¹⁵ That conclusion has won adherence among some lower courts²¹⁶ and in some quarters of the U.S. government,²¹⁷ but other courts have not followed it²¹⁸ and it has been quite controversial among many commentators.²¹⁹ As many critics have argued,²²⁰ this interpretation misreads the statutory language of the 1976 Act, under which a copy must be fixed “for a period of more than transitory duration,”²²¹ and conflicts with legislative history which states that “the definition of ‘fixation’ would exclude from the concept purely evanescent or transient reproductions such as those . . . captured momentarily in the ‘memory’ of a computer.”²²² Indeed, the public display right

214. See HARDY, *supra* note 213, at 130 (“With most personal computers today, the RAM memory is erased when the power is turned off.”); WHITE, *supra* note 213, at 35 (“When you turn off your PC, anything that’s contained in RAM disappears.”); Cate, *supra* note 123, at 1413 & n.123; Lemley, *supra* note 196, at 550 (stating that RAM copies “exist only while the computer . . . [is] turned on; they are erased when the computer is turned off” and noting two technical exceptions).

215. Stenograph L.L.C. v. Bossard Assocs. Inc., 144 F.3d 96, 101–02 (D.C. Cir. 1998); MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 518 (9th Cir. 1993); see also Sony Computer Entm’t, Inc. v. Connectix Corp., 203 F.3d 596 (9th Cir. 2000); Triad Sys. v. Southeastern Express Co., 64 F.3d 1330 (9th Cir. 1995).

216. *E.g.*, Intellectual Reserve, Inc. v. Utah Lighthouse Ministry Inc., 74 F. Supp. 2d 1290, 1294 (D. Utah 1999); Tiffany Design, Inc. v. Reno-Tahoe Specialty, Inc., 55 F. Supp. 2d 1113, 1121 (D. Nev. 1999); *In re Indep. Serv. Orgs. Antitrust Litig.*, 910 F. Supp. 1537, 1541 (D. Kan. 1995); Advanced Computer Servs. of Mich. v. MAI Sys. Corp., 845 F. Supp. 356, 363 (E.D. Va. 1994); ISC Bunker-Ramo Corp. v. Altech, Inc., 765 F. Supp. 1310, 1332 (N.D. Ill. 1990).

217. WHITE PAPER, *supra* note 172, at 64–65. The assertion in this report that “[i]t has long been clear under U.S. law that the placement of copyrighted material into a computer’s memory is a reproduction of that material” has been vigorously assailed. *E.g.*, Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 40–43 (1994); see also Statement of the Register of Copyrights, House Judiciary Subcommittee on Courts and Intellectual Property, June 15, 2000, available at <http://lweb.loc.gov/copyright/docs/regstat61500.html> (“Internet retransmissions require the making of temporary copies within computer systems delivering the retransmissions, which allow the audio or video programming to appear to be played in real time to the end user.”).

218. For cases implicitly rejecting the proposition that temporary storage of a work in RAM constitutes reproducing a copyrighted work, see MARK A. LEMLEY ET AL., SOFTWARE AND INTERNET LAW 198 (2000), citing Hogan Sys. Inc. v. Cybersource Int’l, 158 F.3d 319 (5th Cir. 1998); DSC Communications Corp. v. DGI Tech., Inc., 81 F.3d 597 (5th Cir. 1996); Tricom Inc. v. Elec. Data Sys. Corp., 902 F. Supp. 741 (E.D. Mich. 1995).

219. *E.g.*, James Boyle, *Intellectual Property Policy Online: A Young Person’s Guide*, 10 HARV. J.L. & TECH. 47, 83–94 (1996); Cate, *supra* note 123, at 1420–21; Lemley, *supra* note 196, at 550–52; Litman, *supra* note 217, at 41–43. For a list of additional articles critical of interpreting “copies” to apply to storage in RAM, see Lemley, *supra* note 196, at 551 n.25.

220. *E.g.*, Litman, *supra* note 217, at 41–43; Pamela Samuelson, *Legally Speaking: The NII Intellectual Property Report*, COMM. ACM, Dec. 1994, at 22–23.

