

The Demise of the Copyright Act in the Digital Realm: Re-Engineering Digital Delivery Models to Circumvent Copyright Liability After *Aereo*

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INTRODUCTION

In the late 1950s, broadcasters waged war on a new, disruptive technology that threatened to change the television industry forever: cable. Broadcasters and their allies attempted to stifle cable by exercising their intellectual property rights, calling cable a “huge parasite in the marketplace” and attacking it for exploiting the works of others.¹ Today, broadcasters face a new technology threatening to disrupt the television landscape: services disseminating television programming via the Internet. Just as they did in the 1950s, broadcasters have launched a legal battle against these services, characterizing them as exploitative—the modern parasites in the marketplace.

Aereo, a service that captures over-the-air television and transmits it via the Internet to paying subscribers, is at the center of this dispute. Echoing the early cries that cable would “prove more revolutionary than the printing press,”² Aereo has been heralded as a victory for innovation and consumer choice in an otherwise archaic television industry, turning laptops and smartphones into television sets and leaving behind the days of a “giant rooftop antenna or awkward rabbit ears.”³ Aereo is able to provide consumers with an alternative to set-top boxes, expensive contracts and bundled plans, while keeping prices at a modest \$8 per month by not paying licensing or retransmission fees to broadcasters.⁴ Aereo argued that such fees were unnecessary because they simply provided consumers with a means of

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1. See TIM WU, *THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES* 179 (2011). We know today that the broadcasters ultimately lost their fight, as cable changed the television landscape forever.

2. *Id.* at 176.

3. See *About Aereo*, AEREO (Feb. 3, 2013), <https://aereo.com/about>.

4. See Jeff John Roberts, *Aereo's Big Bet to Break the TV Industry: CEO Chet Kanojia Explains*, GIGAOM (Feb. 7, 2013), <http://gigaom.com/2013/02/07/aereos-big-bet-to-break-the-tv-industry-ceo-chet-kanojia-explains>; Ryan Kim, *IAC-Banked Aereo Makes a Big Play for Cord Cutters*, GIGAOM (Feb. 14, 2012), <http://gigaom.com/2012/02/14/iac-backed-aereo-makes-a-big-play-for-cord-cutters>; Beth Carter, *Introducing Aereo: One Small Step for Cord Cutting, One Giant Leap of Faith*, WIRED.COM (Feb. 14, 2012), <http://www.wired.com/business/2012/02/aereo-cord-cutting>.

doing something that consumers were already legally entitled to do.⁵ Broadcasters, of course, disagreed.⁶

Over the years, the growth of digital technology has created countless methods and modes of communicating content to the public that, like Aereo, have challenged the status quo.⁷ Methods of content delivery that constitute performance to the public are covered by the Transmit Clause of the public performance right,⁸ which was added by Congress in response to the Supreme Court's rulings that unauthorized retransmission of television broadcasts did not violate copyright law.⁹ Recent development of Internet-based services designed to retransmit copyrighted content to subscribers has created confusion about which transmissions are considered "public." In two recent decisions, the Second Circuit has attempted to interpret what constitutes "public" under the Transmit Clause.¹⁰

In *WNET, Thirteen v. Aereo, Inc.* ("Aereo"), broadcasters brought suit against Aereo, arguing that the use of individual antennas to retransmit individualized copies live over the Internet is a violation of the Transmit Clause because such activity results in performing copyrighted works "to the public."¹¹ The Second Circuit disagreed, holding that Aereo was not performing copyrighted works "to the public," even though thousands of subscribers were receiving retransmissions of copyrighted content. The Second Circuit's rationale was based on its earlier decision in *Cartoon Network LP v. CSC Holdings, Inc.* ("Cablevision"), in which it held that the meaning of "public" is determined by who is capable of receiving a transmission from a particular copy.¹² Thus, as long as a transmission from a particular copy is private, the public performance right is not violated.

By prioritizing form over substance, the Second Circuit's interpretation has created a massive loophole in copyright protection, allowing any digital content

5. See *Our Response*, AEREO (Mar. 1, 2012), <http://blog.aereo.com/2012/03/our-response/> ("Consumers are legally entitled to access broadcast television via an antenna and they are entitled to record television content for their personal use. Innovations in technology over time, from digital signals to Digital Video Recorders ('DVRs'), have made access to television easier and better for consumers.").

6. See, e.g., Reuters, *CBS Threatens to Cut Off Broadcast Signal if Aereo Wins*, HUFFINGTON POST (Mar. 11, 2013), http://www.huffingtonpost.com/2014/03/11/cbs-aereo_n_4941089.html.

7. In fact, in the 1970s, cable television was one of the "disruptive" technologies that challenged the then-dominant broadcasting television industry. See WU, *supra* note 1, at 177, 179.

8. 17 U.S.C. § 101 (2012) (The Transmit Clause provides that "to perform or display a work 'publicly' means . . . (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times").

9. See *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394, 405 (1974) (holding that unauthorized retransmission of television broadcasts, received by antenna and retransmitted to subscribers via coaxial cable, did not require licenses from copyright holders because the cable systems did not "perform" those works); *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390, 395 (1968).

10. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 689–94 (2d Cir. 2013), *cert. granted*, 134 S. Ct. 896 (2014) (mem.); *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 136 (2d Cir. 2008).

11. *WNET, Thirteen*, 712 F.3d at 682–83.

12. *Cartoon Network*, 536 F.3d at 134.

delivery service to transmit copyrighted works to thousands of people without engaging in an infringing act. Although the Supreme Court has granted certiorari in *Aereo* to clarify the scope of the public performance right as it applies to retransmissions of television broadcasts over the Internet,¹³ the Second Circuit's loophole has much broader consequences, implicating the entire Copyright Act and extending to all digital media.

This Note argues that the Second Circuit's interpretation of the Transmit Clause eviscerates the meaning of "public" within the digital realm and has created a blueprint for business models to completely circumvent copyright liability. Part I provides the background of the public performance right, focusing on the role that technology has played in the addition of the Transmit Clause and on relevant judicial interpretation. Part II argues that the Second Circuit's interpretation of the Transmit Clause was improper; it tests the court's blueprint by re-engineering past business models to show how they could have evaded liability. Part III proposes that, in order to prevent the breakdown of traditional copyright protection in the digital realm, courts should prioritize function over form and adopt a delivery-agnostic approach to evaluating copyright infringement.¹⁴

I. THE EVOLUTION OF THE PUBLIC PERFORMANCE RIGHT IN LIGHT OF EMERGING TECHNOLOGY

The exclusive right to publicly perform has been particularly affected by the progression of technology over the past century. As companies develop new techniques for sharing content, issues continue to arise as to the meaning of "publicly perform" and the level of protection that should be afforded by the public performance right. Congress attempted to clarify these issues by adding the Transmit Clause to the Copyright Act in 1976.¹⁵ However, technology has evolved rapidly, and new challenges surrounding the application of the public performance right have now fallen to the courts.

Part I will explore the evolution of the public performance right in light of

13. See Petition for Writ of Certiorari, *Am. Broad. Cos. v. Aereo, Inc.*, No. 13-461 (petition granted Jan. 10, 2014), available at http://sblog.s3.amazonaws.com/wp-content/uploads/2013/11/ABCvAereo_11Oct13.pdf.

14. Contrary to arguments Aereo and its proponents made, the Second Circuit's interpretation is not necessary to allow legitimate cloud technologies, such as DropBox or Amazon Cloud Player, to continue to function without liability. As the Solicitor General has argued, there is a distinction between neutral services that enable consumers to store and play back their own lawfully acquired content, on the one hand, and services that offer consumers initial access to copyrighted content on the other. A consumer using the former service to stream his content for private playback will receive a performance analogous to playing back a DVD, which requires no additional licensing. Additionally, transmissions for personal use would be protected by fair use principles under 17 U.S.C. § 107. See Brief for the United States as Amicus Curiae Supporting Petitioners, *Aereo*, No. 13-461, 31-32 (Mar. 2014). Cablevision also observed that cloud technology providers might invoke the safe harbors within the Digital Millennium Copyright Act, although it is unclear whether such protection would be complete. See CABLEVISION, *AEREO AND THE PUBLIC PERFORMANCE RIGHT* 16 (2013), available at http://www.cablevision.com/pdf/cablevision_aereo_white_paper.pdf.

15. 17 U.S.C. § 101 (2012).

emerging technology. Part I.A will discuss provisions of the Copyright Act that are particularly influenced by new technology. Parts I.B and I.C will discuss the background surrounding Congress' addition of the Transmit Clause to the public performance right. Part I.D will consider the modern judicial interpretation of the Transmit Clause, particularly as it relates to retransmission of digital content. This section will provide a foundation from which to analyze the Transmit Clause as applied to digital retransmissions of copyrighted content.

A. PROVISIONS OF THE COPYRIGHT ACT OFTEN INFLUENCED BY EMERGING TECHNOLOGY

Content providers have traditionally protected their business models and content by exercising their rights under the Copyright Act. Section 106 of the Copyright Act confers upon owners of copyrighted material the exclusive rights to: (1) "reproduce the copyrighted work"; (2) "prepare derivative works" based upon the original work; (3) "distribute copies" of the original work to the public; (4) "perform the copyrighted work publicly"; (5) "display the copyrighted work publicly" and (6) perform a digital audio transmission publicly.¹⁶ While the exclusive rights conferred on copyright owners often overlap in the digital realm, the rights of reproduction and public performance particularly have served as significant tools for content providers in their fight against copyright infringers. Consequently, interpretations of those two rights are often the subject of debate.

1. The Reproduction Right: 17 U.S.C. § 106(1)

Although not central to this Note, the reproduction right is often associated with the public performance right when digital retransmissions are at issue. An explanation of the reproduction right, which this Note will explore later in conjunction with the Second Circuit's interpretation of the Transmit Clause, will clarify the ramifications of recent decisions on digital retransmission.

Infringement under § 106(1) requires a reproduction of the original work in copies.¹⁷ Thus, the central question in determining the scope of the reproduction right is what constitutes a "copy." Section 101 defines "copies" as

material objects . . . 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. The term "copies" includes the material object . . . in which the work is first fixed.¹⁸

Digital technology has complicated this definition, raising questions about whether temporary copies stored on a hard drive, or buffer copies, are sufficiently "fixed" to constitute a copy.¹⁹ While § 101 provides a definition of "fixed,"²⁰ courts have not

16. 17 U.S.C. § 106 (2012).

17. *Id.*

18. 17 U.S.C. § 101.

19. *See, e.g.,* London Sire Records v. Does, 542 F. Supp. 2d 153, 171 (D. Mass. 2008).

consistently required that a copy exist “for a period of more than transitory duration” in relation to buffer copies.²¹

2. The Public Performance Right: 17 U.S.C. § 106(4)

Infringement under § 106(4) requires a performance of a work “to the public.” Thus, the two terms relevant to the construction of the public performance right are “perform” and “public,” which Congress defined in § 101. To “perform a work means to recite, render, play, dance, or act it, either directly or by means of any device or process.”²² Congress defined “public” as follows:

To perform or display a work “publicly” means—(1) to perform or display it 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; or (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.²³

This definition indicates that a performance can be “public” either by occurring in a public place or by transmission. Clause two, clarifying what constitutes a public performance by transmission, is known as the Transmit Clause and is central to the focus of this Note.

Interpretation of the Transmit Clause has become exceedingly complex as digital media have advanced and created new methods of retransmitting copyrighted content. Although the Transmit Clause provides some guidance about which transmissions are “public,” courts have struggled with its application to new technology. In this regard, it is instructive to understand the background of Congress’ decision to include the Transmit Clause in the public performance right.

B. THE PUBLIC PERFORMANCE RIGHT UNDER THE 1909 COPYRIGHT ACT

The emergence of cable television has created one of the most illustrative examples of the conflict between new technology and traditional copyright law. This development “seemingly wrote the script for future battles” between traditional copyright protection and new technologies seeking to circumvent

20. 17 U.S.C. § 101 (“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.”).

21. *Compare London Sire Records*, 542 F. Supp. 2d at 170–71, 175 n.29 (holding that fixation occurs when the copy permits the work to be perceived for a period of more than transitory duration), *with Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 130 (2d Cir. 2008) (holding that reproductions made in a buffer stream lasting 1.2 seconds were insufficiently “fixed” to constitute “copies”).

22. 17 U.S.C. § 101.

