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The Internet after Aereo: How to Save Innovation from the Public Performance Right

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The Internet after *Aereo*: How to Save Innovation from the Public Performance Right

ABSTRACT

The Supreme Court's decision in American Broadcasting Companies, Inc. v. Aereo, Inc. overturned the Second Circuit's rule that separate copies create separate performances without clarifying the scope of a performance. The decision creates significant ambiguity surrounding the public performance right and potentially massive liability for cloud-computing companies. Since cloud computing allows customers to run programs remotely from a company's servers, two independent customers watching different copies of the same movie from the same cloud results in the cloud conducting a public performance. This Note examines this problem, concludes that the current public performance regime has become obsolete, and proposes a new bright-line safe harbor for cloud-computing companies based on the fair use doctrine, dubbed the "Fair Performance Doctrine."

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In the 1920s, the La Salle Hotel offered its guests a new and innovative form of entertainment: radio.¹ Since radio sets were still an expensive luxury, placing separate transmitters in each guest room was unrealistic.² Instead, the hotel received the signal through a single “master radio” that was wired to each of its two hundred guest rooms.³ The guests could then listen to the single radio station at their leisure.⁴ Unfortunately, the author of the song “Just Imagine” could not envision the new technology’s potential.⁵ He argued that the hotel was performing his song publicly and thereby violating his rights.⁶ In *Buck v. Jewell-La Salle Realty Co.*, the Supreme Court agreed and found the radio system to be conducting a public performance.⁷ Since that time, American jurisprudence has struggled to balance the copyright holder’s exclusive rights with technology’s potential to optimize the user’s experience.

More recently, the Internet start-up company Aereo tried to revolutionize the way that users experience broadcast television.⁸ Instead of receiving the broadcast from a television antenna, Aereo users could watch broadcast television anywhere with Internet access, including through their laptops and cellphones.⁹ Since the broadcasts were already free, Aereo argued that it was merely leasing a television antenna to its subscribers, who happened to stream the signal to themselves over the Internet.¹⁰ Under Aereo’s theory, the company was only providing its users with the equipment to conduct a private performance, not performing anything and certainly not performing anything publicly.¹¹ The broadcast companies, recognizing a threat to

1. See *Buck v. Jewell-La Salle Realty Co.*, 283 U.S. 191, 195 (1931). Radio broadcasting was virtually unknown at the time that Congress passed the Copyright Act of 1909. See *id.* at 196.

2. See *id.* at 195.

3. See *id.*; *Buck v. Jewell-La Salle Realty Co.*, 51 F.2d 726, 727 (8th Cir. 1931).

4. See *Jewell-La Salle Realty*, 283 U.S. at 195.

5. See *Buck v. Duncan*, 32 F.2d 366, 366 (W.D. Mo. 1929), *aff’d in part, rev’d in part sub nom. Jewell-La Salle Realty*, 51 F.2d 726.

6. See *Jewell-La Salle Realty*, 283 U.S. at 195. The public performance right is one of six exclusive rights that are bestowed on every copyright holder, along with the rights to reproduce and distribute their work and to create derivative works. For images, there is also the right to publicly display the work. For sound recordings, there is the right to perform the work by means of a digital audio transmission. See 17 U.S.C. § 106 (2012).

7. See *Jewell-La Salle Realty*, 283 U.S. at 202.

8. See *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2503 (2014).

9. See *id.*

10. See *id.* at 2504.

11. See *id.*

their valuable retransmission fees, naturally disagreed.¹² They called the service a public performance of their work and filed suit.¹³ On narrow grounds, the Supreme Court agreed with the broadcast companies that Aereo was conducting a public performance and effectively shut down the business model.¹⁴

While Aereo may only be a minor footnote in the history of the Internet revolution, the decision in *American Broadcasting Companies, Inc. v. Aereo, Inc.* leaves very important questions unanswered, which could impede the development of cloud-based computing. Cloud computing allows users to store data in a remote database, known as the cloud, that can be accessed by any computer with Internet access.¹⁵ While this technology may seem different from Aereo's service, they are difficult to distinguish under the standard public performance analysis.¹⁶ If users independently upload a movie to the same company's cloud and watch the movie from the cloud, then the company could be liable for infringing the public performance right.¹⁷ This degree of legal liability threatens to stymie a potentially new and important innovation.

This Note seeks to avert this problem by creating an explicit safe harbor from public performance infringement for cloud-based computing through the fair use doctrine while largely leaving the public performance right intact. Part I provides background on the development of the public performance right and its current state. Part II examines the continuing viability of the US Court of Appeals for the Second Circuit's decision in *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*,¹⁸ in light of the Supreme Court's *Aereo* decision. Part III explains the importance of cloud computing and the threat posed by the public performance right. Part IV searches for

12. See *id.* at 2503–04. The main broadcast companies are NBC, FOX, and CBS. Broadcast companies receive a significant portion of their revenue by licensing the broadcasts to cable companies, who in return pay the broadcast companies retransmission fees. If Aereo's business model had been upheld, cable companies could have used a similar device to freely retransmit the broadcast signals. See *id.* at 2509.

13. See *id.* at 2503–04.

14. See *id.* at 2510.

15. See Michael Armbrust et al., *A View of Cloud Computing*, 53 COMM. ACM 50, 50 (2010) ("Cloud computing refers to both the applications delivered as services over the Internet and the hardware and systems software in the data centers that provide those services.")

16. See *infra* Part III.

17. As will be explained in more detail later, it would not matter that the users watch the movie at different times or in different places. As a result of the *Aereo* decision, it also would not matter that they used separate copies. All that appears to matter is the users watched the performance of the same copyrighted material from the same entity, in this case, the cloud company. See *infra* Part I.

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

factors that can distinguish performances in spite of rapid technological advancement. Finding none, Part V demonstrates that the current public performance framework is broken and calls for fundamental change. To protect cloud computing until such changes occur, Part VI outlines a new safe harbor, the "Fair Performance Doctrine," based on the fair use doctrine that will allow cloud-computing companies to grow without fear of legal liability. While drawing on current fair use jurisprudence, the new safe harbor offers bright-line rules that will minimize uncertainty. As this Note argues, the potential benefits of cloud computing far outweigh the benefits of creative works. Part VII concludes with some final reflections on the evolving role of the public performance in modern America.

I. THE PUBLIC PERFORMANCE RIGHT WALKS OFF STAGE

Forty years after the Supreme Court decided *Jewell-La Salle Realty*,¹⁹ copyright owners found new trouble in an emerging technology they believed would threaten their public performance right: cable television. With broadcast, television signals would be sent from towers in major cities, but mountains and forests would block the signals from reaching rural communities, leaving their residents without television.²⁰ To solve this problem, companies began retransmitting the signals through cables laid to rural residents.²¹ Broadcasters viewed these retransmissions as a threat to their business, even though the cable customers were never broadcast customers, and alleged that the new cable companies were violating their exclusive right to publicly perform their works.²²

When the issue came up in *Fortnightly Corp. v. United Artists Television, Inc.* and *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*,²³ the Supreme Court analogized the cable company to a broadcast viewer to uphold their services.²⁴ In recognizing that the public performance right needed to adapt to new technologies, the Court analogized the cable companies to broadcasters and viewers in order to resolve the case.²⁵ In performing the work, the broadcaster selects the programming, sells the accompanying advertising, and

19. *Buck v. Jewell-La Salle Realty Co.*, 283 U.S. 191 (1931).