221. 17 U.S.C. § 101 (1994) (“fixed”); see, *e.g.*, Cate, *supra* note 123, at 1453 (“If RAM, which must be refreshed electronically many times a second, is not the epitome of ‘transitory duration’ and therefore not within the meaning of ‘fixed,’ it is difficult to imagine what is.”).

222. 1976 HOUSE REPORT, *supra* note 2, at 53. The interpretation also arguably conflicts with language in the 1976 House Report that distinguishes reproduction from display and states that “the showing of images on a screen or tube would not be a violation of [the reproduction right], although it might come within the scope of [the public display right].” *Id.* at 62.

lends support to the view that the RAM copy doctrine misinterprets the 1976 Act. Projecting an image on a screen at the front of a classroom, for example, makes that image visible for as long as the projection continues. A literal reading of the definition of “copies” would mean that the projected image is a copy: the screen is a material object from which the image can be perceived and the embodiment of the copyrighted work in that object is “sufficiently permanent or stable to permit it to be perceived . . . for a period of more than transitory duration,” assuming that the projector remains on for a long enough time.²²³ It seems absolutely clear, however, from the structure and legislative history of the 1976 Act, that the drafters did not consider projecting an image onto a screen to be reproducing the work in a *copy* but rather they considered it a display of the work.²²⁴ Thus, the facts that a work can be perceived—for example, can be seen on a computer screen—when it is stored in RAM, and that it can be perceived for as long as the storage lasts do not themselves necessitate the conclusion that storage in RAM is the making of a copy.

Interpreting the storage of data in RAM to be the making of a “copy” for purposes of copyright has extraordinary implications for computer network transmissions, because such transmissions typically involve making multiple copies in RAM at various points along the transmission route between the storage device of the web server that sends the material and the monitor screen of the end-user’s computer which receives and displays the material. As Mark Lemley has noted,

If one accepts the argument that RAM copies are actionable under § 106(1), the number of copies made in even the most routine Net transactions increases dramatically. Obviously, each act of uploading or downloading makes a RAM copy in the recipient’s computer, but that is only the beginning. When a picture is downloaded from a Website, the modem at each end will buffer each byte, as will the router, the receiving computer, the Web browser, the video

223. See 17 U.S.C. § 101 (Supp. IV 1998) (“fixed”); see Charles R. McManis, *Taking Trips on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technology*, 41 VILL. L. REV. 207, 267 (1996).

224. See McManis, *supra* note 223, at 267. In addition to the specific references in the legislative history distinguishing reproduction from display, the limit on the public display right in § 109(c) indicates the drafters’ intent. See 1976 HOUSE REPORT, *supra* note 2, at 52–53, 62. If projection on a screen constituted reproduction, then the limitation in § 109(c) would be ineffective to allow in-person public displays by projection, since such activity would independently infringe the reproduction right. It is absolutely clear that Congress thought that § 109(c) did allow such projection, because the image on the screen would not constitute a “copy,” even though an absolutely literal reading of the definition of “copy” might include it. Indeed, under a literal reading of the definition of “copies” memorizing a poem would be an unauthorized act of reproduction. The person who memorizes the poem will have fixed the poem in a material object—the memorizer’s brain—from which the work can be perceived—for example, listeners can hear the memorizer recite the lines. See *Blue Pearl Music Corp. v. Bradford*, 728 F.2d 603, 606 n.4 (3d Cir. 1984) (suggesting that if defendant had stolen only copy of a work, committed work to memory, then destroyed the copy, defendant might properly be ordered to recreate the work); David Nimmer, *Brains and Other Paraphernalia of the Digital Age*, 10 HARV. J.L. & TECH. 1, 42–45 (suggesting that a computer might be entitled to a “right to read” because of similarities between a computer and the human brain).

decompression chip, and the video display board. Those seven copies will be made on each such transaction.²²⁵

Thus, in the course of a transmission of a display of a copyrighted work over a computer network, the work will be stored in the RAM of the computer of the transmitting entity (such as a website) and will also be stored in the RAM of every computer to which the material is transmitted.