23. *Id.*

liability.²⁴

With the launch of cable television, cable providers developed technology that transmitted broadcast television to subscribers in areas that had previously been unable to receive signals due to poor reception. The broadcasters objected, arguing that retransmission of broadcast television content to the public without compensation to the broadcasters was copyright infringement.²⁵ The cable providers argued that they were not indiscriminately sending signals to the public, but were instead sending signals to individual homes to provide a better antenna for homes otherwise unable to receive the terrestrial signal.²⁶

Interpreting the then-current 1909 Copyright Act, which included no clause comparable to the current Transmit Clause, the Supreme Court sided with the cable providers. Its *Fortnightly* and *Teleprompter* decisions held that unauthorized retransmission of television broadcasts, received by antenna and retransmitted to subscribers via coaxial cable, did not require licenses from copyright holders of the broadcast programs because the cable systems did not “perform” those works.²⁷ According to the Court, the cable providers merely facilitated reception by providing homeowners with a way to capture content that they could legally capture through the use of their own antennas.²⁸

C. CONGRESS’ ADDITION OF THE TRANSMIT CLAUSE TO THE PUBLIC PERFORMANCE RIGHT AS A RESULT OF TECHNOLOGICAL ADVANCEMENTS

The Supreme Court’s decisions in *Fortnightly* and *Teleprompter* clarified that the broadcasters did not have retransmission rights, and thus had no protection against unauthorized retransmission by the cable providers. In response to the *Fortnightly* and *Teleprompter* decisions, Congress amended the Copyright Act in 1976.²⁹ The amendment essentially reversed the Supreme Court’s rulings by providing a retransmission right for terrestrial broadcasters and a compulsory licensing scheme.³⁰ The new Transmit Clause expanded the definition of

24. Chad Guo, *Copyright’s Online Destiny, or: How to Stop Worrying and Love the Net*, INTELL. PROP. BRIEF, Fall 2013 at 8, 10, available at <http://digitalcommons.wcl.american.edu/ipbrief/vol4/iss3/1>.

25. *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390, 395 (1968); see also *Teleprompter Corp. v. Columbia Broad. Sys. Inc.*, 415 U.S. 394, 402–3 (1974).

26. *Fortnightly*, 392 U.S. at 395.

27. *Teleprompter*, 415 U.S. at 405; *Fortnightly*, 392 U.S. at 402 (“With due regard to changing technology, we hold that the petitioner did not under that law ‘perform’ the respondent’s copyrighted works.”).

28. *Teleprompter*, 415 U.S. at 405; *Fortnightly*, 392 U.S. at 399–401.

29. See H.R. REP. NO. 94-1476, at 88–89 (1976) (“Pursuant to [these] two decisions of the Supreme Court . . . under the 1909 copyright law, the cable television industry has not been paying copyright royalties for its retransmission of over-the-air broadcast signals. Both decisions urged the Congress, however, to consider and determine the scope and extent of such liability in the pending revision bill.”).

30. 4 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 14:7 (2013) (“*Fortnightly* and *Teleprompter* were reversed both by the definitions of ‘perform’ and ‘perform publicly’ in Section 101 and by the imposition of liability subject to a compulsory license in Section 111(d).”); see 17 U.S.C. §§ 101, 111 (2012).

“publicly” within the Copyright Act:

To perform or display a work “publicly” means . . . (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.³¹

Applied to cable television, the Transmit Clause provided greater protection to broadcasters and prevented businesses from selling access to broadcasters’ signals without paying retransmission fees.³² Congress also implemented a compulsory licensing scheme to minimize the burden on cable providers, who would otherwise be forced to negotiate retransmission licenses with every copyright owner.³³ The compulsory licensing scheme allows providers to make and distribute reproductions of copyrighted works without the direct consent of the copyright owner, as long as the provider pays a statutorily established royalty to the copyright owner.³⁴

Although the Transmit Clause was enacted in response to the *Fortnightly* and *Teleprompter* decisions on cable television, its application extends to any service retransmitting copyrighted content publicly. Congress’ intent was not only to protect broadcasters, but also to account for the many new methods of retransmission created by advancing technology.³⁵

D. MODERN JUDICIAL INTERPRETATION OF THE TRANSMIT CLAUSE

Since 1976, the explosion of digital media has created even more modes of transmission to the public, reigniting the battle between copyright owners seeking to protect their works and digital media services seeking to evade liability.³⁶ While it is Congress’ task to define the scope of copyright protection,³⁷ new technologies

31. 17 U.S.C. § 101 (2012).

32. See H.R. REP. NO. 94-1476, at 89 (“[T]he Committee believes that cable systems are commercial enterprises whose basic retransmission operations are based on the carriage of copyrighted program material and that copyright royalties should be paid by cable operators to the creators of such programs.”).

33. *Id.* (“The Committee recognizes, however, that it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system.”).

34. See 17 U.S.C. §§ 111(d), 118 (2012).

35. See *infra* Part II.A for more information about the legislative history of the Transmit Clause.

36. See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 417 (1984) (regarding home video recording technology); *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 123 (2d Cir. 2008) (regarding a cable television system implementing a digital video recorder to record and play back cable programs); *Am. Broad. Cos. v. Aereo, Inc.*, 874 F. Supp. 2d 373, 375 (S.D.N.Y. 2012) (regarding Internet retransmission of television through use of a remote digital video recorder).

37. *Sony*, 464 U.S. at 430–31 (“Repeatedly, as new developments have occurred in this country, it has been the Congress that has fashioned the new rules that new technology made necessary. . . . The judiciary’s reluctance to expand the protections afforded by the copyright without explicit legislative guidance is a recurring theme. Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials.” (citations

emerge quickly, and interpretation typically falls on the shoulders of the courts.³⁸ Although the intent of Congress, as reported in the 1976 House Report, was that the Transmit Clause should encompass new forms of technology,³⁹ courts have applied the clause inconsistently, with unpredictable results.

Application of the Transmit Clause to technology that retransmits over-the-air broadcast television via the Internet has been particularly contentious. The following section analyzes the major cases interpreting the Transmit Clause as it relates to these services.

1. *Cartoon Network LP v. CSC Holdings, Inc. (“Cablevision”)*

One of the most influential interpretations of the Transmit Clause comes from the Second Circuit’s 2008 *Cablevision* ruling.⁴⁰ In that case, broadcasters owning copyrighted programs brought suit against Cablevision, seeking declaratory and injunctive relief against the release of a Remote Storage DVR System (“RS-DVR”). The RS-DVR, using technology similar to set-top digital video recorders (like TiVo DVRs and video-on-demand (“VOD”) services), allowed subscribers without a stand-alone DVR system to record cable programming on central hard drives, which were housed and maintained by Cablevision.⁴¹ Subscribers subsequently received playback of their copy of the programming through their home televisions, using a standard cable box and RS-DVR software.⁴² Each subscriber’s copies were unique: if 10,000 subscribers wanted to record a particular program, 10,000 copies would be made, each stored on a portion of the server accessible only to the customer who made that copy.⁴³ The broadcasters argued that use of the RS-DVR infringed their reproduction and public performance rights.⁴⁴ Cablevision contended that it should not be held liable because the subscribers made the copies, not Cablevision. Moreover, it argued, the transmissions were not public because they were unique and individualized for each customer.⁴⁵

omitted)).

38. *Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc.*, 780 F. Supp. 1283, 1290 (N.D. Cal. 1991), *aff’d*, 964 F.2d 965 (9th Cir. 1992) (“Congress cannot immediately respond to each invention that hits the market. The courts must therefore use their best judgment to construe the meaning of certain words consistent with Congressional intent.”).

39. See H.R. REP. NO. 94-1476, at 64 (1976) (“The definition of ‘transmit’ . . . is broad enough to include all conceivable forms and combinations of wires and wireless communications media.”); S. REP. NO. 94-473, at 60 (1975) (“A performance may be accomplished either directly or by means of any device or process, including . . . any sort of transmitting apparatus, any type of electronic retrieval system, and any other techniques and systems not yet in use or even invented.” (citations omitted)).

40. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121 (2d Cir. 2008). Although this case involved three contested copyright issues, the most relevant to this note is whether the DVR service constituted a public performance.

41. *Id.* at 124.

42. *Id.*

43. *Id.*

44. *Id.* at 123.

45. *Id.* at 130–31.

a. RS-DVR Operation

Essential to the understanding of the case is an understanding of how the RS-DVR system operates. Unlike traditional transmissions of broadcast programs, which are transmitted to subscriber homes in a single stream via coaxial cable, the RS-DVR system splits the data into two streams.⁴⁶ The first stream is sent to subscribers via coaxial cable. The second stream flows through a Broadband Media Router (“BMR”), where it is buffered and reformatted, before being sent to the “Arroyo Server,” which consists of two data buffers and high-capacity hard drives at Cablevision facilities.⁴⁷ The path of the data is as follows:

The entire stream of data moves to the first buffer (the “primary ingest buffer”), at which point the server automatically inquires as to whether any customers want to record any of that programming. If a customer has requested a particular program, the data for that program move from the primary buffer into a secondary buffer, and then onto a portion of one of the hard disks allocated to that customer. . . . The data buffer in the BMR holds no more than 1.2 seconds of programming at any time.⁴⁸

Once the data reaches the Arroyo Server, it is stored in a space on the hard drive set aside for one subscriber and available only to that subscriber.⁴⁹ The recorded program is stored on the Arroyo Server indefinitely, until either deleted by the subscriber or overwritten by Cablevision to make room for a new program.⁵⁰

Despite the system’s technical complexity, the subscriber’s experience is similar to that of using a standard DVR.⁵¹ The principal difference is that, unlike a traditional DVR, which sends signals from the remote to the on-set box, the subscriber sends a signal from the remote, through the cable, to the Arroyo Servers at Cablevision’s central facility.⁵² This makes the RS-DVR system similar to a VOD service, but with the added capability of playing previously recorded content.⁵³ Additionally, the ownership of the RS-DVR box remains with Cablevision, and customer access requires a continuing relationship with Cablevision.⁵⁴ Cablevision has physical control of the RS-DVR, and Cablevision personnel monitor the programming streams and determine how much memory to allot to each user.⁵⁵ Cablevision also has some control over the content available to

46. *Id.*

47. *Id.*

48. *Id.* at 124–25.

49. *Twentieth Cent. Fox Film Corp. v. Cablevision Sys. Corp.*, 478 F. Supp. 2d 607, 612 (S.D.N.Y. 2007), *rev’d in part, vacated in part sub nom. Cartoon Network*, 536 F.3d 121.

50. *Id.*

51. *Cartoon Network*, 536 F.3d at 125 (explaining that, like a traditional DVR, subscribers can record programming by using the remote control, which allows them to either press record while watching a program or to navigate the on-screen program guide to select a future program to record).

52. *Id.*

53. *Id.*

54. *Twentieth Cent. Fox Film*, 478 F. Supp. 2d at 618. This “continuing relationship” distinction is unlike that of a standalone VCR, which the customer owns outright after purchase.

55. *Id.* at 619.

subscribers, as well as the ability to limit the number of channels available.⁵⁶

b. Second Circuit Decision

The Second Circuit held that Cablevision did not violate the broadcasters' reproduction or public performance rights. First, the court held that the primary ingest buffer copies, remaining in the buffer for 1.2 seconds, were not sufficiently "fixed" to constitute "copies," because they did not last for a period of more than transitory duration.⁵⁷ Second, the court found that the content stored on the Arroyo server did constitute "copies."⁵⁸ However, Cablevision was not liable for the reproduction because it was each subscriber, not Cablevision, who made the copies.⁵⁹ Third, the court held that the copies were not transmitted to the public because each playback transmission was made to an individual customer from a unique copy produced by that customer.⁶⁰

In first deciding that Cablevision had not created a "copy" while initially buffering data, the Second Circuit held that in order to be fixed, the data must both be embodied in a medium that can be perceived and communicated with, and must remain embodied for a period of more than transitory duration.⁶¹ The court held that although the data met the tangible embodiment requirement, the embodiment did not last for a period of more than transitory duration because it was only held in the buffer for 1.2 seconds before being automatically overwritten.⁶² Although the court acknowledged that the transitory requirement was a fact-specific determination, it found that the 1.2-second duration was insufficient to meet the standard set by other precedent, in which data remained in a user's RAM memory until the computer was turned off.⁶³

The second issue was whether Cablevision was directly liable for creating the playback copies. Cablevision's RS-DVR process starts when a subscriber selects a program to record, at which point a copy of the program is created and stored on the Arroyo Server.⁶⁴ In determining whether or not an entity is directly liable, "[t]he question is who made [the] copy."⁶⁵ Following precedent that required "some element of volition or causation" for direct liability online,⁶⁶ the Second Circuit likened Cablevision's RS-DVR process to that of a VCR and consequently released Cablevision from liability for direct infringement.⁶⁷ "In determining who

56. *Cartoon Network*, 536 F.3d at 125.