20. *See Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390, 391–92 (1968).

21. *See id.*

22. *See id.* at 393.

23. *Teleprompter Corp. v. Columbia Broad. Sys., Inc.*, 415 U.S. 394 (1974).

24. *See id.* at 400–02, 415; *Fortnightly Corp.*, 392 U.S. at 400–02.

25. *See Fortnightly Corp.*, 392 U.S. at 392, 397.

broadcasts both to the public.²⁶ On the non-performing side of the analogy, viewers use televisions and antennas to receive the signal and convert it into video and audio.²⁷ To the Court, the cable companies acted almost like agents of the viewers by capturing the signal and transmitting it to their televisions.²⁸ The cable companies did not select or edit the programming as a broadcaster and performer would.²⁹ To illustrate its point, the Court noted that if a group of viewers worked together to connect their televisions to a distant antenna, they would not be conducting a public performance.³⁰ The fact that a private company erected the antenna instead of a group of viewers was not enough to result in infringement.³¹

Congress, however, quickly disagreed with the Court's conclusion and rewrote the Copyright Act.³² By passing the Copyright Act of 1976, Congress abrogated the Supreme Court's decisions in *Fortnightly* and *Teleprompter* and added the Transmit Clause to the public performance right.³³ The new Transmit Clause provided only a superficial and vague definition of a public performance by transmission.³⁴ Instead, the Clause specified factors that cannot stop multiple transmissions of a performance from being considered a single public performance.³⁵ A public performance includes a collection of separate and otherwise private performances that occur at different times and in different places.³⁶ According to the Transmit Clause, a public performance can also occur through any device or

26. See *Teleprompter Corp.*, 415 U.S. at 404.

27. *Fortnightly Corp.*, 392 U.S. at 391.

28. See *id.* at 399–400.

29. See *id.* at 400.

30. See *id.*

31. See *id.*

32. See Copyright Act of 1976, Pub. L. No. 94-553, § 101, 90 Stat. 2541 (1976). The House Report accompanying the Transmit Clause noted specifically that a cable company performs when it retransmits the broadcast to subscribers. See H.R. REP. NO. 94-1476, at 63 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5676–77.

33. See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 685 (2d Cir. 2013), *rev'd sub nom.* *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014). For an excellent history of the public performance right, see generally Sara K. Stadler, *Performance Value*, 83 NOTRE DAME L. REV. 697, 704–28 (2008).

34. The Transmit Clause provides that:

To perform a work “publicly” means . . . to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) [the original public performance right,] 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.

17 U.S.C. § 101 (2012). Courts have noted that the clause is “not a model of clarity.” See *Hearst Stations Inc. v. Aereo, Inc.*, 977 F. Supp. 2d 32, 39 (D. Mass. 2013).

35. See § 101.

36. See *id.*

process and can even occur when there is no evidence that anyone received the performance.³⁷ This definition leaves little doubt that Congress wanted to prevent technological advancements from sidestepping the public performance right.³⁸ However, this new definition leaves open a large question of which factor—and there must be one—explains when one performance ends and another begins. Courts have been struggling with this question, largely unsuccessfully, ever since.

The advent of cloud computing again led to numerous clashes between innovation and the public performance right. Cloud computing allows a user to run a computer program over the Internet from a remote computer server, known as the cloud, effectively replacing the user's computer hard drive.³⁹ The user can access all of his files and programs anywhere in the world, so long as he has Internet access.⁴⁰ As the cable company Cablevision found out, however, when a company replaces a typical household hard drive that plays copyrighted material, such as a Digital Video Recorder (DVR),⁴¹ with cloud-based services, the result may look very similar to a public performance.⁴²

In 2006, Cablevision began offering its customers a service called a "Remote Storage" Digital Video Recorder system (RS-DVR), in conjunction with their normal cable service.⁴³ The RS-DVR recorded and stored programming exactly like a normal DVR, but stored the recorded program at the cable company's facilities instead of inside the user's home.⁴⁴ Users accessed their recorded programs the same way they selected a cable channel to watch, with their remote control.⁴⁵ Copyright owners quickly recognized the similarity to a public performance.⁴⁶ Since the Transmit Clause prohibits distinguishing performances based on time,⁴⁷ the same entity, Cablevision, was transmitting the same underlying work to multiple unrelated individuals, resulting in a public performance.⁴⁸

37. See *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 135 (2d Cir. 2008) (citing H.R. REP. NO. 94-1476, at 64–65).

38. See H.R. REP. NO. 94-1476, at 64–65.

39. See Armbrust et al., *supra* note 15, at 50–51.

40. See *id.*

41. DVRs are devices that record television programming on a hard drive at the request of the user, to be viewed later at their convenience. See *Cablevision*, 536 F.3d at 123.

42. See *id.* at 135.

43. *Id.* at 124.

44. See *id.*

45. See *id.*

46. See *id.*

47. See 17 U.S.C. § 101 (2012).

48. *Cablevision*, 536 F.3d at 124–25.

When the Second Circuit took up the case in *Cablevision*, they disagreed.⁴⁹ Even though the transmissions had the same transmitter and underlying work, they each had one important difference.⁵⁰ The transmissions were each based off separate and unique *copies* of the work.⁵¹ Since the RS-DVR recorded the television program from a user's cable service, the user received a copy of the program that was unique to his account, just as the user would with a real DVR.⁵² The Second Circuit held that transmissions created from separate copies constituted separate performances.⁵³ Thus, *Cablevision* was transmitting a large number of *private* performances and not violating the copyright owners' public performance right.⁵⁴

Of course, the Transmit Clause does not explicitly distinguish performances based on the use of different copies.⁵⁵ But the distinction appeared to fit nicely. Copyright law, as its name suggests, has always revolved around the idea of a copy. The author has the right to control the creation of copies of his work, but no right to control the use or resale of a copy once sold.⁵⁶ At first glance, this distinction appears to make the public performance right fit nicely with the author's other exclusive rights. The transmitter could copy the work and then transmit the separate copies to separate individuals.⁵⁷ The use of separate copies would keep each transmission private.⁵⁸ But the transmitter would still be liable for violating the owner's reproduction rights.⁵⁹ While focusing on the copy appears to create a clean distinction, closer inspection reveals significant problems.⁶⁰

49. See *id.* at 140. The US District Court of Massachusetts later followed the Second Circuit's approach in upholding the service. See *Hearst Stations Inc. v. Aereo, Inc.*, 977 F. Supp. 2d 32, 38–39 (D. Mass. 2013).

50. See *Cablevision*, 536 F.3d at 139.

51. See *id.*

52. See *id.*

53. See *id.*

54. See *id.*

55. See 17 U.S.C. § 101 (2012). In fact, the Transmit Clause does not explicitly provide any factor for distinguishing performances. See *id.* However, there must be some factor, or otherwise the occurrence of a public performance would depend on whether other people played the same underlying work. Cf. *Cablevision*, 536 F.3d at 138–39. This would happen with any work commercially sold, thus effectively eliminating any private performance and giving the copyright owner legal control over *all* performances of his work.