If RAM storage constitutes an act of reproduction subject to the copyright owner's control, then given current technology, every public display of a copyrighted work by transmission over a computer network such as the Internet will also involve multiple acts of reproduction, since all such transmission involves storage of the transmitted work in RAM. For example, a website that transmits a display of a copyrighted text to the public over the web will have made a new "copy" of the text by momentarily loading the digits that represent the text into the RAM of the website's server in the course of transmitting the display to a web browser.²²⁶ The website operator would be directly liable for making that RAM "copy," since the website operator, by initiating the transmission of the text to a web user in response to a request received from that user, has caused the storage of the data in RAM. Thus, if the website's transmission of the text is unauthorized, the copyright owner would have a claim against the website for direct infringement of the owner's exclusive right to reproduce the text in copies.

Given the ubiquity of RAM storage in the course of public displays by computer transmission, a claim of infringing reproduction by means of RAM storage will generally allow copyright owners to control the use of their works over computer networks without any recourse to the public display right.²²⁷ Even the strategic value of the display right in the context of network transmissions would diminish under the RAM copy doctrine. A claim against the website for reproduction in RAM would, like a display right claim, be a claim for direct infringement, thus avoiding the additional burden of proving a contributory infringement claim.²²⁸ And the RAM reproduction claim, like the display right claim, would be against the central transmitting entity, the website, which presents a

225. Lemley, *supra* note 196, at 554–55 (footnotes omitted). Lemley further points out that "since most Internet transmissions do not travel directly between sender and receiver, more copies will be made of the individual packets at each node they pass through on their way to the end point." *Id.*; see also David L. Hayes, *Advanced Copyright Issues on the Internet*, 7 TEX. INTELL. PROP. L.J. 1, 5 (1998) (discussing "ubiquitous" nature of RAM storage in Internet transmissions). The recently enacted "safe harbor" for "transitory digital network communications" would, in certain circumstances, exempt such "intermediate and transient storage" from copyright liability. See 17 U.S.C. § 512(a).

226. This temporary storage in the RAM of the website's server would be in addition to any storage of the transmitted text in the RAM of the recipients' computers.

227. The practical ability of copyright owners to effectively exercise that control is another matter, but such practical problems of effective enforcement—detecting and punishing infringements that occur—should not generally vary with the particular exclusive right that is infringed.

228. See *supra* notes 134–43 and accompanying text.

more attractive defendant than the end-user recipients of the transmission.²²⁹

In addition, the RAM copy doctrine presents some of the same disadvantages for the application of copyright to computer networks as does interpreting the distribution right to encompass computer transmissions—the problem of separate owners of the reproduction and public display and performance rights and the problem of eviscerating the statutory limits on the public display and public performance rights by making every transmitted display or performance simultaneously a reproduction.²³⁰

The potential scope of copyright liability if RAM storage is “reproduction” is enormous and extends far beyond the activities of entities such as websites that transmit displays of copyrighted works to the public. With respect to networks such as the Internet, the RAM copy doctrine also means that “even innocently receiving an e-mail message may infringe the copyright in that message” and that “anyone who browses the Net and unintentionally runs across infringing material is making infringing copies. . . .”²³¹ But the potential scope of liability under the RAM copy doctrine extends beyond computer networks: “For all works encoded in digital form, any act of reading or viewing the work would require the use of a computer, and would, under [the] interpretation [that storage in RAM is the making of a copy], involve an actionable reproduction.”²³² In a world where more and more information is accessed by computer and by a seemingly endless array of computer-like devices, the effects of that interpretation are dramatic and may represent a sizable shift in control over access to information.²³³ Someone who owns a

229. *See id.*

230. *See supra* Part IV.A.3.

231. Lemley, *supra* note 196, at 555.

232. Litman, *supra* note 217, at 40; *see also* DIGITAL DILEMMA *supra* note 213, at 31 (“Such copying occurs with all digital information. Use your computer to read a book, look at a picture, watch a movie, or listen to a song, and you inevitably make one or more copies.”); Cate, *supra* note 123, at 1433 (“It is impossible to read, view, listen to, print, upload, download, transfer, or otherwise access digital expression without making at least one copy of it. That copy violates the copyright holder’s exclusive right to reproduce.”).