57. *Id.* at 130.

58. *Id.*

59. *Id.* at 124 ("Critically for our analysis here, plaintiffs alleged theories only of direct infringement, not contributory infringement, and defendants waived any defense based on fair use.").

60. *Id.* at 134.

61. *Id.* at 127.

62. *Id.* at 130.

63. *Id.* at 129–130 (citing *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 (9th Cir. 1993)).

64. *Id.* at 131.

65. *Id.* at 130.

66. *Id.*

67. *Id.* at 131.

actually ‘makes’ a copy,” the court observed, “a significant difference exists between making a request to a human employee, who then volitionally operates the copying system to make the copy, and issuing a command directly to a system, which automatically obeys commands and engages in no volitional conduct.”⁶⁸ Cablevision’s control over selecting the programming available to subscribers was insufficiently proximate to the copying to trigger liability.⁶⁹

The third issue was whether Cablevision publicly performed the broadcasters’ works through playback of the RS-DVR copies. Although the Second Circuit found that the RS-DVR playback from the Arroyo Server to the subscriber’s television resulted in “[a] transmission of a performance of a work,” the playback did “not involve the transmission of a performance ‘to the public.’”⁷⁰ To determine whether a transmission was made “to the public” under the Transmit Clause, the Second Circuit focused on the potential audience capable of receiving a particular “transmission” or “performance” rather than on the potential audience of a particular work.⁷¹ Consequently, “any factor that limits the potential audience of a transmission is relevant.”⁷² Otherwise, the court reasoned, the potential audience for every copyrighted work would be the general public, which would render the words “to the public” within the Transmit Clause unnecessary.⁷³

In conclusion, the court held that “because the RS-DVR system, as designed, only made transmissions to one subscriber using a copy made by that subscriber . . . the universe of people capable of receiving the RS-DVR transmission is the single subscriber whose self-made copy is used to create that transmission.”⁷⁴ However, the court indicated limits to its holding: “[t]his holding, we must emphasize, does not generally permit content delivery networks to avoid all copyright liability by making copies of each item of content and associating one unique copy with each subscriber to the network, or by giving their subscribers the capacity to make their own individual copies.”⁷⁵

2. *WNET, Thirteen v. Aereo, Inc.* (“Aereo”)

Several years after its *Cablevision* decision, the Second Circuit upheld its interpretation of the Transmit Clause in relation to television retransmission.⁷⁶ In *Aereo*, broadcasters filed suit against Aereo for violating their exclusive right to publicly perform by transmitting television broadcasts over the Internet.⁷⁷ Using

68. *Id.*

69. *Id.* at 132.

70. *Id.* at 134.

71. *Id.* at 134–35.

72. *Id.* at 137 (emphasis removed).

73. *Id.* at 135–36.

74. *Id.* at 137.

75. *Id.* at 139–40.

76. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676 (2d Cir. 2013), *cert. granted*, 134 S. Ct. 896 (2014) (mem.).

77. *Am. Broad. Cos. v. Aereo, Inc.*, 874 F. Supp. 2d 373, 376 (S.D.N.Y. 2012), *aff’d sub nom. WNET, Thirteen*, 712 F.3d at 683. The broadcasters only challenged the aspects of Aereo’s service that allowed subscribers to view programs contemporaneously with the over-the-air broadcast of the

thousands of mini antennas assigned to individual subscribers, Aereo captured broadcast television signals at a subscriber's request, created a unique copy of each program available to only that subscriber, and allowed the subscriber to play back that copy on a television, computer or mobile-device screen.⁷⁸ Applying its interpretation of the Transmit Clause from *Cablevision*, the Second Circuit held that Aereo's transmissions were not public performances because, due to Aereo's technical architecture, the potential audience of each transmission was only one subscriber, and thus each transmission was not made "to the public."⁷⁹

a. Aereo's System

Aereo's system allows subscribers to access live, over-the-air broadcast television for a monthly subscription fee.⁸⁰ Aereo provides this service by capturing over-the-air broadcast television signals through thousands of mini antennas and storing individual copies of the programs on remote hard drives in its facilities.⁸¹ Subscribers can utilize Aereo to watch live broadcast television solely through an Internet connection; no cable subscription service is necessary.⁸²

From a subscriber's perspective, Aereo functions similarly to a remote DVR or Slingbox,⁸³ although Aereo subscribers do not access programming via a cable connection.⁸⁴ After logging on to her personal account, a subscriber can view a programming guide, which shows programs that are currently airing as well as programs that will be aired in the future.⁸⁵ When a subscriber selects a program that is currently airing, the subscriber can press "Watch"—at which point the program begins playing at a slight delay relative to the live television broadcast—or "Record"—which copies and saves the program for later viewing.⁸⁶ When a subscriber presses either "Watch" or "Record," he or she can pause and rewind the program as desired.⁸⁷ When a subscriber selects a program that will air in the future, the subscriber's only option is to press "Record," which will copy and save the program for later playback.⁸⁸

Aereo has large antenna boards that each hold approximately eighty independently-functioning dime-sized antennas, which capture over-the-air broadcast television signals.⁸⁹ When a subscriber selects "Watch" or "Record," a

programs. *See id.*

78. *WNET, Thirteen*, 712 F.3d at 682.

79. *Id.* at 686.

80. *Id.* at 681 (programming is "briefly delayed" for approximately ten seconds relative to the over-the-air transmission).

81. *Id.* at 680.

82. *Id.* at 683.

83. *Id.* at 680.

84. *Am. Broad. Cos. v. Aereo, Inc.*, 874 F. Supp. 2d 373, 376 (S.D.N.Y. 2012), *aff'd sub nom. WNET, Thirteen*, 712 F.3d at 683.

85. *WNET, Thirteen*, 712 F.3d at 681.

86. *Id.*

87. *Am. Broad. Cos.*, 874 F. Supp. 2d at 377.

88. *WNET, Thirteen*, 712 F.3d at 681.

89. *Am. Broad. Cos.*, 874 F. Supp. 2d at 379. There was a dispute in the district court as to

signal is sent to Aereo's Antenna Server, which assigns an individual antenna and transcoder to the subscriber.⁹⁰ First, the Antenna Server tunes the antenna to the broadcast frequency of the channel playing the subscriber's desired program.⁹¹ Next, the Antenna Server sends a request to Aereo's Streaming Server to create a personal directory to store data captured by a subscriber's assigned antenna.⁹² Thus, once a subscriber requests a program, the antenna captures, buffers and sends the data to the Streaming Server, where it is copied and saved to the subscriber's personal directory on Aereo's hard drive.⁹³ Only the original requesting subscriber can ever view that particular copy of the programming, even if multiple subscribers opt to "Watch" or "Record" the same program at the same time. If the subscriber has selected "Watch," the same process occurs, except that only six to seven seconds of the programming is saved on the subscriber's personal directory of the hard drive at a time.⁹⁴

Thus, the three key technical functions of Aereo's service are: (1) each subscriber is assigned to an individual antenna; (2) the signal captured by the assigned antenna is used to create unique copies of the program, which are held in each subscriber's personal directory and (3) the subscriber watches his or her individual copy of the program, which is never accessible to any other Aereo subscriber.⁹⁵

b. Second Circuit Decision

Similar to *Cablevision*, broadcasters sought to enjoin Aereo from transmitting their copyrighted programs "live" (i.e., contemporaneously with the over-the-air broadcast of the programs), claiming that doing so was analogous to retransmissions of copyrighted content by cable providers, which requires a license under the Transmit Clause.⁹⁶ Aereo contended that its service did not violate the broadcasters' public performance rights because each transmission was made available to one subscriber from a unique copy, and was thus private.⁹⁷

The Second Circuit held that Aereo's transmissions were not public performances under *Cablevision*, affirming the district court's denial of the

whether the antennas operated independently or as one unit to receive incoming broadcast signals. The Plaintiffs' expert opined that because the antennas are so small and positioned so closely, the incoming signal treats the antennas as a continuous piece of metal. Despite this, the district court found that Aereo's antennas functioned independently. *See id.* at 379–81. The broadcasters did not appeal this finding to the Second Circuit.

90. *WNET, Thirteen*, 712 F.3d at 683 (explaining that antennas are assigned to subscribers dynamically, meaning that once one subscriber stops using her assigned antenna, another subscriber might be assigned to use that antenna. However, no antenna is ever used to create more than one subscriber's copy of the program at a given time).

91. *Am. Broad. Cos.*, 874 F. Supp. 2d at 378.

92. *Id.*

93. *WNET, Thirteen*, 712 F.3d at 682.

94. *Id.*

95. *Id.* at 683.

96. *Am. Broad. Cos.*, 874 F. Supp. 2d at 376.

97. *Id.* at 385.

broadcasters' preliminary injunction motion.⁹⁸ The Second Circuit rejected the broadcasters' argument that Aereo's service was analogous to retransmissions by cable providers, which the 1976 Copyright Act viewed as public performances.⁹⁹ Instead, the Second Circuit applied the interpretation of the Transmit Clause set forth in *Cablevision*, given the "similar factual context" between the two cases.¹⁰⁰

The Second Circuit relied on "four guideposts" set forth in *Cablevision*: (1) under the Transmit Clause, a transmission is a public performance only where the individual transmission is capable of being received by the public; (2) whether or not the public is capable of receiving the same underlying work should not be determined by aggregating many private transmissions; (3) an exception to the no-aggregation rule exists when private transmissions are generated from the same copy of the work and (4) "any factor that limits the potential audience of a transmission is relevant" to the Transmit Clause analysis.¹⁰¹

Applying these guideposts, the Second Circuit found that Aereo's system possessed both of the essential features present in *Cablevision* to avoid violation of the broadcasters' public performance rights.¹⁰² First, like *Cablevision*'s RS-DVR system, Aereo creates a unique copy each time an Aereo subscriber chooses to "Watch" or "Record" a program and stores it in a personal directory that is inaccessible to other subscribers.¹⁰³ Second, when the subscriber elects to watch the program, the transmission is generated from the unique copy stored in each personal directory: "[t]hus, just as in *Cablevision*, the potential audience of each Aereo transmission is the single user who requested that a program be recorded."¹⁰⁴

The broadcasters also argued that "Aereo's copies [were] merely a device by which Aereo enable[d] its users to watch nearly live TV, while *Cablevision*'s copies, by contrast, could only serve as the source for a transmission of a program after the original transmission . . . had finished."¹⁰⁵ Therefore, Aereo's copies were "no different from the temporary buffer copies created by Internet streaming."¹⁰⁶ Rejecting this argument, the Second Circuit focused on volitional conduct by Aereo's subscribers, who request creation of a program, choose when and how the copy will be played back, and have the option to watch it live, pause and rewind it or elect not to watch it until long after the over-the-air broadcast.¹⁰⁷

98. *WNET, Thirteen*, 712 F.3d at 696.

99. *Id.* at 682. The Second Circuit rejected the broadcasters' attempts to distinguish *Aereo* from *Cablevision*. First, the Second Circuit found no merit in the broadcasters' reliance on the fact that in *Cablevision* the cable providers were paying a licensing fee to transmit the programming in the first place, because it was irrelevant as to whether they needed a license to retransmit the programs via the RS-DVR system. *Id.* at 690. Additionally, the Second Circuit found that the broadcasters' attempts to distinguish *Aereo* from *Cablevision* were a veiled attempt for the court to overrule *Cablevision*, which it had no power to do. *Id.* at 695.

100. *Id.* at 686.

101. *Id.* at 689 (citations omitted).

102. *Id.* at 689–90 (citations omitted).

103. *Id.* at 690.