56. The author has the exclusive right to reproduce and distribute his work. See 17 U.S.C. § 106 (2012). However, once an author creates a copy and sells it, the new owner may resell it without interference from the author. See 17 U.S.C. § 109(a) (2012).

57. See *Cablevision*, 536 F.3d at 137–38.

58. See *id.*

59. See *id.*

60. See *infra* Part IV.

With this ruling in mind, a small Internet start-up called Aereo set off on a doomed venture to revolutionize the broadcast television industry.⁶¹ If the company used a separate antenna for each user, it could capture a broadcast signal as freely as anyone with an antenna and television did.⁶² It could then transmit that signal over the Internet to its subscribers, anywhere in the world, for a small monthly fee.⁶³ Since each transmission used a separate and unique copy, each transmission would be a separate private performance, at least under the Second Circuit's jurisprudence.⁶⁴ As a result, the retransmission violated none of the copyright holder's rights.⁶⁵ Needless to say, broadcast companies did not like this new business plan.⁶⁶ If cable companies followed suit, they could retransmit the broadcast television without paying hundreds of millions in retransmission fees.⁶⁷ If courts upheld the plan, broadcast companies threatened to turn off their free public signal and move to cable, where their content could not be picked up freely.⁶⁸ The small Internet company quickly created a high-stakes standoff.

Litigation began in the Second Circuit.⁶⁹ As expected, the court followed its earlier ruling in *Cablevision* and upheld Aereo's service as a collection of private performances.⁷⁰ Since each transmission came

61. See Sam Gustin, *Disruptive TV Startup Aereo Is Winning in Court*, TIME (Oct. 11, 2013), <http://business.time.com/2013/10/11/disruptive-tv-startup-aereo-is-winning-in-court/>. Aereo admitted to developing its business model to exploit the rules created by the Second Circuit in *Cablevision*. See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 697 (2d Cir. 2013) (J. Chin, dissenting), *rev'd sub nom.* *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

62. See Gustin, *supra* note 61.

63. See *id.*

64. Cf. *Cablevision*, 536 F.3d at 139.

65. Cf. *id.* at 139–40.

66. Cf. *id.*

67. The broadcast companies made \$3 billion in retransmission fees from cable companies in 2012, a figure projected to double to \$6 billion by 2018. See Ryan Nakashima, *Fox Affiliates OK with Plan To Thwart Aereo*, CHRISTIAN SCI. MONITOR (Apr. 10, 2013), <http://www.csmonitor.com/Business/Latest-News-Wires/2013/0410/Fox-affiliates-OK-with-plan-to-thwart-Aereo>.

68. One of the broadcast stations, FOX, has said it would have taken its channel off the public airwaves if the Supreme Court upheld the Second Circuit's *Aereo* holding. See *id.* *DirectTV, Time Warner Cable, and Charter Communications considered following Aereo's lead or buying the company if the technology remained legal as a means to avoid paying the retransmission fees.* See Andy Fixmer et al., *DirectTV, Time Warner Cable Are Said to Weigh Aereo-Type Services*, BLOOMBERG (Oct. 25, 2013, 11:00 PM), <http://www.bloomberg.com/news/2013-10-25/directv-time-warner-cable-said-to-consider-aereo-type-services.html>.

69. See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 680 (2d Cir. 2013), *rev'd sub nom.* *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

70. See *id.* at 689. The court also elaborated its copy-based test for a public performance, relying on the four guideposts created in *Cablevision*. First, if the audience is public, then the performance is public. Second, "private transmissions . . . should not be aggregated," and therefore the broader audience of the underlying work or original performance

from a different antenna, each transmission derived from distinct copies, created legally, and could not be aggregated into a public performance.⁷¹ Therefore, Aereo's service did not violate the broadcaster's public performance right, and the company did not need to pay retransmission fees to the broadcasters.⁷²

Unfortunately for Aereo, district courts in the Ninth, Tenth, and D.C. Circuits disagreed with the Second Circuit's approach and found the company in violation of the broadcaster's public performance rights.⁷³ These courts noted that neither the text of the Transmit Clause nor the corresponding legislative history required that transmissions from separate copies be considered separate performances.⁷⁴ After looking at the plain meaning of the Transmit Clause, they found no need to look further.⁷⁵ The Clause emphasizes a broad definition of "device" by referring to any device or process that exists now or is later developed.⁷⁶ Such a definition encompasses the one-to-one antennas.⁷⁷ Indeed, it is hard to imagine a more public action than making a performance available to anyone in the world with Internet access.⁷⁸ Such a result appears to follow from our fundamental understanding of the public and private divide, as much as from the text and interpretation of the statute.⁷⁹

The Supreme Court agreed with the plain text approach and overruled the Second Circuit.⁸⁰ To interpret the Transmit Clause, the Court emphasized that it is necessary to return to Congress's intentions when drafting it.⁸¹ According to the Court, Congress wrote the Clause to overturn the Court's decisions in *Fortnightly* and

is "irrelevant." *Id.* Third, an exception to the "no-aggregation rule" occurs where the same copy is used, in which case the private transmissions should be aggregated to determine if the audience is public. *Id.* Fourth, "any factor that limits the *potential* audience of a transmission" should be considered. *Id.* (quoting *Cablevision*, 536 F.3d at 137). The test boils down to looking at who receives the transmissions from a given copy and whether that audience would be considered public. *See id.*

71. *See id.* at 689–90, 693.

72. *See id.* at 689–90.

73. *See* Cmty. Television of Utah, LLC v. Aereo, Inc., 997 F. Supp. 2d 1191, 1202 (D. Utah 2014); Fox Television Stations, Inc. v. FilmOn X LLC, 966 F. Supp. 2d 30, 46 (D.D.C. 2013); Fox Television Stations, Inc. v. BarryDriller Content Sys., PLC, 915 F.Supp. 2d 1138, 1146 (C.D. Cal. 2012). The district courts in the D.C. Circuit and the Ninth Circuit actually dealt with a different company, FilmOn, but the two companies' services are the same for all relevant purposes. *See FilmOn*, 966 F. Supp. 2d at 32–33; *BarryDriller*, 915 F. Supp. 2d at 1139–41.

74. *See, e.g., BarryDriller*, 915 F. Supp. 2d at 1145.

75. *See, e.g., FilmOn*, 966 F. Supp. 2d at 46–47.

76. *See id.* at 48.

77. *See id.* at 47–48.

78. *See id.* at 47.

79. *Cf. id.*

80. *See Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2503, 2509 (2014).

81. *See id.* at 2504.