233. *E.g.*, DIGITAL DILEMMA *supra* note 213, at 140, 143 (“[I]n the digital world copying is such an essential action, so bound up with the way computers work, that control of copying provides, in the view of some, unexpectedly broad powers, considerably beyond those intended by the copyright law.”) (“[T]rue control of reproduction [in the digital world] would bring unprecedented control over access to information.”); RAYMOND NIMMER, INFORMATION LAW ¶ 4.08[1], at 4-30 (1996) (“[T]he idea that reading a digital text entails a potential copyright violation shifts policy. That shift, even if desirable, should occur because of an express policy choice rather than because new technology technically triggers concepts originally designed for a world of photocopy machines, records, and the like.”); NIMMER & NIMMER, *supra* note 195, at 8-149 to 8-150 (labeling the literal conclusion that the RAM storage involved in every instance of access to a privately owned digital copy implicates the reproduction right a “RAM-scam”); Cate, *supra* note 123, at 1409–10, 1433–35 (arguing that copyright law evinces significant regard for private uses of copyrighted works and that digital and digital-networked technology gives copyright owners power to prevent access to their works, a “dramatic extension of the copyright holder’s rights in nondigital contexts”); Pamela Samuelson, *The Copyright Grab*, WIRED, Jan. 1996, at 134 (stating that a user’s rights to use copyrighted materials will be rescinded and the public may be

printed copy of a literary work can read that copy without implicating any exclusive rights of the copyright owner. But someone who owns a copy of the text in a digital format (e.g., on CD-ROM or on the storage device attached to a personal computer or electronic reader²³⁴) can read the work only by displaying it on a screen, a process that under current technology involves storing the work in RAM. Thus, Jessica Litman has suggested that the RAM copy doctrine effectively grants copyright owners the “exclusive right to read” their copyrighted works. Existing copyright doctrines such as fair use and implied license may somewhat reduce the potential scope of liability under the RAM copy doctrine for everyday activities in an increasingly digital environment, but the application of those doctrines to many situations will be problematic and unclear.²³⁵

While copyright owners may generally be unlikely to sue individual users for infringement,²³⁶ the ubiquity of potentially infringing acts under the RAM copy doctrine can nonetheless significantly expand copyright owners’ control over uses of their works that would not otherwise infringe. In the context of the Internet, for example, at least one court has suggested that a website that includes a hyperlink to another web page on which infringing material appears may be liable for contributory infringement because a user who clicks on the original site’s link would open the infringing page in her browser, thus temporarily storing the infringing material in RAM and, under the RAM copy doctrine, creating an infringing copy.²³⁷ Again, such control would extend beyond the Internet and beyond transmissions. Consider, for example, a recent case in which a plaintiff alleged that the defendant’s poster of the Las Vegas

stripped of rights that copyright law traditionally has recognized); *see also* HARDY, *supra* note 213, at 132. Hardy notes:

Digital information, at least for the foreseeable future, means information that is under the control of computers. With present technology, a digital computer cannot “run” without some sort of “copying” of information and data into the computer’s internal RAM memory. Therefore any access to or use of digital information means access to or use of information that is under the control of a computer, and therefore means that some computer program must be executed. If a computer program is executed, a RAM copy is created. *In this manner, “access to and use of information” and “copyright” can be tied together. . . .*

HARDY, *supra* note 213, at 132 (emphasis added).

234. An example of such a reader is Gemstar’s eBook. *See eBook*, at <http://www.ebook-gemstar.com> (last visited Oct. 16, 2000) (on file with *University of Illinois Law Review*).

235. *See* David L. Hayes, *Advanced Copyright Issues on the Internet*, 7 TEX. INTELL. PROP. L.J. 1, 63 (1998) (Internet browsing “raises important copyright problems that cannot be dismissed simply on the notion that doctrines such as fair use, implied license, or innocent infringement will remove the problems entirely”); LEMLEY ET AL., *supra* note 218, at 870–71 (noting potential problems with application of implied license and fair use defenses to charges of infringement by storage in RAM in course of Internet transmissions).

236. *But see* LEMLEY ET AL., *supra* note 218, at 871 (noting that the availability of statutory damages may make suit against end user financially worthwhile and that copyright plaintiffs sometimes sue for nonmonetary reasons). *See also* DIGITAL DILEMMA, *supra* note 213, at 144 (“Because control of access to individual published copies was not conceived of as part of copyright, this control is not to be embraced lightly, whether or not routinely exercised by authors or other rights holders.”).