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.* ("This second layer of control, exercised after the copy has been created, means that

c. Judge Chin's Dissent

Judge Chin rejected the argument that Aereo provides a “technology platform that enables consumers to use remotely-located equipment . . . to create, access and view their own unique recorded copies of free over-the-air broadcast television programming,” and called Aereo’s technology platform “a sham.”¹⁰⁸ He elaborated:

[T]here is no technologically sound reason to use a multitude of tiny individual antennas rather than one central antenna; indeed, the system is a Rube Goldberg-like contrivance, over-engineered in an attempt to avoid the reach of the Copyright Act and to take advantage of a perceived loophole in the law. . . . Under Aereo’s theory, by using these individual antennas and copies, it may retransmit, for example, the Super Bowl “live” to 50,000 subscribers and yet, because each subscriber has an individual antenna and a “unique recorded cop[y]” of the broadcast, these are “private” performances. Of course, the argument makes no sense. These are very much *public* performances.¹⁰⁹

Judge Chin also pointed out “critical differences” between *Aereo* and *Cablevision*, most notably that *Cablevision* was a cable company already paying statutory licensing and retransmission consent fees, and *Cablevision* subscribers could already view the programming live through their subscriptions.¹¹⁰ *Aereo*, on the other hand, had no authorization or licenses enabling them to retransmit broadcast television.¹¹¹

Additionally, Judge Chin differentiated Aereo’s service from RS-DVR or VCR systems, which were designed only to time shift live television broadcasts. While *Cablevision*’s RS-DVR existed to create a copy of an already licensed program, Aereo’s system produced a copy in order to enable it to transmit programs to subscribers through the Internet.¹¹² “The core of Aereo’s business is streaming broadcasts over the Internet in real-time; the addition of the record function, however, cannot legitimize the unauthorized retransmission of copyrighted content.”¹¹³

Finally, disagreeing with the majority’s focus on “form over substance,” Judge Chin considered the broadly-worded statutory language and legislative history of the Copyright Act, determining that Aereo’s service “fit[] squarely within the plain

Aereo’s transmissions from the recorded copies cannot be regarded as simply one link in a chain of transmission, giving Aereo’s copies the same legal significance as the RS-DVR copies in *Cablevision*.”)

108. *Id.* at 696–97 (Chin, J., dissenting).

109. *Id.* at 697.

110. *Id.*

111. *Id.*

112. *Id.* at 701 (“Whereas *Cablevision* promoted its RS-DVR as a mechanism for recording and playing back programs, Aereo promotes its service as a means for watching ‘live’ broadcast television on the Internet and through mobile devices. . . . An Aereo subscriber could not use her own DVR to lawfully record content received from Aereo because Aereo has no license to retransmit programming.”).

113. *Id.*

meaning of the statute.”¹¹⁴ He also considered it to be consistent with the legislative history, which made clear that “Congress intended to reach new technologies, like this one, that are designed solely to exploit someone else’s copyrighted work.”¹¹⁵

In sum, Judge Chin concluded that Aereo’s transmissions were, indeed, public performances in violation of the broadcasters’ rights. He expressed concern about what this decision could mean: “[t]oday’s decision does not merely deny the broadcasters a licensing fee for Aereo’s activity; it provides a blueprint for others to avoid the Copyright Act’s licensing regime altogether.”¹¹⁶

3. *Aereo* Progeny

As of this writing, three of the four district courts that have applied the Transmit Clause to Aereo’s service or equivalent technology have declined to follow the Second Circuit. In the most recent case, the District Court for the District of Utah, finding Judge Chin’s dissent to be “more persuasive than the majority opinion,” agreed that Aereo was engaging in public performances under any reasonable interpretation of the Transmit Clause.¹¹⁷ The court noted that this interpretation was supported by the legislative history of the Transmit Clause, as well as the sweeping language of the statute, which was intended to apply “not only to cable television but any device or process that could be developed in the future to transmit copyrighted works in any form to the public.”¹¹⁸ Further, the court noted that the Second Circuit’s focus on who is “capable of receiving” the performance was not supported by the statutory language, which “states clearly that it applies to any performance made available to the public.”¹¹⁹ The court also supported Judge Chin’s approach of elevating function over form, since “Congress made clear that it did not want copyright liability to turn on the technical details of a transmission service.”¹²⁰

Similarly, most district courts have been unwilling to apply the Second Circuit’s interpretation of the Transmit Clause to services using technology similar to

114. *Id.* at 698–99 (“The statute is broadly worded, as it refers to ‘any device or process.’ Aereo’s system of thousands of antennas and other equipment clearly is a ‘device or process’ Because Aereo is transmitting signals to paying strangers, all of its transmissions are ‘to the public,’ even if intervening ‘device[s] or process[es]’ limit the potential audience of each separate transmission to a single ‘member[] of the public.’”).

115. *Id.* at 699. Judge Chin also rejected Aereo’s argument that it makes no legal difference that the system is erected and owned by Aereo and not the subscribers themselves, as this is the same argument made in *Fortnightly* and *Teleprompter* Congress rejected. *Id.*

116. *Id.* at 705.

117. *Community TV of Utah, LLC v. Aereo, Inc.*, No. 2:13CV910DAK, 2014 WL 642828, at *3 (D. Utah Feb. 19, 2014).

118. *Id.* at *7. The court also noted Congress’ determination that “a commercial enterprise should not be allowed to build a business off the exploitation of copyrighted programming without compensating the owners of that programming.” *Id.*

119. *Id.* at *5.

120. *Id.* at *7.

Aereo.¹²¹ FilmOn X, also known as Aereokiller, provides a service “substantially similar” to Aereo “that uses the Internet to give consumers the ability to watch live over-the-air television channels through their computers and on their mobile devices.”¹²² In a suit brought against FilmOn X, the District Court for the Central District of California rejected the Second Circuit’s position in *Cablevision* that the transmission itself must be public in order to infringe the public performance right.¹²³ The court pointed out that the statute “does not by its express terms require that two members of the public receive the performance from the same transmission.”¹²⁴ The focus should be on the public performance of the copyrighted work, rather than the uniqueness of the individual copy from which a transmission is made.¹²⁵ The court also rejected FilmOn X’s argument that it was not infringing, and was instead merely providing a service that individuals could lawfully do for themselves, because Congress had rejected the same argument after the Supreme Court’s *Fortnightly* and *Teleprompter* decisions.¹²⁶

In a subsequent suit brought by broadcasters, the District Court for the District of Columbia also found that FilmOn X was publicly performing based on the unambiguous and broad language of the statute,¹²⁷ as well as on Congress’ stated intent to extend the Transmit Clause to new technology beyond radio and television broadcasting.¹²⁸ Similar to Judge Chin’s focus on substance rather than form, the court cited precedent interpreting “public performance” broadly, given Congress’ intent that copyright protection not “turn on the mere method by which television signals are transmitted to the public.”¹²⁹

The only court that has followed the Second Circuit’s interpretation of the Transmit Clause is the District Court for the District of Massachusetts.¹³⁰ Unfortunately, that court provided little support for its decision. After summarizing the *Cablevision* and *Aereo* holdings,¹³¹ the court found Aereo’s argument that it was transmitting private, rather than public, performances per *Cablevision* “more plausible” than the Plaintiff’s argument that what makes a transmission “public” is the intended audience of the initial broadcast, regardless of whether a user views a

121. See *Fox TV Stations, Inc. v. FilmOn X LLC*, No. 13-758, 2013 WL 4763414 (D.D.C. Sept. 5, 2013); *Fox TV Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F. Supp. 2d 1138 (C.D. Cal. 2012).

122. *FilmOn X LLC*, 2013 WL 4763414, at *1.

123. *BarryDriller*, 915 F. Supp. 2d at 1144. This case was decided after the S.D.N.Y. issued its *Aereo* decision, but before the Second Circuit decision was released.

124. *Id.*

125. *Id.* at 1145.

126. *Id.* at 1146.

127. *FilmOn X LLC*, 2013 WL 4763414, at *13 (“FilmOn X transmits (i.e., communicates from mini-antenna through servers over the Internet to a user) the performance (i.e., an original over-the-air broadcast of a work copyrighted by one of the Plaintiffs) to members of the public (i.e., any person who accesses the FilmOn X service through its website or application) who receive the performance in separate places and at different times (i.e. at home at their computers or on their mobile devices).”).

128. *Id.* at *14.

129. *Id.*

130. *Hearst Stations Inc. v. Aereo, Inc.*, No. 13-11649, 2013 WL 5604284 (D. Mass. Oct. 8, 2013) (denying a local television station’s preliminary injunction motion against Aereo).

131. *Id.* at *5.

unique copy.¹³² Although the court seemed to rely on the Second Circuit's rationale in *Cablevision* and *Aereo*, the court provided little clarity as to why it endorsed this interpretation. The court's only explicit reasoning was that interpreting the relevant performance as the copyrighted work would read the language "performance or display" out of the statute, which would be contrary to the "'canon against surplusage' [requiring] this [c]ourt to give meaning to every statutory term if possible."¹³³ However, the court did not address how the statutory language supports the use of "transmission" and "performance" synonymously, or why the use of a distinct copy is relevant. Without more detailed reasoning, the opinion provides little support for the Second Circuit's interpretation of the Transmit Clause.

II. THE SECOND CIRCUIT'S INTERPRETATION OF THE TRANSMIT CLAUSE EVISCERATES THE PUBLIC PERFORMANCE RIGHT IN THE BROADCAST INDUSTRY AND BEYOND

The Second Circuit's decision to uphold its interpretation of the Transmit Clause in *Cablevision* eviscerates the public performance right within the digital space and creates a gap in protection for copyright owners. The court's interpretation of the Transmit Clause contradicts the statutory text, legislative history and traditional protection afforded by the Copyright Act. By misconstruing the language of the Transmit Clause in this way, the Second Circuit has created a loophole in the public performance right, leaving copyright owners defenseless against copyright infringement within the digital realm.

Although the Second Circuit's Transmit Clause interpretation was established in *Cablevision*, the decision to apply the *Cablevision* holding to *Aereo* significantly broadened the interpretation. Instead of limiting its holding to the context and facts presented in *Cablevision*,¹³⁴ the Second Circuit inappropriately applied it to virtually all methods of digital content delivery, something the court in *Cablevision* hesitated to do.¹³⁵ Consequently, the court virtually eliminated "public" from the Copyright Act in the digital realm, calling into question the ability of copyright law to sufficiently protect copyright owners in the digital environment.¹³⁶

132. *Id.* at *6.

133. *Id.*

134. See Brief of the United States as Amicus Curiae at 21–22, *Cable News Network, Inc. v. CSC Holdings, Inc.*, 557 U.S. 946 (2009) (No. 08-448) (arguing that the Second Circuit's decision in *Cablevision* "should not be understood to reach . . . other circumstances beyond those presented in the case" and that the court "resolved a narrow question about a discrete technology in the terms that it had been framed by the parties").

135. The Second Circuit itself warned against a loose application of its *Cablevision* holding: "[t]his holding, we must emphasize, does not generally permit content delivery networks to avoid all copyright liability by making copies of each item of content and associating one unique copy with each subscriber to the network, or by giving their subscribers the capacity to make their own individual copies." *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 139–40 (2d Cir. 2008).

136. Jane C. Ginsburg, *Recent Developments in US Copyright Law—Part II, Caselaw: Exclusive Rights on the Ebb?* 1 (Colum. Pub. Law & Legal Theory Working Paper Grp., Working Paper No. 08158, 2008) [hereinafter Ginsburg, *Recent Developments*] ("Several US courts have narrowly

Part II.A will discuss how the Second Circuit misconstrued the Transmit Clause and the consequences for the broadcast television industry. Part II.B will discuss the wide-ranging potential consequences for digital content delivery systems beyond the broadcast industry. These consequences will be illustrated through hypothetical case studies applying the Second Circuit's technological blueprint to several business models.

A. THE SECOND CIRCUIT'S INTERPRETATION CREATES A GAP IN PROTECTION TRADITIONALLY CONFERRED ON BROADCASTERS

The Second Circuit's interpretation of the Transmit Clause creates a massive gap in the traditional protection for broadcasters under copyright law. By disaggregating the audience, the Second Circuit has, in effect, rendered all individualized on-demand transmissions private and effectively eviscerated the public performance right. The Second Circuit misconstrued the language of the statute and the intent of Congress, and reached an improper outcome as to a service functionally equivalent to cable television providers.

1. The Second Circuit Improperly Construed the Plain Language of the Transmit Clause

The Transmit Clause defines what constitutes a public performance by transmission.¹³⁷ As the Second Circuit noted, the Transmit Clause is "not a model of clarity."¹³⁸ The Second Circuit incorrectly interpreted multiple ambiguous phrases within the Transmit Clause, leading to the exclusion of individualized on-demand transmissions from the definition of "public."