Teleprompter.⁸² While these cases sought to create a distinction between the broadcaster as performer and the viewer as receiver, the new Transmit Clause made it clear that both the broadcaster and the viewer perform the work.⁸³ Both show the program's images and make the accompanying sounds audible.⁸⁴ Thus, any entity that acts like the cable companies in *Fortnightly* and *Teleprompter* perform even if they are merely retransmitting another entity's performance.⁸⁵

Turning to the question of whether Aereo performs the work "publicly," the Court again analogized to cable companies and one by one dismissed the distinctions created by Aereo's unique transmitting system.⁸⁶ Users receive a personal copy created from a unique antenna.⁸⁷ But this occurs "behind-the-scenes" and does not affect the "viewing experience."⁸⁸ Since the statute specifies that a public performance can occur by "any device or process," such behind the scenes processes cannot prevent a public performance from occurring.⁸⁹ Similarly, the use of several transmissions, instead of a single transmission, does not prevent a performance from becoming public.⁹⁰ To emphasize the similarities, the Court notes that Aereo even has the same "commercial objective[s]" as cable companies.⁹¹ As a result, Aereo performs the work publicly in the same way that cable companies would if they retransmitted the program without paying for it.⁹²

Like the statute they were trying to interpret, the Court did very little to define the scope of a performance or what makes one public.⁹³ Instead, it explained what would not prevent a performance from becoming public and left the critical questions for another day.⁹⁴

82. See *id.* at 2505.

83. See *id.* at 2505–06.

84. *Id.* For comparison, the Copyright Act defines the performance of an audiovisual work as "to show its images in any sequence or to make the sounds accompanying it audible." 17 U.S.C. § 101 (2012).

85. See *Aereo*, 134 S. Ct. at 2505–06.

86. See *id.* at 2507–08.

87. See *id.* at 2508.

88. *Id.*

89. See *id.* at 2509 (quoting Section 101).

90. See *id.* According to the statute, a performance is public regardless of whether people receive it at different times or at different places. The Court noted that considering separate transmissions to be separate performances would undermine this requirement. See *id.*

91. See *id.* at 2508.

92. See *id.* at 2508–09.

93. See *id.* at 2508–10.

94. See *id.*

It specifically reserved the question of whether services like RS-DVRs and cloud computing violate the public performance right.⁹⁵

II. THE LEGACY OF THE SECOND CIRCUIT'S *CABLEVISION* DECISION

The major question left unresolved by *Aereo* is the state of the Second Circuit's decision in *Cablevision*—whether services like a RS-DVR violate the public performance right.⁹⁶ On one hand, the Supreme Court did not explicitly overturn the Second Circuit's decision in *Cablevision*.⁹⁷ On the other hand, the holding in *Cablevision* turns on the use of separate copies for separate performances.⁹⁸ Since *Cablevision* used separate unique copies for each user's RS-DVR, the transmissions from those copies did not aggregate into a public performance.⁹⁹ However, this appears to be exactly the sort of “behind-the-scenes” technological differences that the *Aereo* Court said could not prevent a performance from becoming public.¹⁰⁰ Moreover, the Court specifically noted that the use of distinct copies could not prevent the aggregation of transmission for the public performance analysis.¹⁰¹ As a result, it appears that the broad holding of *Cablevision*, using copies to distinguish transmissions and therefore performances based on the use of distinct copies, is no longer good precedent.¹⁰²

At the same time, however, the narrow holding of *Cablevision* that would allow the use of RS-DVRs may still be good law based on other justifications.¹⁰³ Similarly, the Supreme Court's language suggests some sympathy for cloud-computing companies.¹⁰⁴ It specifically reserved the question of whether these services conduct public performances and also suggested that these services may gain fair use protection.¹⁰⁵ Regardless of the specific legal theory used, the

95. See *id.* at 2511.

96. Cf. *id.*

97. Cf. *id.*

98. See *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 138 (2d Cir. 2008).

99. See *id.*

100. See *Aereo*, 134 S. Ct. at 2508.

101. See *id.* at 2509.

102. See *Cablevision*, 536 F.3d at 138; cf. *Aereo*, 134 S. Ct. at 2501.

103. Cf. *Aereo*, 536 F.3d at 2511. The Court did not elaborate on what these other grounds might be but explicitly refused to address how the new precedent would apply to RS-DVRs and cloud computing. See *id.*

104. Cf. *id.*

105. Cf. *id.* Somewhat less sympathetically, they also appear to be punting the issue to Congress. The Court suggests that “to the extent commercial actors or other interested entities may be concerned with the relationship between the development and use of such technologies and the Copyright Act, they are of course free to seek action from Congress.” *Id.*

decision will probably turn on how closely these companies resemble cable companies and the extent to which their services undermine the author's ability to profit from their works.¹⁰⁶ Cablevision and other companies that rely on cloud computing and remote storage systems will have to tread carefully until this important area of law is given a more direct treatment by the Supreme Court.¹⁰⁷

III. THE THREAT TO CLOUD COMPUTING

Cloud computing is quickly gaining recognition as the next major frontier in the Internet revolution.¹⁰⁸ Cloud computing allows customers, usually other businesses, to purchase computing storage and processing as a service, like a utility, instead of purchasing a hard drive as a major capital investment.¹⁰⁹ The cloud-computing servers are stored at a remote location and can be accessed from anywhere over the Internet.¹¹⁰ If a company wants to start a website, they can rent the computing power for the website instead of purchasing physical computer servers.¹¹¹ Thus, a large, fixed start-up cost has become a variable cost charged only if customers arrive.¹¹² The global cloud services market was estimated to be \$9.6 billion in 2013 and is expected to grow 24.8 percent annually over the next five years.¹¹³ By 2019, more than two-thirds of data center traffic will occur in the cloud.¹¹⁴ McKinsey & Co., a management consulting firm, predicts that the total economic impact of cloud computing will range from \$1.7 trillion to \$6.2 trillion in 2025.¹¹⁵ While the economic size of cloud computing is impressive, an examination of its potential will reveal a much more powerful contribution to the technology industry and every industry that relies on technology.

106. *Cf. id.* at 2501–02.

107. *Cf. id.* at 2511.

108. *See* Armbrust et al., *supra* note 15, at 50.

109. *See id.* at 50–51. The computer storage and processing power is stored at the cloud-computing company's computer servers, which the customer will access over the Internet. Normally, this computer power is rented on an hourly basis. *See id.* at 52.

110. *See id.* at 50–51.

111. *See id.*

112. *See id.*

113. *See* GARD LITTLE ET AL., INT'L DATA CORP., EXCERPT: IDC MARKET SCOPE: WORLDWIDE CLOUD PROFESSIONAL SERVICES 2013 VENDOR ANALYSIS 3 (2013), available at <http://planetic.es/sites/default/planeticfiles/content-files/private/IDC%20MarketScope.pdf>.

114. *See* JAMES MANYIKA ET AL., MCKINSEY GLOBAL INST., DISRUPTIVE TECHNOLOGY: ADVANCES THAT WILL TRANSFORM LIFE, BUSINESS, AND THE GLOBAL ECONOMY 63 (2013), available at http://www.mckinsey.com/insights/business_technology/disruptive_technologies.

115. *See id.* at 61.