237. *See* Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, 75 F. Supp. 2d 1290, 1294 (D. Utah 1999).

Strip infringed the plaintiff's poster of the same subject.²³⁸ The court, finding genuine issues of material fact as to whether the defendant's poster "substantially incorporated protected materials from the plaintiff's" poster, denied the plaintiff summary judgment on that infringement claim.²³⁹ Nonetheless, the court *granted* summary judgment on the plaintiff's additional claim that the defendant had infringed the copyright in plaintiff's poster not because any material in the defendant's finished poster infringed on the plaintiff's poster, but because the defendant had scanned plaintiff's poster into its computer, such that the image "resided, at least temporarily, in the [d]efendant computer's random access memory (RAM)" while the defendant cut the images of six buildings from the plaintiff's poster in order to manipulate and insert them into the defendant's poster.²⁴⁰

The RAM copy doctrine would also allow copyright owners to control displays that are not transmitted "to the public" and that therefore would not infringe the public display right. If, for example, a computer user sends a digital image file to a single family member by e-mail, rather than posting that file on a publicly accessible website, then the transmission of that display would likely not be "to the public" and the sender's display would not infringe the copyright owner's public display right in that image.²⁴¹ Under the RAM copy doctrine, however, the sender would be responsible for the storage of the image in RAM in the course of the transmission and therefore be liable for infringement unless the

238. See *Tiffany Design, Inc. v. Reno-Tahoe Specialty, Inc.*, 55 F. Supp. 2d 1113 (D. Nev. 1999).

239. *Id.* at 1122. Copying from a copyrighted work does not constitute infringement unless sufficient protected expression is copied. See GOLDSTEIN, *supra* note 195, § 7.3.1 at 7:21.

240. *Tiffany Design*, 55 F. Supp. 2d at 1115-16, 1119-20. Copying that is "intermediate" in the production of defendant's final product has been held actionable in non-RAM and noncomputer cases. See, for example, *Sega Enters. v. Accolade, Inc.*, 977 F.2d 1510, 1518 (9th Cir. 1992), and cases cited therein. Nonetheless, had the defendant sketched exact copies of the six buildings from the plaintiff's poster and then manipulated those sketches and incorporated the manipulated images into its own poster, it seems unlikely that the defendant would have run a serious risk of liability for such intermediate copying if its final poster was not substantially similar to the plaintiff's protected expression. *E.g.*, NIMMER & NIMMER, *supra* note 195, § 8.01[E], at 8-20.

Reverse engineering of computer programs presents a similar issue of intermediate copying, and a recent reverse engineering case required two courts to engage in an elaborate fair use analysis (with the appeals court reversing the district court) not because the defendant's final work included any copyrighted material from the plaintiff's work but largely because the defendant's employees had loaded the plaintiff's program into RAM each day when the employees turned on their computers. See *Sony Computer Enters. v. Connectix Corp.*, 203 F.3d 596, 605 (9th Cir. 2000), *rev'g* 48 F. Supp. 2d 1212 (N.D. Cal. 1999). The Ninth Circuit's discussion of the intermediate copying focuses primarily on the temporary RAM "copies" that the defendant made, although it seems likely that more permanent intermediate copies were made as well. See *Sony Computer*, 48 F. Supp. 2d at 1217.

241. Sending an e-mail to a Usenet newsgroup or an e-mail listserv would likely be a transmission "to the public." See 17 U.S.C. § 101 (Supp. IV 1998) ("publicly") (defining transmission as "to the public" "whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times"). But some question may remain as to whether sending an e-mail that the recipient opens later (if at all) constitutes the transmission of a display. See *supra* note 123.

reproduction were somehow excused.²⁴² Congress's decision to limit the copyright owner's control to public displays seems appropriate. A private transmission of a display of a copyrighted work seems no more likely to interfere with a copyright owner's interests than would showing a copy of a photograph to another individual in person.²⁴³

In addition, the RAM copy doctrine may allow a copyright owner not only to use copyright to control *activities* by third parties (such as reading, intermediate copying, or private displays) that would not otherwise infringe, but it may allow copyright owners to use copyright law to control other people's access to, and use of, noncopyrightable elements contained in a copyrighted work.²⁴⁴ One court has at least suggested that while a website that posts factual information not subject to copyright protection has no copyright claim against a competing website that posts the same factual information,²⁴⁵ the first website nevertheless might have a copyright claim based on the storage of the pages containing the facts in the RAM of the second website's computers in the course of extracting the factual information.²⁴⁶