First, the Second Circuit misinterpreted the intent of the phrase "members of the public capable of receiving." Focusing on the phrase "capable of receiving," the Second Circuit determined that the definition of public covered "people capable of receiving a particular 'transmission' or 'performance,' and not of the potential audience of a particular 'work.'"¹³⁹ The court held that Cablevision's RS-DVR transmissions were not made "to the public" because the copies were individualized to particular subscribers, and thus only one person was "capable" of receiving the transmission.¹⁴⁰

However, the language "members of the public" indicates that Congress

construed the reach of the exclusive rights of reproduction, distribution, public performance and public display, thus putting into doubt their efficacy in the digital environment. In particular, the Second Circuit's recent decision in *Cartoon Networks v. CSC Holdings*, if followed, could substantially eviscerate the reproduction and public performance rights.").

137. 17 U.S.C. §101 (2012) ("To perform or display a work 'publicly' means . . . (2) to transmit or otherwise communicate a performance or display of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.").

138. *Cartoon Network*, 536 F.3d at 136.

139. *Id.* at 135.

140. *Id.*

intended to focus on each recipient of a particular transmission, which the Second Circuit seems to ignore. Many commentators have agreed with this position, including Professor Jane Ginsburg, who pointed out that “[t]he phrase ‘members of the public capable of receiving the performance’ is not intended to narrow the universe of ‘the public.’ On the contrary, its role is to clarify that a transmission is still ‘to the public’ even if its receipt is individualized.”¹⁴¹ Thus, individual recipients do not cease being “members of the public” simply because they are “capable of receiving the performance” one at a time.¹⁴²

The Copyright Act’s definition of what it means “to perform or display a work ‘publicly’” is divided into two parts: (1) public performance in the more traditional sense (i.e., in front of a crowd of individuals) and (2) transmission or communication of a performance of a work to the public. The Second Circuit improperly construed the word “it” at the end of the second part of the definition—“whether the members of the public capable of receiving the performance . . . receive it”—by erroneously conflating “transmission” and “performance” to determine that “it” was the transmission of the performance as opposed to the performance of the underlying work.¹⁴³ The terms “transmission” and “performance” are distinct within the statute, and “it” here refers to the performance.¹⁴⁴ By treating the terms as synonymous, the Second Circuit improperly focused on the uniqueness of each transmission and individual copy, rather than on the performance of the work. A digital content provider could therefore avoid the term “public” altogether by creating individualized transmissions from a unique copy; such a tactic would make only one member of the public capable of receiving that *transmission*. However, this result would still be erroneous because the provider’s act would result in a private transmission of a public performance, which would still violate the broadcasters’ public performance right. As Judge Wu stated in *Fox TV Stations v. BarryDriller Content Systems*, “[v]ery few people gather around their oscilloscopes to admire the sinusoidal waves of a television broadcast *transmission*.”¹⁴⁵

141. See Ginsburg, *Recent Developments*, *supra* note 136, at 26; see also Jeffrey Malkan, *The Public Performance Problem in Cartoon Network LP v. CSC Holdings, Inc.*, 89 OR. L. REV. 505, 532 (2010) (“Switching the words ‘performance’ and ‘transmission’ changed the outcome of the case because there will be viewers who will be capable of receiving a performance of a network telecast (subscribers to Cablevision’s feed of HBO) but not capable of receiving particular transmissions of that performance (nonsubscribers to Cablevision’s RS-DVR service). This is because nonsubscribers won’t have access to any RS-DVR copies, and even RS-DVR subscribers will have access only to their own copies.”); 2 PAUL GOLDSTEIN, *GOLDSTEIN ON COPYRIGHT § 7.7.2* (3d ed. Supp. 2013).

142. Ginsburg, *Recent Developments*, *supra* note 136, at 26.

143. See *Cartoon Network*, 536 F.3d at 136 (“[W]e believe that when Congress speaks of transmitting a performance to the public, it refers to the performance created by the act of transmission.”).

144. See 2 GOLDSTEIN, *supra* note 141 (“The error in the Second Circuit’s construction of the transmit clause was to treat ‘transmissions’ and ‘performance’ as synonymous, where the Act clearly treats them as distinct—and different—operative terms.”); see also *United States v. Am. Soc. of Composers, Authors, Publishers*, 627 F.3d 64, 73 (2d Cir. 2010) (“Because the electronic download itself involves no recitation, rendering, or playing of the musical work encoded in the digital transmission, we hold that such a download is not a performance of that work, as defined by § 101.”).

145. *Fox TV Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F. Supp. 2d 1138, 1144 (C.D.

Conflating “transmission” and “performance” also clashes with the remainder of the statute, which explicitly includes performances to members of the public “at different times.”¹⁴⁶ The Second Circuit’s synonymous use of “transmission” and “performance” writes the “at different times” language out of the statute because one transmission cannot be received at different times.¹⁴⁷ Professor Jane Ginsburg has discussed this difference, noting that “[i]f one member of the public receives an on-demand transmission of a performance of a given work at 12 o’clock, and another receives from the same transmission service an on-demand transmission of a performance of the same work at 1 o’clock, only one person can receive each on-demand transmission.”¹⁴⁸ A performance, on the other hand, can be received at different times. “Once one recognizes that it is not possible for the two people to receive the same transmission ‘at different times,’” Professor Ginsburg concluded, “then it becomes clear that the ‘public’ character of the transmission cannot turn on capacity to receive a transmission.”¹⁴⁹ This logic also renders the Second Circuit’s distinction between individual and common source copies irrelevant, because if members of the public have to receive the same particular transmission, all asynchronous transmissions would be excluded regardless.¹⁵⁰

Additionally, the Second Circuit seems to ignore the phrase “by means of any device or process,” which indicated Congress’ intent to encompass emerging forms of technology.¹⁵¹ Both Cablevision’s RS-DVR system and Aereo’s retransmission service, comprised of mini antennas, fall under “any device or process.”

In sum, the Second Circuit’s interpretation of “public” within the Transmit Clause erroneously focused on whether the transmissions were derived from a unique source copy rather than on whether the communication was to “members of the public.” By disaggregating the audience, the Second Circuit has created a blueprint for intermediaries to send individualized on-demand transmissions of a performance to thousands of subscribers at different times without violating the public performance right.¹⁵² Furthermore, this blueprint could impact the distribution right and the display right because these rights also require that a work reach “the public.”¹⁵³

Cal. 2012).

146. 17 U.S.C. § 101 (2012).

147. See Jane C. Ginsburg, *WNET v. Aereo: The Second Circuit Persists in Poor (Cable)Vision*, MEDIA INST. (Apr. 23, 2013), <http://www.mediainstitute.org/IPI/2013/042313.php>.

148. *Id.*

149. *Id.*

150. *Id.* (“The individual/common source distinction is a red herring because a reading of the statute that requires members of the public to receive the same particular transmission would exclude all asynchronous transmissions no matter how shared the source.”).

151. 17 U.S.C. § 101. This point is further supported by the legislative history. See *infra* Part II.A.2.

152. See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 697 (2d Cir. 2013) (Chin, J., dissenting) (“Under Aereo’s theory, by using these individual antennas and copies, it may retransmit, for example, the Super Bowl ‘live’ to 50,000 subscribers and yet, because each subscriber has an individual antenna and a ‘unique recorded cop[y]’ of the broadcast, these are ‘private’ performances. Of course, the argument makes no sense. These are very much *public* performances.”).

153. 17 U.S.C. § 106(3) (2010) (“to display the copyrighted work *publicly*”) (emphasis added); *id.*

2. The Legislative History Does Not Support the Second Circuit's Construction of the Transmit Clause

The Second Circuit's reliance on the "capable of receiving" language within the clause "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"¹⁵⁴ is not only unpersuasive but also is unsupported by authority. Analysis of the legislative history contradicts the Second Circuit's statutory interpretation. The Transmit Clause was added in order to clarify that it did not matter whether the people receiving the transmission did so at different times, in different places, or from one copy or individualized copies; rather, what matters is that the transmission was made by means of any device or process to members of the public. Congressional reports accompanying the Copyright Act of 1976 stated that a "performance made available by transmission to the public at large is 'public' even though the recipients are not gathered in a single place, and even if there is no proof that any of the potential recipients was operating his receiving apparatus at the time of the transmission."¹⁵⁵ It is thus clear that Congress was focused solely on whether "members of the public" were receiving a performance of a copyrighted work, irrespective of whether a transmission was generated from an individual or common source copy, or whether the members of the public viewed the performance at the same time or at different times.¹⁵⁶

The Congressional reports also clarified the scope of the phrase "by any device or process," indicating Congress' intent to include transmissions created by new forms of media technology:

The definition of "transmit" . . . is broad enough to include all conceivable forms and combinations of wires and 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 or sounds comprising a performance or 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 clauses (4) or (5) of section 106.¹⁵⁷

Although the Congressional reports directly contradict the Second Circuit's statutory interpretation, the court attempted to justify its interpretation by misconstruing the legislative history. The Second Circuit focused on Congress' requirement that performances must be public to be liable, and conversely that

§ 106(5) ("to distribute copies . . . of the copyrighted work *to the public*") (emphasis added).

154. 17 U.S.C. § 101 (2010).

155. H.R. REP. NO. 94-1476, at 64-65 (1976); S. REP. NO. 94-473, at 61 (1975).

156. Several courts have come to a similar conclusion. See *Columbia Pictures Indus., Inc. v. Redd Horne, Inc.*, 749 F.2d 154, 159 (3d Cir. 1984) (holding that a performance of a work was public, even though each individual received it via separate transmission); *Fox TV Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F. Supp. 2d 1138, 1144-45 (C.D. Cal. 2012) ("[T]he concern is with the performance of the copyrighted work, irrespective of which copy of the work the transmission is made from. . . . Thus, *Cablevision's* focus on the uniqueness of the individual copy from which a transmission is made is not commanded by the statute."); *On Command Video Corp. v. Columbia Pictures Indus.*, 777 F. Supp. 787, 790 (N.D. Cal. 1991).

157. H.R. REP. NO. 94-1476, at 64-65; S. REP. NO. 94-473, at 61.

private performances are exempted from liability. In doing so, the court concluded: “[t]his limitation also applies to performances created by a ‘transmission,’ since, as the *Cablevision* court noted, if Congress intended all transmissions to be public performances, the Transmit Clause would not have contained the phrase ‘to the public.’”¹⁵⁸ The court’s support for this conclusion is its determination that “Congress would have certainly wished to avoid adopting language that would make millions of Americans copyright infringers because they transmitted broadcast television programs from their personal rooftop antennas to their own television sets.”¹⁵⁹ This analogy is inapposite, because Americans in this situation would not be transmitting the performance to “members of the public” and would thus not be liable for copyright infringement.

3. The Second Circuit’s Interpretation Is Incorrect Because Aereo Provides a Service Functionally Equivalent to a Cable Television Provider

The background of the Transmit Clause reveals that the outcome in *Aereo* was contrary to the traditional protection of copyright law and the intent of Congress. The result of the Second Circuit’s interpretation is that a cable provider who relays a real-time signal to a user’s home through the traditional mode of coaxial cable must pay retransmission fees; meanwhile, a cable provider who first relays the signal through a separate server and creates an individualized copy of the work is exempt from those fees. By applying its *Cablevision* precedent to *Aereo*, treating “transmission” and “performance” synonymously, the Second Circuit created a loophole in which the “public” element can be avoided through an individualized delivery method. Until the court recognizes that the determination of copyright infringement in this context must be delivery-agnostic, there will be a massive gap in protection afforded by the Copyright Act. As Judge Chin observed in his dissent, *Aereo*’s technology platform is an over-engineered attempt to avoid copyright liability.¹⁶⁰

4. The Second Circuit’s Volitional Act Requirement Allows Providers to Escape Copyright Liability Altogether

In *Cablevision* and *Aereo*, the Second Circuit also created a way for retransmission services to avoid direct liability for copyright infringement by providing automated services. Although the Second Circuit focused on the definition of “public,” rather than “perform,” both cases established a volitional act requirement for direct liability. According to the Second Circuit, in order to “perform,” or be the party who “made” the copies, the party must take some volitional action.¹⁶¹ In both *Cablevision* and *Aereo*, the Second Circuit observed

158. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 694 (2d Cir. 2013), *cert. granted*, 134 S. Ct. 896 (2014) (mem.).