The biggest advantage of cloud computing is not its ability to generate revenue and profits. Rather, its biggest benefit is turning a fixed cost into a variable cost for its customers, which are normally web-based businesses.¹¹⁶ In starting a major web-based business, such as eBay or Facebook, the company normally needs a large number of high-powered computer servers that can host the activity of customers using their website.¹¹⁷ These servers are similar to the company's factory.¹¹⁸ They are expensive and go directly into the start-up costs of a company—the costs that need to be paid before a single customer arrives.¹¹⁹ Cloud computing, however, replaces these servers and thus turns a fixed start-up cost into a variable cost, which is charged only if and when customers start using the website.¹²⁰

This shift from fixed cost to variable cost will facilitate the creation of new revolutionary companies. Cloud computing eliminates the need to buy massive computer servers and thus reduces the initial costs of starting a new business or entering a new market.¹²¹ Therefore, it reduces the losses of a failed business and consequently the venture's risk.¹²² Since you can never fully know if a business will succeed until customers start buying its products, this risk reduction will allow the start-up companies to enter new markets and create dramatic change through direct experimentation with different business models.¹²³ Further, cloud computing is cheaper than traditional servers.¹²⁴ Cloud computing benefits from economies of scale and can thereby sell processing power for a lower cost.¹²⁵ Renting server space from a cloud costs only one third as much as buying and maintaining equipment for the same power.¹²⁶ It also allows companies to allocate those costs to more efficiently match customer demand.¹²⁷ If a company operated off its own server, it would need enough computing power to host the *maximum* number of

116. See Armbrust et al., *supra* note 15, at 51.

117. *Cf. id.*

118. *Cf. id.*

119. *See id.*

120. *See id.* at 53. Cloud computing is considered to be a “pay as you go” service. The more technical business terminology for changing a fixed cost into a variable cost is to change a capital expense into an operating expense. *See id.*

121. *See id.* at 51.

122. *Cf. id.*

123. *See id.*

124. *See id.* at 52.

125. *See id.*

126. *See* MANYIKA ET AL., *supra* note 114, at 63.

127. *See* Armbrust et al., *supra* note 15, at 53. Adjusting the computer power rented from a cloud can be changed in minutes rather than weeks and thus allows for greater flexibility and for businesses to match costs with revenues. *See id.*

customers that it expects at any given point in time.¹²⁸ Since the maximum traffic on a website tends to be two to ten times the average traffic, most of the server power will go unused most of the time.¹²⁹ Thus, companies with their own servers only use 5–20 percent of their servers' power on average.¹³⁰ In a cloud-computing world, however, this problem does not exist.¹³¹ Companies only purchase the power that they need and can simply purchase more computing power when they need it.¹³² Thus, cloud computing can replace the upfront costs of buying servers with a service that is cheaper and utilized only as needed.¹³³

Finally, and most importantly, cloud computing allows companies to quickly scale up their operations at a rate that was previously unimaginable.¹³⁴ Since cloud-computing power is purchased as a service, companies can buy more power as their website traffic requires it.¹³⁵ For example, Animoto is a company that allows users to create web-based presentations from uploaded images and videos.¹³⁶ In early 2008, it served just 5,000 people a day.¹³⁷ But in May 2008, it went viral.¹³⁸ The site's user traffic doubled every twelve hours for three straight days, totaling nearly 750,000 new users.¹³⁹ Since they were already based in the cloud, they accommodated the surge nearly seamlessly, expanding from 50 servers to 3,500 servers in the three-day period.¹⁴⁰ And they did it at a cost of just ten cents per server, per hour.¹⁴¹ Anywhere other than the

128. *See id.* If the business fails to provide for the peak traffic, users will experience slow response times and likely move to a competitor. For example, it is believed that Friendster lost popularity to Facebook and MySpace because of its slow response times, which lasted up to forty seconds. In a world of instant gratification, such a delay is deadly. *See id.*

129. *See id.*

130. *See id.*

131. *See id.*

132. *See id.* To illustrate this concept, imagine an e-commerce website that—like most retail businesses—sees its most sales and thus most Internet traffic leading up to Christmas. If it uses its own servers, it will have to purchase enough servers to accommodate this high demand. In this scenario then, the server power designed to accommodate the Christmas rush will go unused for the rest of the year. Cloud computing, by contrast, eliminates this waste by allowing companies to purchase servers only when they need it. *See id.*

133. *See id.*

134. *See id.*

135. *See id.*

136. *See* Michael Fitzgerald, *Cloud Computing: So You Don't Have To Stand Still*, N.Y. TIMES, May 25, 2008, http://www.nytimes.com/2008/05/25/technology/25proto.html?_r=1&.

137. *See id.*

138. *See id.*

139. *See* Armbrust et al., *supra* note 15, at 53; Fitzgerald, *supra* note 136.

140. *See* Fitzgerald, *supra* note 136.

141. *See id.*

cloud, this would be an astonishing feat.¹⁴² The implications of cloud computing is an unprecedented level of flexibility for businesses to enter new markets and meet customer demand.

Unfortunately for the cloud-computing industry, the fate of this revolution hangs on the opinion of nine Supreme Court justices, who still have trouble using email.¹⁴³ And right now, the ambiguity in the public performance rights regime threatens to create major legal liability for cloud-computing companies.¹⁴⁴ While a public performance may seem different from a cloud-computing company at first, under the legislative definition, they are very difficult to distinguish.¹⁴⁵ The standard public performance analysis prohibits distinguishing performances based on time or place.¹⁴⁶ Consequently, when two customers upload different copies of the same movie to the cloud and then watch it independently, the cloud-computing company is legally conducting just one performance.¹⁴⁷ Thus, the two customers have unwittingly made the company conduct a public performance.¹⁴⁸ To use Animoto as an example, it is nearly certain that two users will upload the same copyrighted movie clips for their presentation and then play them off Amazon's cloud.¹⁴⁹ Since courts cannot distinguish the two performances based on time, location, or copy, courts will aggregate the performances into a public performance, creating significant liability for Amazon.¹⁵⁰ Presumably, some factor must prevent these two performances from constituting a single public performance.¹⁵¹ But no likely candidate exists currently and cloud-computing companies will continue to operate under the threat of major legal liability until this issue is resolved.¹⁵²

142. See *id.*

143. See Will Oremus, *Elena Kagan Admits Supreme Court Justices Haven't Quite Figured Out Email Yet*, SLATE (Aug. 20, 2013), http://www.slate.com/blogs/future_tense/2013/08/20/elena_kagan_supreme_court_justices_haven_t_gotten_to_email_use_paper_memos.html.

144. Cf. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2511 (2014).

145. Cf. *id.* Like Aereo, cloud-computing services perform copyrighted works for multiple users, and these performances can only be distinguished because they derive from different copies. Cf. *id.*

146. Cf. 17 U.S.C. § 101 (2012).

147. Cf. *id.*

148. Cf. *id.*

149. Cf. Mark H. Wittow & Daniel J. Buller, *Cloud Computing: Emerging Legal Issues for Access to Data Anywhere, Anytime*, 14 J. INTERNET L. 1, 7 (2010), available at http://www.klgates.com/files/upload/Journal_Internet_Law.pdf; Fitzgerald, *supra* note 136.

150. Cf. Wittow & Buller, *supra* note 149, at 7; Fitzgerald, *supra* note 136.

151. See *infra* Part V.

152. See *infra* Part V. The two factors that currently limit the aggregation of different performances would be ineffective here because the same transmitter is transmitting the same underlying performance. See *infra* Part V.