The RAM copy doctrine's potential for giving copyright owners excessive control over copyrighted works and uncopyrightable information, and the particular problems that such control may create in a variety of situations, can perhaps be dealt with as each situation arises, either by applying or updating existing copyright doctrines²⁴⁷ or by developing new ones, either in courts or in the Congress.²⁴⁸ Indeed, the "safe harbor"

242. Even without the RAM copy doctrine, more permanent storage of a privately transmitted work—for example, saving it to a hard drive or a diskette—could constitute an infringing reproduction of the work transmitted.

243. Such a showing would not be infringing even without the protection of the § 109(c) limit, because the display would not be made "publicly." Copying an image file onto a floppy diskette and giving it to another individual would be a potentially infringing reproduction, just as photocopying the image and giving it to someone would be. Similarly, a recipient of a private transmission who made a copy of the transmitted image (by saving the file or printing it) would commit an act of reproduction. Such private copying may be difficult to detect and enforce, but would not seem to be any more difficult to detect and enforce than would a private transmission between two individuals, the making of RAM copies in the course of such transmission, or the analog copying of a work by one individual for another.

244. See *Cate*, *supra* note 123, at 1397–98, 1434.

245. Mere facts are not subject to copyright protection because they are not the "writings" of "Authors" that Congress is authorized to protect under the Patent and Copyright Clause of the U.S. Constitution, although the particular selection and arrangement of facts, or the original expression in their presentation, may be protected by copyright. See *Feist Publ'n, Inc. v. Rural Tel. Serv.*, 499 U.S. 340, 340, 347–48 (1991).

246. *Ticketmaster v. Tickets.com*, No. CV 99-7654, 2000 U.S. Dist. LEXIS 4553, at *5 (C.D. Cal. Mar. 27, 2000). Presumably the pages browsed included not only bare facts but also copyrightable expression (such as graphics, additional text, etc.) in the presentation of those facts. This opinion is fairly brief and comes at fairly preliminary point in the proceedings, so it is not entirely clear whether the plaintiff has claimed that the defendant only engaged in RAM storage of the plaintiff's web pages or whether the defendant made any more permanent intermediate storage in the course of extracting unprotected factual data from those pages. See *id.* at *4–5.

247. These could include doctrines such as fair use, implied license, and copyright misuse.

248. For example, the European Union has directed its member states to exempt from the copyright owner's exclusive reproduction right "transient and incidental acts of reproductions, forming an

limitations on liability in § 512 of the Copyright Act, enacted in 1998, can be seen as an initial attempt to deal with some of the potential problems created by the RAM copy doctrine in the computer network context.²⁴⁹ Such an ad hoc approach, however, would create significant uncertainty as each new situation arises. In addition, that approach requires significant effort on the part of courts, Congress, and copyright lawyers, as the complexity of the safe harbor provisions of § 512 and the difficulty with which they were enacted amply demonstrate.

These burdens of coping with the RAM copy doctrine might be acceptable if the doctrine were necessary for copyright owners to prevent unauthorized use of their works on computer networks. But the existence of the public display right means that the RAM copy doctrine is *not* generally needed in order to give copyright owners such control. Because of the display right, a decision (by a court or Congress) that temporarily storing data in RAM does not generally constitute the making of a “copy” would not leave copyright owners defenseless in the modern world of computer networks. Since transmitting a copyrighted work for viewing over the Internet generally involves making a public display, the public display right will generally allow the copyright owner to hold the transmitting party liable for making such transmissions without authorization, regardless of whether any data is stored in RAM during the transmission, or whether that storage infringes the reproduction right.

Enforcing the public display right but not considering RAM storage to be a “reproduction” would appropriately limit a copyright owner’s control over her work.²⁵⁰ If you own a novel on a CD-ROM (or stored on your hard drive after downloading it with authorization from a bookseller’s website), then you own a lawfully made *copy* in which the novel is fixed, just as if you owned a printed volume. Without the RAM copy

integral part of and essential to a technological process, carried out for the sole purpose of enabling use of a work . . . and which have no separate economic value on their own.” Amended Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 1999 O.J. (C 161) 2, COM(99)250 final, at 16.