159. *Id.* at 694 n.18.

160. *Id.* at 697.

161. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 130 (2d Cir. 2008).

that it was not the services but rather their subscribers who “made” the copies.¹⁶² The court looked to the control that the subscriber exercised over each service, ultimately finding that because both services were fully automated, neither service took the volitional action necessary to have “made” the copies.¹⁶³ This requirement is seemingly without authority.

Additionally, such a requirement allows services to circumvent not only direct liability because they did not make the copy, but also contributory liability. Although contributory liability was not at issue in either case, the effects of this interpretation are worth noting for future application of this precedent. Absent an actionable claim for direct copyright infringement, there can be no claims of contributory infringement.¹⁶⁴ Although the issue of contributory liability was not litigated, the Ninth Circuit recently ruled that subscriber-made time-shifting copies were fair use.¹⁶⁵ If the Second Circuit also finds that time-shifting copies are fair use, there would be no direct infringement by the user—and thus no contributory infringement by anyone—in such cases.¹⁶⁶ Thus, a service with a fully automated system allowing a subscriber to make copies could potentially escape copyright liability altogether.

B. RE-ENGINEERING INFRINGING INTERMEDIARY BUSINESS MODELS IN LIGHT OF THE SECOND CIRCUIT’S INTERPRETATION

Not only does statutory and economic analysis reveal an illogical result, but the Second Circuit’s holdings in *Cablevision* and *Aereo* also have the potential to threaten industries beyond broadcast television. As Fox stated in its petition for writ of certiorari following the *Cablevision* ruling, “[t]he Second Circuit’s tortured reading of the public performance right will have profoundly destabilizing effects on the emerging marketplace for services that perform works on demand. . . . Any company with a digital copy of a work can readily avail itself of this gaping loophole.”¹⁶⁷ The Second Circuit has created a technological roadmap for intermediary service providers that will seriously undermine copyright

162. See *WNET, Thirteen*, 712 F.3d at 689–90; *Cartoon Network*, 536 F.3d at 130–33.

163. In the *Cablevision* district court opinion, Judge Chin rejected the argument that the user, not the service, “made” the copies because *Cablevision* “actively participates” in the playback process through its operation and computer servers facilitating playback after the user presses the remote. See *Twentieth Cent. Fox Film Corp. v. Cablevision Sys. Corp.*, 478 F. Supp. 2d 607, 622 (S.D.N.Y. 2007), *rev’d sub nom. Cartoon Network*, 536 F.3d at 121. However, given discussion of the issue within the *Cablevision* and *Aereo* opinions, it seems likely that a fully automated system controlled by a subscriber might successfully evade copyright liability under Second Circuit precedent. See *WNET, Thirteen*, 712 F.3d at 689–90; *Cartoon Network*, 536 F.3d at 130–33.

164. See *Greenspan v. Random House, Inc.*, 859 F. Supp. 2d 206, 219 (D. Mass. 2012), *aff’d*, No. 12-1594, 2012 WL 5188792 (1st Cir. 2012), *cert. denied*, 133 S. Ct. 1811 (2013).

165. *Fox Broad. Co. Inc. v. Dish Network, L.C.C.*, 905 F. Supp. 2d 1088 (C.D. Cal. 2012), *aff’d*, 723 F.3d 1067, 1075 (9th Cir. 2013).

166. The fair use defense would likely be strengthened by analogy to time-shifting under *Sony Corp. of Am. v. Universal City Studios Inc.*, 464 U.S. 417 (1984).

167. *Petition for Writ of Certiorari at *36–37, Cable News Network, Inc. v. CSC Holdings, Inc.*, 557 U.S. 946 (2009) (No. 08-448).

protection.¹⁶⁸

Three essential holdings from the Second Circuit's decisions in *Cablevision* and *Aereo* function as a blueprint for new business models providing digital content delivery to evade liability.¹⁶⁹ (1) a transitory buffer copy does not constitute an infringing copy because it is not "fixed,"¹⁷⁰ and thus, when gathering content, a service can avoid creating a "copy" by first running the content through a transitory buffer stage; (2) the party that causes the copies to be made is the one that exercises "volitional conduct,"¹⁷¹ meaning that, in a fully automated service in which a subscriber elects to copy and play back the content, the subscriber "makes" the copy and (3) transmissions made from a unique source copy stored in a personalized portion of a central server are private, because the potential audience of each transmission is only one person.¹⁷² Following this blueprint, any service with large servers of personalized storage space and an ability to collect and transcode information individually could transmit copyrighted works to thousands of subscribers without ever paying a cent to copyright owners.

While creating such a technologically inefficient system may once have been precluded by high costs of storage space, the ubiquity of cloud storage and low cost hard drives removes such limitations. Additionally, the use of automated systems to execute subscriber requests is the norm in many industries, likely benefiting the service's operation. Thus, assuming that a service can circumvent the structural impediments involved in disaggregating the audience,¹⁷³ there are few obstacles to executing the blueprint.

To illustrate the perverse consequences of the Second Circuit's decisions, this Note will apply the general principles of the Second Circuit's *Cablevision* and *Aereo* decisions to hypothetically re-engineer several business models, taken from previously decided copyright cases in which courts have granted protection to copyright owners.¹⁷⁴ Applying these general principles will reveal the loophole that the Second Circuit created for business models seeking to circumvent copyright liability. This experiment illustrates how the Second Circuit's holdings

168. See also Mary Rasenberger & Christine Pepe, *Copyright Enforcement and Online File Hosting Services: Have Courts Struck the Proper Balance?*, 59 J. COPYRIGHT SOC'Y U.S.A. 627, 693 (2012) ("The ability to hold a service directly liable for publicly performing copyrighted works online has . . . been severely curtailed by the potential loophole created by the *Cablevision* decision and its recent progeny, *Aero* [sic].").

169. The "fixation" and "volitional conduct" requirements were not the central focus of either case because the broadcasters elected not to pursue a claim for violation of their reproduction right. However, these are important elements of the blueprint to ensure that intermediary services could circumvent not just the public performance right, but both relevant exclusive rights.

170. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 130 (2d Cir. 2008).

171. *Id.*

172. *Id.* at 134–35.

173. In order to successfully follow the blueprint, the service must have access to content, as well as an ability to gather and buffer that content in a way that creates individual source copies for each subscriber. Additionally, like any online service, it would need to establish a subscriber base.

174. The issues in each case and the applicable portions of the Copyright Act vary. This does not affect the analysis: the purpose of this exercise is to see the results of the blueprint proposition not only on the public performance right, but throughout copyright law.

could distort traditional copyright law, allowing digital content providers to not only evade liability for publicly performing, but also for publicly displaying, distributing or reproducing content.

1. *Associated Press v. Meltwater U.S. Holdings, Inc.*

In *Associated Press v. Meltwater U.S. Holdings, Inc.*, the Associated Press (“AP”) brought suit against Meltwater U.S. Holdings, Inc. (“Meltwater”), an Internet media monitoring service, for direct and contributory copyright infringement for publishing portions of AP’s copyrighted news stories.¹⁷⁵ A central component of AP’s revenue has been the licensing fees it collects to publish all or excerpts of its articles on the Internet.¹⁷⁶

Meltwater collected excerpts of AP’s published news articles by using “crawlers,” or automated computer programs, to scan the Internet for news content and “scrape,” or copy, the content from the web.¹⁷⁷ After scraping the content, Meltwater indexed each article to allow subscribers to perform ad hoc searches of the content or set up standing search queries that were conducted automatically on a recurring basis.¹⁷⁸ Meltwater then delivered the requested content to the subscriber, typically providing the headline of the article, the article’s source and hyperlink, a verbatim excerpt of the opening text of the article, and a verbatim excerpt of the “Hit Sentence,” or sentence containing the subscriber’s searched keywords.¹⁷⁹ Subscribers (primarily businesses, government agencies and nonprofit organizations) could archive their search results by saving them in a personal archive stored on Meltwater’s database.¹⁸⁰

Although Meltwater did not dispute that it was taking copyrighted content from AP,¹⁸¹ it argued that copying AP’s articles was protected by the fair use doctrine because Meltwater’s purpose was to serve as a search engine and news reporting service.¹⁸² The S.D.N.Y. rejected this argument, finding that “Meltwater’s business model relies on the systematic copying of protected expression and the sale of collections of those copies in reports that compete directly with the copyright owner and that owner’s licensees and that deprive that owner of a stream of income to which it is entitled.”¹⁸³ Ultimately, the court refused to allow Meltwater “to free ride on the costly news gathering coverage work performed by other

175. *Associated Press v. Meltwater U.S. Holdings, Inc.*, 931 F. Supp. 2d 537, 540-41 (S.D.N.Y. 2013). Although AP exerted multiple claims in the suit, the foregoing analysis will focus on direct and contributory copyright infringement.

176. *Id.* at 542 (noting that AP’s digital license agreements and commercial clients account for more than \$75 million of AP’s annual gross revenue).

177. *Id.* at 542-44.

178. *Id.* at 544.

179. *Id.* at 544-45.

180. *Id.* at 546.

181. *Id.* at 541.

182. *Id.* In addition to its fair use defense, Meltwater exerted defenses of implied license, copyright misuse, estoppel and laches. *See id.*

183. *Id.* at 561.

organizations.”¹⁸⁴

Although the S.D.N.Y. made clear that Meltwater was engaging in copyright infringement by taking “the fruit of AP’s labor for its own profit,”¹⁸⁵ Meltwater’s technological platform could be re-engineered to provide its subscribers with the same service while evading copyright liability.

In its original system, Meltwater’s crawlers automatically scanned the Internet to collect news content, indexed the content to make it searchable, and then allowed subscribers to search the index for content containing certain keywords.¹⁸⁶ Applying the blueprint, Meltwater could re-engineer its service to consist of thousands of separate crawlers, each responsible for content collection for a particular subscriber. To make a search query, a subscriber would first request that content be captured in conjunction with particular keywords. This request would trigger one or more crawlers to be assigned to the subscriber. The crawlers would then automatically scan the Internet to collect the subscriber’s requested content, which would be sent through a primary buffer process in which a transitory buffer copy would be created. Afterwards, the content would be sent to Meltwater’s hard drive, where a copy would be saved to the subscriber’s personalized folder. When the subscriber is ready to access the news content, Meltwater would create a news report from the individual copy, which would be displayed to the subscriber at the moment of delivery. No other subscriber would ever be able to access that content, even if they searched for news containing the same keywords as another subscriber.

Using this redesigned technology platform, Meltwater could escape infringement of AP’s reproduction right, because the transitory buffer copy would not be fixed and because the subscriber, not Meltwater, would be responsible for making the copy. Since Meltwater’s system was fully automated and initiated in response to a subscriber’s request, Meltwater would not have exercised the “volitional conduct” necessary to be liable for direct copyright infringement. Meltwater would also not violate AP’s public display or distribution right because the news report would be made from an individualized copy associated with only one subscriber. Thus, the potential audience of the content would only be one person.

After re-engineering Meltwater’s technology in accordance with the Second Circuit’s blueprint, Meltwater would be able to provide the same service to subscribers with a different result under the law. Simply by making a few changes to its content delivery method, Meltwater could not only free itself from all copyright liability, but also catch a “free ride on the costly news gathering coverage work performed by other organizations.”¹⁸⁷

2. *Atlantic Recording v. XM Satellite Radio*

In 2007, several recording companies brought suit against XM Satellite Radio

184. *Id.* at 553.

185. *Id.*

186. *Id.* at 544–45.