The problem is not just a theoretical one. The *Cablevision* decision led to substantial increases in investment for the cloud-computing industry, since the industry no longer had to worry about copyright liability stemming from copyrighted content that users placed on their servers.¹⁵³ A study on the effects of copyright policy on venture capital investments found that the *Cartoon Network* decision resulted in increased investment by venture capital firms in cloud computing along the lines of \$728 million to \$1.3 billion over two-and-a-half years.¹⁵⁴ While no one has yet studied the issue, it is likely that the Supreme Court's decision has reversed this tide of investment and its resulting benefits.¹⁵⁵ Until the legal issue is cleared up, it will slow down the cloud-computing revolution.

IV. THE NEVER ENDING STORY: DECIDING WHERE ONE PERFORMANCE ENDS AND ANOTHER BEGINS

The broader question that the *Aereo* decision implicates is what *exactly* distinguishes two performances.¹⁵⁶ In a public performance case, courts tend to use an aggregation analysis where they look to see if a performance occurred, which transmissions are aggregated into that performance, and finally whether the audience of the performance is public.¹⁵⁷ The difficulty comes in the second step of the analysis in deciding which factors guide the aggregation of transmissions.

Right now, there appear to be only two agreed-upon factors that can prevent two performances from being aggregated. First, two transmissions of two different works will not be aggregated.¹⁵⁸ Second, transmissions by distinct entities will be considered separate

153. See generally JOSH LERNER, THE IMPACT OF COPYRIGHT POLICY CHANGES ON VENTURE CAPITAL INVESTMENT IN CLOUD COMPUTING COMPANIES (2011), available at http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Lerner_Fall2011_Copyright_Policy_VC_Investments.pdf (presenting empirical evidence that the Second Circuit's decision in *Cablevision* leads to additional investment in the cloud-computing industry).

154. See *id.* at 1. To reach this result, they compare the increases in cloud-computing investment between the United States, where the decision would have a major impact, to other countries, where it should have no impact. See *id.* at 7.

155. See Ali Sternberg, *8 Passages from the Supreme Court's Aereo Decision that May Have Negative Implications for the Cloud*, DISRUPTIVE COMPETITION PROJECT (June 25, 2014), <http://www.project-disco.org/intellectual-property/062514-8-passages-supreme-courts-aereo-decision-may-negative-implications-cloud/>.

156. Cf. *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2508 (2014) (examining arguments for what can distinguish two separate performances).

157. Cf. *id.* at 2504 (looking first at whether Aereo performs, second whether or not each transmission should be aggregated, and the third element following implicitly).

158. Cf. 17 U.S.C. § 101 (2012) ("To 'perform' a work means to . . . show its images in any sequence or to make the sounds accompanying it audible.").

performances.¹⁵⁹ The statute defines public transmission in largely negative language, describing what cannot prevent transmissions from being aggregated.¹⁶⁰ We know that time and place cannot prevent two transmissions from being aggregated.¹⁶¹ Based on the Supreme Court's *Aereo* decision, we also know that distinct copies and separate communications cannot prevent aggregation.¹⁶² While the guidance ends here, it appears obvious that *some* additional factor must distinguish performances. Otherwise, every transmission of a given work by a given broadcaster would be considered a single performance. The remainder of this Part examines some of the likely candidates.

A. Do Separate Copies Create Separate Performances?

For a while, using the copy to distinguish performances seemed like a good solution. In *Cartoon Network* and *Aereo*, the Second Circuit proposed to limit aggregation when the performances used separate copies of the work.¹⁶³ Distinguishing performances based on the copy used has several advantages and appears to create a series of rights that lock together, ensuring that the author will receive compensation for their efforts.¹⁶⁴ From an interpretative standpoint, focusing on the copy limits the audience without violating the express non-limits of the statutory definition.¹⁶⁵ Second, the author will be compensated in each scenario, either for the public performance or for his reproduction right in the case of a private performance based off a distinct copy.¹⁶⁶ However, further analysis shows that distinguishing performances based on copies creates more problems than it has solved.

159. See *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 138 (2d Cir. 2008). However, to make things confusing, it appears that more than one entity can perform the same transmission, but for public analysis, these performances would be considered distinct. Cf. *Aereo*, 134 S. Ct. at 2500 (“Thus, *both* the broadcaster *and* the viewer ‘perform,’ because they both show a television program’s images and make audible the program’s sounds.”) (emphasis added).

160. Cf. § 101.

161. See *id.* (“[T]o transmit or otherwise communicate a performance . . . 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.”).

162. See *Aereo*, 134 S. Ct. at 2502.

163. See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 689 (2d Cir. 2013), *rev’d sub nom. Aereo*, 134 S. Ct. 2498; *Cablevision*, 536 F.3d at 138.

164. See *Cablevision*, 536 F.3d at 137–38.

165. See *id.*

166. See Jacob Marshall, Note, *Trading Rabbit Ears for Wi-Fi: Aereo, the Public Performance Right, and How Broadcasters Want to Control the Business of Internet TV*, 16 VAND. J. ENT. & TECH. L. 909, 942 (2014).

The Second Circuit based its decision on the assumption that a transmission of a work cannot occur without a copy of that work.¹⁶⁷ Thus, separate copies would lead to separate private performances where the author has already been duly compensated by the purchased copy.¹⁶⁸ However, this is not necessarily the case. A person can perform a work without ever having attained a copy of that work. For example, an individual in a public place could begin singing “Happy Birthday to You,” a notoriously copyrighted work that almost everyone knows by heart.¹⁶⁹ Even transmitting a performance does not necessarily require a copy of the work. Again, the individual could sing the song live on a radio station without ever using a copy of the work.¹⁷⁰

To illustrate the point, the facts of *Aereo* demonstrate that even a digitally recorded television program does not need a copy to conduct a performance.¹⁷¹ *Aereo* used a unique copy of the programming for each viewer, but only because it recorded six or seven seconds of the programming before sending it to the viewer.¹⁷² It would be easy for a company like *Aereo* to not create any copies at all and simply pass the broadcast signal on to the viewers.¹⁷³ This is because a copy is created only when the work is fixed.¹⁷⁴ To be fixed, the work must be embodied in the buffer for more than a “transitory duration.”¹⁷⁵ As the Second Circuit found, this duration requirement is not met where the work stayed in the buffer for less than 1.2 seconds.¹⁷⁶ If *Aereo*

167. See *Cablevision*, 536 F.3d at 137–38.

168. See *id.*

169. Warner/Chappell Music owns the copyright to the song and collects about \$2 million a year in royalties. *But see* Robert Brauneis, *Copyright and the World’s Most Popular Song*, 56 J. COPYRIGHT SOC’Y U.S.A. 335, 339–40, 360 (2008) (arguing that the song, “Happy Birthday to You,” has fallen into the public domain due to problems with the work’s authorship and copyright renewal).

170. Of course, the singer would still be violating the author’s public performance rights in both hypotheticals. The point is merely that transmissions and performances do not depend on copies, and therefore a copy-based aggregation approach has serious shortcomings that could be exploited in the future.

171. *Cf.* *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 683 (2d Cir. 2013), *rev’d sub nom.* *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

172. See *id.* at 682–83.

173. *Cf. id.*

174. See 17 U.S.C. § 101 (2012) (“‘Copies’ are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term ‘copies’ includes the material object, other than a phonorecord, in which the work is first fixed.”)