249. See 17 U.S.C. § 512(b)(1), (e), (g)(1), (g)(4) (Supp. IV 1998). Section 117(c), enacted in 1998, can also be seen as a legislative response to the perceived problems with the application of the RAM copy doctrine in the particular circumstances in which the doctrine was first announced in the *MAI* case—RAM copies made by an independent service organization in the course of performing maintenance or repair on a computer system. See *id.* § 117(c); see also *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993).

250. The case that resulted in the first appellate decision establishing the RAM copy doctrine, *MAI v. Peak*, would likely have been decided differently under this approach, because that case did not involve any network transmission of the computer software involved, thus not implicating the public display right. See *MAI*, 991 F.2d at 513–16. The fact that Congress has now expressly reversed the application of the RAM copy doctrine in situations like the one involved in *MAI* suggests that the different outcome would be appropriate. See 17 U.S.C. § 117(c). The outcome of the other main appellate decision affirming the RAM copy doctrine, *Stenograph L.L.C. v. Bossard Associates Inc.*, would have been the same if RAM storage was held not to be reproduction, as the defendant in that case had, without authorization, copied the plaintiff’s computer software onto computer hard drives and used it for over two years—acts that clearly qualified as reproduction. 144 F.3d 96, 100–01 (D.C. Cir. 1998).

doctrine, you can use the digital file to read the novel whenever and as often as you like without committing copyright infringement—even though each time you read it you are making RAM copies—just as you could read the printed volume freely without infringing any copyright in the novel. On the other hand, if you access the text of a copyrighted magazine article on the Internet, the site that is transmitting that article to you would be publicly displaying the article and therefore, potentially infringing its copyright, independent of the work being stored in the RAM of the website’s server or your computer. You, however, would not be liable for creating a potentially infringing reproduction of the article simply by browsing the web page on which it is posted and thereby temporarily storing the work in the RAM of your computer. If, however, you were to download and save a copy of the article from the website, or print it out, you would then have committed an act of reproduction for which you might be liable (and for which the website operator might be contributorily liable).²⁵¹

Relying on the public display right instead of the RAM copy doctrine may thus more appropriately distinguish which uses of a work a copyright owner should and should not control: display of the work to the public, or reproduction of the work onto a storage medium (such as a hard drive, floppy disk, or paper), would infringe, but private transmissions or temporary storage in RAM would not.²⁵² Such a result would be consistent with the position taken by the Register of Copyrights in the 1965 copyright revision hearings:

[D]isplay[ing] the work temporarily on a . . . screen . . . would be an infringement only if the image of the work is transmitted beyond the location of the computer in which the copy is stored; I do not believe that the transitory image of a copyrighted work, taken from an authorized reproduction stored in a computer and consulted at the computer site, should be treated as different from the consultation of a book in a library.²⁵³

In the realm of network transmissions, this approach would put the law’s focus on what the creators of the display right realized as early as the 1960s was the main economic concern of copyright owners in this area—capturing some of the value to users of being able to *see* a work on demand without buying or renting a physical *copy*—instead of on ephemeral storage of the work that is, at most, of tangential concern.

251. This approach would have similar results for music. Transmitting a performance of recorded music over the Internet would constitute a public performance, while listening in private to a digital recording would not be an infringement, even if the work was stored in RAM in order to be played. Similarly, downloading a copy of a digital music file would constitute an act of reproduction that would be infringing if unauthorized. See R. Anthony Reese, *Copyright and Internet Music Transmissions*, U. MIAMI L. REV. (forthcoming 2001).

252. See Litman, *supra* note 217, at 43 (suggesting that when Congress granted the reproduction right it did not intend to grant the exclusive right to read, view, or listen to a copyrighted work).

253. 1965 House Hearings, Part III, *supra* note 67, at 1861.

Applying the display right, rather than the distribution right or the RAM copy doctrine, to computer network transmissions will not be a panacea for the difficult copyright problems presented by the Internet and other computer networks. Identifying which rights apply—and how they apply—to computer transmissions will not, for example, resolve the problems of decentralized infringement that such networks present to copyright owners trying to enforce their rights. In addition, problems presented by dispersed individual users storing works more permanently—such as by saving a file to a hard drive or printing a web page—such that they each commit potentially infringing acts of reproduction would not be addressed by eliminating the RAM copy doctrine.