187. *Id.*

(“XM Radio”) for operating a digital download subscription service that distributed copyrighted works outside the scope of the broadcast license.¹⁸⁸

XM Radio provided a subscription service using copyrighted songs from the record companies in its programming.¹⁸⁹ Although the record companies owned the rights to the majority of the content, XM Radio had a compulsory license, as a digital satellite broadcasting service, to use the copyrighted content subject to a few conditions.¹⁹⁰

In 2006, in addition to its typical service, XM Radio released a digital download service operated through an “XM + MP3” player. This service gave subscribers the ability to record, retain and create a library of song recordings from XM Radio broadcasts.¹⁹¹ When songs were transmitted during programming, the XM + MP3 player automatically created a short-term buffer copy, which allowed subscribers to record the whole song at any time during the song’s playback or pre-select a song from published programming schedules.¹⁹²

The recording companies brought suit, alleging that XM Radio’s activities violated the terms of the compulsory license as well as the recording companies’ reproduction and distribution rights. Although the S.D.N.Y. focused its analysis on whether XM Radio was protected by the Audio Home Recording Act, the court determined that XM Radio violated its license by acting as a commercial content delivery provider without authorization.¹⁹³ Recognizing the commercial benefit that XM Radio received through its XM + MP3 players, the court pointed out that XM Radio was only paying fees as a broadcaster, while acting as a distributor by making music available and allowing users to record well beyond the time when the song originally played.¹⁹⁴ The court held that this conduct was contrary to “the fundamental tenet of copyright law that all who derive value from a copyrighted

188. *Atl. Recording Corp. v. XM Satellite Radio, Inc.*, No. 06 Civ. 3733, 2007 WL 136186, at *1 (S.D.N.Y. Jan. 19, 2007). The recording companies brought nine causes of action, including infringement of distribution and reproduction rights, violation of license, contributory copyright infringement and unfair competition. *Id.* In its defense, XM Radio asserted statutory immunity under the Audio Home Recording Act of the Copyright Act because the XM + MP3 player was a digital audio recording device. *Id.* However, while the court agreed that the XM + MP3 player was a digital audio recording device, XM Radio was not immunized because the recording companies’ claim was for actions taken as a satellite radio broadcaster, not a digital audio recording device provider. *Id.* at *8.

189. *Id.* at *2.

190. *Id.* at *6; *see also* 17 U.S.C. § 114(d)(2) (2012). The compulsory license permitted XM Radio to “perform sound recordings publicly by means of a subscription digital audio transmission.” Restrictions on the license prohibited satellite radio providers from providing an interactive service, publishing its programming schedules prior to broadcast or playing songs by the same artist too frequently. *See Atl. Recording Corp.*, 2007 WL 136186, at *6.

191. *Atl. Recording Corp.*, 2007 WL 136186, at *2. The XM + MP3 player was a “special receiver” that differed from ordinary XM radios by adding features that allowed subscribers to do more than merely listen to programming. *Id.*

192. *Id.* XM Radio also controlled much of the functionality of the XM + MP3 player, including the initial activation, functionality of each player, and determining which songs users could and could not save. *Id.*

193. *Id.* at *6.

194. *Id.* at *7.

work should pay for that use.”¹⁹⁵

To ensure that all of the *Aereo* requirements are met, XM Radio could first confirm that each subscriber’s XM + MP3 player is equipped with a mini antenna capable of capturing retransmitted content from XM Radio’s satellites.¹⁹⁶ Subscribers would select particular songs that they wanted to save. For every song that is retransmitted by the satellites, each subscriber’s XM + MP3 player would capture the signal (a service that XM Radio typically provides). Once the signal was captured, the stream would be transcoded and a buffer copy created.¹⁹⁷ From the buffer copy, a unique copy would be stored in XM Radio’s digital storage space within the subscriber’s personalized directory.¹⁹⁸ Upon the subscriber’s request, XM Radio could transmit the song from the unique copy.

Following these steps to conform to the *Aereo*-style buffer copy, user-initiated automation and individualized copy mechanisms set out in the blueprint, XM Radio could successfully re-engineer its technology platform in a way that evades copyright liability. XM Radio’s compulsory license permits it to broadcast content publicly through digital satellite radio transmission, but it would not necessarily permit retransmission from the storage space to the subscriber.¹⁹⁹ Thus, to avoid liability for violating the public performance right, it is still important that XM Radio send private transmissions to a potential audience of only one subscriber.

Hypothetically re-engineering the XM + MP3 player in light of *Cablevision* and *Aereo* leads to incongruous legal results for two services that provide an indistinguishable experience to consumers. Furthermore, by applying this technological blueprint, XM Radio would evade one of S.D.N.Y.’s stated tenets of copyright law by “deriv[ing] value from a copyrighted work” without “paying for that use.”²⁰⁰

3. *Infinity Broadcasting Corporation v. Kirkwood*

Media Dial-Up (“Dial-Up”) was a pre-Internet service that allowed subscribers to listen to live radio over the phone. Dial-Up enabled subscribers (mostly radio stations, advertisers, entertainment companies and others interested in scouting talent or verifying the broadcast of scheduled advertisements) to listen to broadcasts from cities around the country.²⁰¹ In order to do this, Dial-Up placed

195. *Id.* (internal citations omitted).

196. *Id.* at *2. Since each XM + MP3 player is already formatted to receive XM radio broadcasts, it is likely that mini antennas are already present in the device.

197. Although there is no set timeframe for what constitutes a “fixed” copy, a blueprint should adhere to the Second Circuit’s holding that copying 1.2 seconds of programming at any time was not sufficiently fixed. *See Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 130 (2d Cir. 2008).

198. If a subscriber did not request that a particular song be saved, the stream would be played back as a regular satellite radio broadcast retransmission. *See Atl. Recording Corp.*, 2007 WL 136186, at *2.

199. *See id.* at *6 (observing that 17 U.S.C. § 114 generally permits satellite radio services to perform sound recordings publicly, but there are restrictions under § 114(d)(2) that would likely be violated by retransmitting the recordings from storage).

200. *See Atl. Recording Corp.*, 2007 WL 136186, at *7.

201. *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 106 (2d Cir. 1998).

radio receivers in multiple cities that contained circuit boards connected to specific telephone lines.²⁰² When a receiver captured over-the-air broadcasts, it transmitted them into the phone line so that subscribers could call and listen to a particular broadcast.²⁰³ Subscribers exercised complete control over which station the receiver was tuned to by changing its setting via a touchtone phone.²⁰⁴

Infinity Broadcasting Corporation (“Infinity”) was a media company that owned a large number of radio stations in the markets where Dial-Up had placed its receivers. Some of Infinity’s stations were syndicated, or broadcast in other markets for a fee, and some offered listen lines, which were station-specific versions of Dial-Up’s service.²⁰⁵ In 1998, Infinity brought suit against Dial-Up for retransmitting its copyrighted material.²⁰⁶

Dial-Up claimed that although it was retransmitting copyrighted material, its activity was protected by the fair use defense.²⁰⁷ The Second Circuit nevertheless held that Dial-Up’s retransmissions of the copyrighted broadcasts infringed on Infinity’s copyrighted content, and that the retransmissions were not fair use because they were not transformative: “[Dial-Up] creates nothing and advances no body of knowledge or criticism. [It] simply takes Infinity’s unaltered broadcasts and markets them to a specific clientele.”²⁰⁸

Using technology available today, Dial-Up could easily re-engineer its service to avoid infringing on Infinity’s copyrighted content. Instead of having one receiver in each city, Dial-Up could install mini-antenna boards holding multiple antennas in each city. Subscribers could then remotely select which programming they would like to listen to, which would send a signal to Dial-Up’s server to assign the subscriber to a particular antenna within the desired market. The antenna would capture the over-the-air broadcast, generate a buffer copy and create an individualized copy from which the radio retransmission stream would be generated. Through such re-engineering, Dial-Up would conform to the blueprint and thus evade copyright liability.

Once again, re-engineering in light of *Cablevision* and *Aereo* would apply a different legal treatment to a technology that generates the same results for consumers. Despite its new “legality,” the hypothetical re-engineering of Dial-Up would still, in the words of the Second Circuit, “simply take[] Infinity’s unaltered broadcasts and market[] them to a specific clientele.”²⁰⁹

While it is difficult to imagine a circumstance in which a telephone listen-line service would be a desirable way to listen to radio broadcasts today, application of the Second Circuit’s loophole to older media illustrates the far-reaching repercussions of this interpretation. The blueprint could be applied to a modern

202. *Id.*

203. *Id.*

204. *Id.*

205. *Id.*

206. *Id.* at 107.

207. *Id.*

208. *Id.* at 111–12.

209. *Id.*

day version of Dial-Up, in which an Internet service capturing over-the-air broadcasts offers this programming to subscribers online.

4. *WPIX, Inc. v. ivi, Inc.*

ivi, Inc. was a service that captured over-the-air television content and retransmitted the live content to subscribers over the Internet.²¹⁰ Subscribers downloaded ivi's "TV player," which enabled them to watch the content live on any Internet-capable device.²¹¹ Subscribers could pay an additional fee to access functions such as recording, pausing, fast-forwarding and rewinding.²¹² In *WPIX, Inc. v. ivi, Inc.* ("*ivi*"), major television broadcasters brought suit against ivi for streaming copyrighted television content live over the Internet.²¹³ While ivi did not dispute that the broadcasters owned the copyright in the content, it argued that its service was nevertheless permitted because it was a cable system entitled to a compulsory license under § 111 of the Copyright Act.²¹⁴

The Second Circuit held that ivi's Internet retransmission service did not constitute a "cable system" under the Copyright Act, and ivi was therefore not entitled to a compulsory license. It thus could not legally continue to retransmit copyrighted television content to its subscribers.²¹⁵ The court relied heavily on the legislative history behind the compulsory licensing scheme, concluding that Congress' intent was not to extend the compulsory cable license to Internet retransmissions.²¹⁶

From a subscriber perspective, ivi's business model and service was nearly identical to Aereo's. Yet, because ivi did not design its technological platform to conform to the Second Circuit's blueprint (as Aereo did), the court held that its actions constituted infringement. Both ivi and Aereo collected over-the-air broadcast television content and retransmitted it via the Internet to thousands of subscribers, yet these two services were treated differently under the law in the same circuit. Perhaps the most perverse example of the Second Circuit's blueprint, this result was achieved without any hypothetical re-engineering at all. Ultimately, ivi's positioning as a retransmission service, as opposed to Aereo's positioning as a VCR time-shifting device, altered the copyright liability for an essentially identical service.

210. *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 277 (2d Cir. 2012), *cert. denied*, 133 S. Ct. 1585 (2013).

211. *Id.*

212. *Id.*

213. *Id.*

214. *Id.*; *see* 17 U.S.C. § 111 (2012).

215. *ivi*, 691 F.3d at 277.

216. *Id.* at 282.

III. COURTS SHOULD ADOPT JUDGE CHIN'S APPROACH AND APPLY TRADITIONAL PRINCIPLES OF COPYRIGHT LAW TO NEW TECHNOLOGY

The Second Circuit's decisions in *Cablevision* and *Aereo* have created a loophole in traditional copyright protection. As a result, any digital content delivery service can create unauthorized copies of copyrighted works and transmit them to thousands of people without engaging in any infringing act. This outcome essentially eviscerates the public performance, public distribution and public display rights for any content within the digital realm.

On January 10, 2014, the Supreme Court granted certiorari in *Aereo*.²¹⁷ While the case is an opportunity for the Supreme Court to address interpretations of the public performance right, the issues of fixation and volition are not included in the questions presented to the Court.²¹⁸ Thus, multiple elements of the blueprint are still likely to be at issue even after the Supreme Court renders a decision, allowing digital content providers to continue to evade copyright liability by re-engineering their business models.

This Part will discuss how the courts can close this loophole, and what content owners can do to protect themselves in the interim. Part III.A will propose that courts adopt Judge Chin's interpretation of fixation, volition and "public" under the Transmit Clause in order to close the loophole. Part III.B will discuss how the courts can resolve future problems by striking a proper balance between copyright protection and technological innovation. Part III.C will discuss steps that copyright owners can take to exercise their rights and protect their content.

A. COURTS SHOULD FOCUS ON THE POTENTIAL AUDIENCE OF A PARTICULAR WORK AND PRIORITIZE FUNCTION OVER FORM

While it is unclear which issues (beyond public performance) the Supreme Court will address in its *Aereo* decision, to the extent that the Court interprets the Transmit Clause, it should follow the approach proposed by Judge Chin's dissent in *Aereo*.²¹⁹ By disaggregating the audience, the Second Circuit provided digital delivery services with a loophole, allowing them to avoid performing "publicly" simply by changing their delivery method. Specifically, digital delivery services could send individualized transmissions to subscribers, without regard to how many total subscribers received the same source transmission. This sets the stage for

217. See *American Broadcasting Companies, Inc. v. Aereo, Inc.*, SCOTUSBLOG, <http://www.scotusblog.com/case-files/cases/american-broadcasting-companies-inc-v-aereo-inc> (last visited Mar. 15, 2014).