175. See *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 129–30 (2d Cir. 2008).

176. See *id.* at 130. However, other circuits have found the buffer of a work to count as a copy despite its transitory duration. See, e.g., *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d

kept a similarly short part of the program in their buffer, then presumably they could retransmit the program without creating any copies.¹⁷⁷ In that case, Aereo would not even need to use separate antennas to avoid infringing the public performance right under the Second Circuit's copy-based jurisprudence.¹⁷⁸ Thus, focusing on the copy creates a gap between the author's reproduction rights and the public performance right that can be exploited by performers to sell performances without compensating the author. As a result, delineating performances based on copies is a poor solution to the current ambiguity in the public performance regime.

B. Can Ownership Distinguish the Performances?

In *Aereo*, the Court suggested in dicta that separate ownership of the underlying work creates separate performances.¹⁷⁹ As an initial matter, this distinction would provide little help. Only the copyright holder owns the underlying work.¹⁸⁰ Members of the public own only a copy of the work or a limited license to perform the work publicly. Thus, the distinction does not go far in explaining where one performance ends and another begins.

To consider a more interesting variation of this distinction: courts might try to distinguish the performances based on *ownership of the copy*. Under this distinction, Aereo performed their works publicly because they owned each of the separate copies. By contrast, a cloud-computing company would not be conducting a public performance because it does not own the copies, which are owned by the respective users.¹⁸¹ While this distinction has some promise, it is still open to abuse by performers. Aereo has consistently argued that

511, 518 (9th Cir. 1993) (finding that running a program on a computer's random access memory (RAM) was sufficiently fixed).

177. Cf. *Cablevision*, 536 F.3d at 130.

178. Cf. *WNET, Thirteen v. Aereo*, 712 F.3d at 689–90. This point is assuming that the transmissions could not be aggregated at all because they each come from the original performance and therefore there is no copy. Conceivably, the court could interpret the transmissions as all coming from the broadcaster's original copy and thereby aggregate the performances.

179. See *Am. Broad. Cos. v. Aereo, Inc.*, 134 S. Ct. 2498, 2510 (2014). It is difficult to understand what argument the Court is trying to preempt. If a person viewed a performance of their own work, presumably they would be granting at least an implicit permission for the performance, regardless of whether it is public or private. Cf. *id.*

180. See 1 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 5.01[A] (rev. ed.). Under any interpretation of the public performance right, the owner would presumably not sue himself for creating a public performance.

181. Cloud-computing services usually say explicitly in their terms of service that the user retains ownership rights in all of the content that they upload to the cloud. See Michelle Maltais, *Who Owns Your Stuff in the Cloud?*, L.A. TIMES, Apr. 26, 2012, <http://articles.latimes.com/2012/apr/26/business/la-fi-tech-savvy-cloud-services-20120426>.

they are merely “renting” their antennas to their customers.¹⁸² Consistent with this theory, Aereo could argue that their respective customers own the newly created copies.¹⁸³ As a result, focusing on the owner of the copy may also fail where the copy-based distinction failed.¹⁸⁴

C. Distinguishing Performances Based on Volition

While dissenting in *Aereo*, Justice Scalia suggested that performances should be distinguished based on who provided the volition to start the performance.¹⁸⁵ With Aereo’s service, the consumer provides the volition and controls what content to stream, regardless of whether it is copyrighted.¹⁸⁶ Aereo only provides the equipment.¹⁸⁷ Since consumers are independently streaming broadcasts through separate equipment, no public performance should result and certainly not one conducted by Aereo.¹⁸⁸ Using this argument, Aereo makes itself look like an Internet-based Radio Shack that is just selling the online version of a common household antenna.¹⁸⁹ Since the user provided the necessary volition by clicking “record,” the user rather than Aereo conducted the performance, leaving Aereo free from liability.¹⁹⁰ While the majority rejected this argument, it still provides an interesting alternative for limiting performances.¹⁹¹

182. See *Aereo*, 134 S. Ct. at 2504.

183. *Cf. id.* While the Court rejected the “renting” argument for the purposes of a transmission, the result might be different for those who own the underlying copy. For example, Aereo might make such ownership right clear in their “terms of use” or adjust their systems to save the copy directly to the customers’ hard drives. It is not contradictory for a business to perform or transmit a copy owned by another entity. *Cf. id.* at 2508.

184. *Cf. supra* Part IV.A.

185. See *Aereo*, 134 S. Ct. at 2512–13 (Scalia, J., dissenting). Somewhat oddly, Scalia dubs this test the “traditional volitional-conduct test.” *Id.* at 2517. However, Scalia is actually the first person to apply a volitional test in the context of the public performance. *Cf. id.* at 2513–14 (listing cases where the court refused to find the defendant liable for their customers’ copying because they did not provide the necessary volition). Instead, he appears to have adapted it from *Cablevision’s* use of the test to show that Cablevision did not create a copy since it did not provide the necessary volition. *Cf. Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 131 (2d Cir. 2008).

186. See Brief for Respondent at 17–18, *Aereo*, 134 S. Ct. 2498 (No. 13-461), 2014 WL 1245459.

187. See *id.*

188. See *id.*

189. See *id.*

190. See *Aereo*, 134 S. Ct. at 2512–13 (Scalia, J., dissenting).

191. *Cf. id.*

In *Cablevision*, the court implicitly followed a similar volition-based theory of culpability.¹⁹² In deciding who authored the infringing copy, they viewed the RS-DVR system as analogous to a household VCR.¹⁹³ The person who operates the VCR is responsible for creating the copy, not the party that created or sold the VCR.¹⁹⁴ In a similar manner, the television companies could not hold Cablevision responsible as a direct infringer for the copies created by its consumers using its system.¹⁹⁵ The consumer, not Cablevision, provided the necessary volition to create the copy.¹⁹⁶ It seems clear that the same volition that created the copy also caused the performance to occur.¹⁹⁷ Thus, it would be an odd and contradictory result for the court to then find that the consumer caused Cablevision to conduct a public performance.¹⁹⁸ Moreover, analogizing the RS-DVR to a VCR appears to buttress this result. Based on the famous principle that similar cases should be treated similarly,¹⁹⁹ the distinction between housing the copy at the user's home or at the service provider's facilities does not feel sufficiently distinct to warrant legal liability.²⁰⁰

The problem with this volition-based approach is that it ignores the fair use nature of the original product.²⁰¹ It is legal to sell VCRs, despite their tendency to record copyrighted material, because "time-shifting" programs constitute a fair use.²⁰² However, a fair use defense becomes difficult to justify when the means become more efficient and a single actor is performing the service on a mass scale.

192. Cf. *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 134–40 (2d Cir. 2008).

193. See *id.* at 131.

194. See *id.*

195. See *id.* at 132. The court did not deal with the issue of secondary liability for Cablevision because the plaintiffs expressly disavowed it. See *id.* at 130–31.

196. See *id.* at 132.

197. Cf. *id.* at 134.

198. Cf. *id.* at 139. The court specifically notes that finding that the consumer created the copy does not necessarily lead to the conclusion that the consumer performed the work. The court skips the question of whether Cablevision or the consumer was responsible for conducting the transmission and therefore the performance, finding it unnecessary to answer since the performance was not public. See *id.* at 134.