Given the lack of caselaw interpreting the public display right, courts and perhaps Congress will also need to develop the contours of the right further, doing the work that the early drafters left undone because they could not predict the details of the particular technologies that would develop to allow widespread public displays. One issue that is likely to emerge as courts apply the display right to computer transmissions is when a transmission is a *public* display. Because transmitted displays are copyright infringements only if they are transmitted “to the public” or to a place open “to the public,” and because the 1976 Act nowhere defines “the public,” courts are likely to be faced with questions about when a display is transmitted publicly. In addition, because copyright law is territorial and generally does not extend beyond a country’s borders, while computer networks such as the Internet generally ignore national boundaries, courts may face tough decisions about whether a public display by transmission occurs at the place where the transmission originates or at the place where it is received. Courts already have some experience with these questions, though, because the definition of “publicly” display exactly parallels the definition of “publicly” perform and several cases have begun the work of establishing the meaning of “public” in the performance context and deciding how U.S. law applies to cross-border transmissions.²⁵⁴ And courts are, in any event, likely to face those questions because transmissions of performances of musical recordings over the Internet have already become so common and transmissions of motion pictures appear likely to become more common in the future. Thus, while relying on the display right to address much copyright infringement on the Internet will neither be completely straightforward or a complete solution, neither will it require substantial effort that would otherwise be unnecessary.

254. *E.g.*, Allarcom Pay Television, Ltd. v. Gen. Instrument Corp., 69 F.3d 381 (9th Cir. 1995) (finding infringing performance of audiovisual work by satellite transmission across U.S.–Canadian border occurred in Canada); On Command Video Corp. v. Columbia Pictures Indus., 777 F. Supp. 787 (N.D. Cal. 1991). Another issue likely to pose questions is whether a download transmission constitutes a display (or performance). *See supra* note 123.

V. CONCLUSION

The scope and origins of the public display right suggest that it should become significantly more important in the era of computer networks than it has been to date. Congress designed the right to cover transmissions of images and texts of copyrighted works to the public, including those made over computer networks, where it is possible for someone to take a single copy of a work and provide the public with interactive, on-request access to the work that is likely to satisfy much of the demand for owning a physical copy. Now that such transmissions are becoming commonplace over computer networks such as the Internet, courts should recognize the so far underutilized public display right as well-suited to addressing many of the difficult copyright questions raised by those networks. Whether the display right will become important in adapting copyright to the digital networked environment will depend in large part on whether courts and lawyers have the will and creativity to apply the right to the cases for which it was designed.

Although alternative copyright approaches to controlling transmissions over computer networks have emerged, the public display right is in many ways superior to those alternatives and would allow courts to avoid some troublesome and unnecessary results from applying other exclusive rights to such transmissions. It avoids many of the problems of divided ownership of copyright rights, and it may ease the problem of potentially excessive copyright control that the RAM copy doctrine presents.

In addition, the display right has two less concrete advantages over the distribution and RAM copy alternatives. First, it is more faithful to the language and intent of the Copyright Act than either of the alternatives. Second, insisting that the specific rights implicated by a particular activity (such as transmitting images over the World Wide Web) be properly identified emphasizes that copyright owners do not simply “own” their “works” but, rather, they have exclusive control over certain specified uses of those works, while other uses—for example, reading or viewing a copy of a work, privately performing a work, or using a work’s uncopyrightable elements—are not under the copyright owner’s control. As copyright expands and debates rage over the appropriate sphere of control over copyrightable works, properly interpreting the specific rights granted to the copyright owner can help focus attention away from notions of undifferentiated ownership by rightsholders. Copyright has never given owners complete control over their works, but instead has sought to give owners sufficient control to provide incentives to produce and disseminate copyrightable works while allowing the public to benefit from access to those works. Digital technology and computer networks require rethinking how the balance between incentives and access is to be struck in terms of the rights granted to owners and the limitations on those rights, which will be difficult to do if copyright ownership is con-

ceived of as absolute and exclusive control over all uses of the copyrighted work.