218. See Petition for Writ of Certiorari, *Am. Broad. Cos. v. Aereo, Inc.*, No. 13-461 (petition granted Jan. 10, 2014), available at http://sblog.s3.amazonaws.com/wp-content/uploads/2013/11/ABCvAereo_11Oct13.pdf.

219. The proper approach was also adopted by the Central District of California and the D.C. District Court in the *FilmOn X* cases. See *Fox TV Stations, Inc. v. FilmOn X LLC*, No. 13-758, 2013 WL 4763414 (D.D.C. Sept. 5, 2013); *Fox TV Stations, Inc. v. BarryDriller Content Sys., PLC*, 915 F. Supp. 2d 1138 (C.D. Cal. 2012).

services to structure their technical delivery systems according to the *Cablevision* and *Aereo* blueprint in order to retransmit copyrighted works to the public without facing copyright liability. Applying Judge Chin's approach would switch the focus to the potential audience capable of receiving the same source performance, rather than elevating "form over substance" by allowing services to engineer their technological platforms to avoid liability.²²⁰ Therefore, under Judge Chin's approach, despite the technically individualized copies and transmissions, Aereo's transmissions would be made "to the public."

Given its broad application beyond the public performance right and television broadcast environment, the loophole for digital delivery content providers will likely continue to exist after the Supreme Court's *Aereo* decision. As suits are brought against new technologies that push the limits of copyright protection, federal courts will thus have to determine the extent to which copyright owners should be protected within the digital realm. In order to determine whether a performance, display or distribution should be considered "public" under copyright law, several legal commentators have suggested that courts consider certain standard factors that can be applied to varying situations. Noting that decisions have often relied on "the court's chosen degree of focus or quantum time span," commentator Vivian Kim has suggested that courts should consider three key factors in determining whether a place is "public": privacy, control and the nature of the place.²²¹ In other words, "[a] place would be considered 'public' if there was no privacy afforded to the consumers, no consumer control over the method or mode of consumption, and if the place was commonly known to be open to the public."²²² These factors are flexible enough to apply to both physical and digital environments. A definition of "public" that can be applied to different situations would help bring predictability to this area of the law, even as new technologies continue to enter the market. Without debating what factors should be considered, the broad takeaway is that courts should establish a high-level, well-rounded approach when evaluating whether services are "public," one that is flexible but consistently applied to varying forms of technology.

Another issue in applying traditional copyright law to Aereo's technology was that the Second Circuit focused too heavily on form over function, a fact that Judge Chin noted in his dissent. The outcome of the case was thus based on how the technology was configured, rather than how Aereo functioned. Each party framed Aereo's service differently. Aereo positioned itself as a hardware manufacturer, providing a time-shifting device that allowed subscribers to watch and record television programming as they wished, much like using a VCR.²²³ Aereo would

220. WNET, *Thirteen v. Aereo, Inc.*, 712 F.3d 676, 693 (2d Cir. 2013), *cert. granted*, 134 S. Ct. 896 (2014) (mem.).

221. Vivian I. Kim, *The Public Performance Right in the Digital Age: Cartoon Network LP v. CSC Holdings*, 24 BERKELEY TECH. L.J. 263, 290–91 (2009). Although Vivian Kim specifically discussed whether performances or transmissions were public, these factors can be applied to each exclusive right that requires content to reach "the public" for liability.

222. *Id.*

223. *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 131 (2d Cir. 2008).

not be liable if it merely provided customers with a time-shifting device.²²⁴ The broadcasters, on the other hand, framed Aereo as a subscription service providing television transmissions via the Internet.²²⁵ Under this framing, Aereo would be liable for publicly performing and would also be disqualified from the compulsory licensing scheme.²²⁶ Thus, because Aereo added two technological elements to its system, it avoided liability as an Internet retransmission subscription service, even though it was providing a functionally equivalent service. If courts prioritize function over form when applying copyright law to unfamiliar technology, they can prevent the circumvention of copyright liability via over-engineering.

Following Judge Chin's approach of prioritizing function over form would focus the outcome of each case on a content provider's service rather than on its technological platform. Using Judge Chin's Super Bowl example,²²⁷ in determining whether a service was performing publicly, a court would focus on the fact that Aereo transmitted the Super Bowl—the same source performance—live to 50,000 people, rather than that each transmission was created from an individualized copy. This new emphasis would continue to protect copyright owners in accordance with traditional doctrine, even as technology advances.²²⁸ As Judge Chin pointed out, even though delivery “emanates from a distinct copy of a program uniquely associated” with one subscriber for exclusive viewing, it is not private.²²⁹ Therefore, analysis of copyright infringement must be delivery-agnostic in order to provide copyright owners with the protection conferred on them under the Copyright Act.²³⁰

B. COURTS SHOULD SUPPORT COPYRIGHT OWNERS AGAINST SERVICES DESIGNED TO DISSEMINATE CONTENT BY EXPLOITING THE WORKS OF OTHERS

A major question underlying this dispute is whether “copyright prerogatives should yield to technological preferences.”²³¹ Copyright law seeks both to reward content creators and encourage creation for the good of society. It could be argued that Judge Chin's approach to the Transmit Clause and *Aereo* prioritizes the

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

225. *Cartoon Network*, 536 F.3d at 125.

226. See *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275 (2d Cir. 2012), *cert. denied*, 133 S. Ct. 1585 (2013).

227. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 693 (2d Cir. 2013) (Chin, J., dissenting), *cert. granted*, 134 S. Ct. 896 (2014) (mem.).

228. See also Daniel L. Brenner & Stephen H. Kay, *ABC v. Aereo, Inc.: When Is Internet Distribution a “Public Performance” Under Copyright Law?*, 24 *INTELL. PROP. & TECH. L.J.* 12, 15 (2012) (“In a world of digital server technology, why should infringement turn on whether the defendant uses a less efficient, separate copy system than using a common master copy for each customer requesting one?”).

229. *Twentieth Cent. Fox Film Corp. v. Cablevision Sys. Corp.*, 478 F. Supp. 2d 607, 622–23 (S.D.N.Y. 2007), *rev'd in part, vacated in part sub nom. Cartoon Network*, 536 F.3d 121.

230. Implementing this approach might also avoid such contradictory results as the Second Circuit's *ivi* and *Aereo* decisions, which came to different conclusions regarding the liability of two services that both captured over-the-air television and retransmitted that content to thousands of users. See *WNET, Thirteen*, 712 F.3d 676; *ivi*, 691 F.3d at 277.

231. See Ginsburg, *Recent Developments*, *supra* note 136, at 2.

protection of copyright owners over the promotion of technological innovation. After all, the hard work and innovation of Aereo's over-engineering, in accordance with *Cablevision*, provided consumers with access to television that was less expensive and more widely accessible than cable providers offered. To enjoin Aereo could stifle innovation, disincentivizing other companies from developing technology that could improve the lives of many. Commentators have also noted the costs of assigning rights to content owners at the expense of companies that provide less costly or more efficient modes of dissemination.²³² One such cost is "the use of intellectual property rights to block or delay the market entry of threats to intellectual property owners."²³³ Professor Timothy Wu has discussed how industry incumbents can use copyright law as a tool to foreclose new methods of dissemination and preserve market dominance.²³⁴ This result would deprive society of valuable technological services.

Although shutting down Aereo could disincentivize companies from developing new modes of dissemination, a narrow construction of the Copyright Act could also stifle innovation by disincentivizing the production of new content. At the very least, lost revenue resulting from increased access to content could limit copyright owners' ability to invest in new and quality content.²³⁵ Since broadcasters are both disseminators and creators, this would also discourage creation. A primary purpose of copyright law is to grant creators control over their creations in exchange for allowing the public to benefit from their creations.²³⁶ While Aereo and similar services create useful technology, these services are dependent on copyright owners' creation of content to function.²³⁷ Thus, in cases concerning services "designed solely to exploit someone else's copyrighted work,"²³⁸ the economic rights of copyright owners should be prioritized. To keep up with the inevitably

232. See Tim Wu, *Intellectual Property, Innovation, and Decentralized Decisions*, 92 VA. L. REV. 123, 139 (2006) [hereinafter Wu, *Intellectual Property*]; Timothy Wu, *Copyright's Communications Policy*, 103 MICH. L. REV. 278, 293-94 (2004).

233. See Wu, *Intellectual Property*, *supra* note 232, at 134.

234. *Id.* at 139 ("The history of copyright and communications technologies typifies this problem, where the holders of copyright block or slow the dissemination of technologies of potentially broad social value that threaten an existing market position. Television broadcasters, for example, blocked cable television, and over the last decade the existing radio industry has successfully blocked the arrival of new 'low-power' FM stations.").

235. Aereo could severely affect broadcasters' revenue by undercutting the entire retransmission fee structure. Since there is no compulsory fee structure for Internet retransmission services, Aereo will never pay a cent to the broadcasters for retransmitting their content. Consequently, cable providers who do pay retransmission fees will gain more leverage in negotiations, and fees will likely decrease.

236. *Mazer v. Stein*, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.").

237. The blueprint explored in Part II.B functions for services that capture free or low-cost copyrighted content. In order to build a substantial subscriber base to monetize the business, these services have to charge less than the content creators themselves. Thus, inherent in each service is a reliance on using copyrighted content created by, and at the cost of, others.

238. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 699 (2d Cir. 2013) (Chin, J., dissenting).

advancing landscape, broad application of copyright protection is necessary to achieve an appropriate balance between incentivizing content creators and ensuring that distributors develop more efficient methods.²³⁹

C. CONTENT OWNERS CAN USE ALTERNATIVE MEANS TO PROTECT THEIR CONTENT

While the fate of content owners lies partly in the hands of the courts, copyright owners can take alternative measures to protect their content. First, content owners could petition Congress to permit the use of Digital Rights Management (“DRM”) technologies to protect content.²⁴⁰ Television broadcasters employed this tactic with some success in 2003, when the Federal Communications Commission (“FCC”) mandated that every consumer electronic device capable of receiving digital television signals be programmed to recognize a “broadcast flag.”²⁴¹ DRM technology could be explored for any copyright owner who wants to place specific limits on consumption.²⁴²

Additionally, to minimize their financial harm, broadcasters could lobby for the advertising revenue generated on Aereo to be paid back to the television stations. With Nielsen’s recent progress in tracking online streaming,²⁴³ it would be feasible to track the number of advertising views on Aereo and pay the television stations accordingly. If the extra audience created by Aereo were counted as part of the wider television audience, thereby generating value for producers and broadcasters, harm to broadcasters would be reduced. While not an ideal solution for broadcasters, monetizing the extra audience garnered by services like Aereo would be a possible fallback in the case of undesirable decisions by courts.

CONCLUSION

Advances in technology have created an ongoing conflict about the level of protection that the public performance right should afford copyright owners. Instead of resolving this conflict, the Second Circuit created a loophole for digital content providers by focusing on technical architecture instead of practical effect of the technology. In the digital media age, the purpose of traditional copyright

239. Such broad application is also in line with the traditional rights under copyright law and with Congress’ intent, as discussed in Part II.A.

240. See Andrew W. Bagley & Justin S. Brown, *The Broadcast Flag: Compatible with Copyright Law & Incompatible with Digital Media Consumers*, 47 IDEA 607, 608 (2007).

241. *Id.* at 609. This would restrict the ability to save or record programming, make secondary copies or skip commercials. Although the D.C. Circuit struck down the FCC’s broadcast flag mandate for lack of jurisdiction, this could be a viable option to protect broadcasters.

242. See Kim, *supra* note 221, at 295. Of course, copyright owners could experience consumer backlash for limiting the use of their content, which would require a cost-benefit analysis to decide whether such protection was worthwhile.

243. See Heather Kelly, *Nielsen Adds Web Viewers to its TV Ratings*, CNN (Oct. 28, 2013), <http://www.cnn.com/2013/10/28/tech/web/nielsen-tv-ratings-online>; *Nielsen Expands Digital Measurement with Pilot Program for New Content Ratings*, NIELSEN (April 30, 2013), <http://www.nielsen.com/us/en/press-room/2013/nielsen-expands-digital-measurement-with-pilot-program-for-new-c.html>.

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doctrine and the functional outcome of digital services must be considered. Although the Second Circuit has created a blueprint for virtual copyright immunity in the digital space, courts can take this opportunity to properly apply the public performance right to digital retransmissions, and can restore the proper balance between copyright protection and technological innovation.