199. See generally Kenneth I. Winston, *On Treating Like Cases Alike*, 62 CALIF. L. REV. 1 (1974) (tracing the origin of the principle that like cases should be treated alike and assessing its application in law).

200. Cf. *id.* at 9–12 (deriving the principle that like cases should be treated alike).

201. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 456 (1983).

202. See *id.* The Court applied the standard four factor test to determine that "time-shifting" fell within fair use. First, private use is a noncommercial activity, supporting fair use. The second factor, the nature of the fair use, works against fair use but the Court fails to explain why. Third, the entire program is reproduced, undermining fair use. Fourth, there was no demonstrable damage to the market for the work. See *id.* at 448–51.

In *Sony Corp. of America v. Universal City Studios, Inc.*, two of the four factors supporting fair use included the facts that the activity was a nonprofit, noncommercial private use and did not produce any demonstrable damage to the market for the copyrighted work.²⁰³ Under the facts of *Cablevision*, however, these factors would have pointed in the opposite direction.²⁰⁴ Cablevision was acting in a commercial and for-profit capacity in selling the RS-DVR services.²⁰⁵ Moreover, these systems have an increasing potential to hurt the market for copyrighted works as they become more capable of holding larger numbers of shows and effortless, since users may be able to build libraries based on recorded television that replace their need to buy copies.²⁰⁶ As a result, the viewer's volition theory of liability relies on the assumption of fair use for a VCR-type system that becomes untenable when moved to a mass scale.

V. CLOSING THE CURTAINS ON THE PUBLIC PERFORMANCE REGIME

The difficulty with identifying a factor that can distinguish where one performance ends and another begins results from a more fundamental breakdown in the copyright framework. The current copyright framework traces its roots to a time when copies meant books and performances meant theater.²⁰⁷ In today's digital age, new modes of communicating creative ideas have evolved; the performance and the copy no longer have a meaningful distinction.

The paradigmatic public performance is an actor reciting the script of a play in front of a live audience.²⁰⁸ Without the public performance right, the actor could potentially purchase a single print copy of the play and perform it for dozens of paying audience members, night after night.²⁰⁹ Those audience members, having already experienced the play, are then much less likely to buy a print

203. See *id.* at 449–51.

204. Under the issue of copyright infringement, the court never reaches the question of fair use because they decide that Cablevision did not authorize the copies and because the plaintiffs decided against arguing for contributory liability. See *Cartoon Network LP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 132–33 (2d Cir. 2008). Also, of course, fair use did not impact the analysis of the public performance infringement under the court's reasoning, since there was no public performance. See *id.* at 139. However, the sense of justice embodied in the fair use doctrine still appears to be driving the results in this case and the other cases discussed in this Part.

205. See *id.* at 124.

206. See *id.*

207. See Stadler, *supra* note 33, at 700.

208. See *id.*

209. See *id.* at 718.

copy of the script.²¹⁰ In a world without a public performance right, this profit opportunity allows the performer to appropriate the benefits of the work without compensating the author. A property right is necessary to fill this loophole.²¹¹

The search for a solution to this appropriation problem has resulted in our modern copyright regime. The *sine qua non* of a copy is its permanence.²¹² By purchasing a copy, the consumer gains the ability to experience the work whenever, wherever, and for as many times as they wish.²¹³ In contrast, the *sine qua non* of a performance is the one-time experience.²¹⁴ When you sell someone a ticket to a performance, you are selling the experience of the copyrighted work with no additional rights after the performance ends.²¹⁵ Each audience member experiences the work once, without interruption, and then it is gone.²¹⁶ In the pre-Internet world, the distinction between a copy and a public performance was rooted in the physical nature of the act.²¹⁷ Creating a physical object containing the work is a copy.²¹⁸ By contrast, creating a sound or transmission—technically understood as a series of waveform audio or electromagnetic distributions—is a performance.²¹⁹ Thus, the distinction between the author's rights grew off of a clear physical distinction.

Unfortunately, those clear physical distinctions have evaporated. The line between a performance and a copy—between a permanent object and a temporary signal—can no longer be meaningfully deciphered. Any sort of Internet-delivered performance necessarily requires a reproduction in the computer's random access memory (RAM).²²⁰ A reproduction and distribution over the Internet differs from a public performance only by the lack of a contemporaneous audio and visual rendering of the work.²²¹ However,

210. *See id.*

211. *But see id.* at 700–01 (arguing that the public performance right today gives copyright holders the ability to charge for their work in each step of the process through which the work reaches its audience).

212. *See* Jonah M. Knobler, *Performance Anxiety: The Internet and Copyright's Vanishing Performance/Distribution Distinction*, 25 CARDOZO ARTS & ENT. L.J. 531, 587 (2007).

213. *See id.*

214. *See id.*

215. *See id.*

216. *See id.*

217. *See id.* at 580.

218. *See id.*

219. *See id.*

220. *See id.* at 578.

221. *See id.*; *see also* United States v. Am. Soc'y of Composers, Authors & Publishers, 627 F.3d 64, 73 (2d Cir. 2010) (holding that a downloaded song is not music because there is no contemporaneous perception by the listener).

the same digital string of ones and zeroes leads to either a copy or a performance based only on the software used to decipher them.²²² With a small change in the software, the performance stays on the viewer's computer as a copy, or a copy is simultaneously observed and deleted like a performance.²²³

Transmitters have tried to maintain the traditional copyright distinctions in their software.²²⁴ From a practical perspective however, the transmitter constructs and controls the software located on the viewer's computer.²²⁵ Indeed, the transmission is often encrypted in a fashion that can only be decoded by the transmitter's software.²²⁶ At the same time, the distinction is an artificial one and will continue to break down until it is replaced.

VI. RECASTING THE FAIR USE DOCTRINE: THE FAIR PERFORMANCE DOCTRINE

The doctrine of fair use allows "courts to avoid the rigid application" of copyright law when doing so would "stifle the very creativity which that law is designed to foster."²²⁷ While creativity is the main focus, the broader public interest is also important and can tip the scale.²²⁸ Traditional fair use analysis relies on four factors: the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the portion used, and the effect on the market for the copyrighted work.²²⁹ Based on these four factors,

222. See Knobler, *supra* note 212, at 579-80.

223. See *id.*

224. See *id.* at 580.

225. See *id.*

226. See *id.*

227. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994) (quoting *Stewart v. Abend*, 495 U.S. 207, 236 (1990)).

228. See 4 NIMMER ON COPYRIGHT, *supra* note 180, § 13.05[B][5].

229. The fair use defense codified in Section 107 reads:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

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

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

this Note proposes a four-element safe harbor designed to protect cloud-computing services from public performance liability. The defending company must demonstrate that: (1) the service did not initially create or provide access to the copy used; (2) the service must have a primary purpose separate from performing audio visual works, such as data storage; (3) the performances must be essentially private by resembling a series of private performances; and (4) the infringement must be limited to performing the work, rather than copying or publishing the work.

If a company is found in violation of the public performance but meets all four elements, the company can assert the “Fair Performance Doctrine” as an affirmative defense. Since each element is derived from one of the fair use’s factors, as will be demonstrated, the company has effectively fallen within the fair use defense.²³⁰ If the company fails one of the elements, then courts should proceed under the standard fair use doctrine.

To emphasize the point, it is crucial that courts create an explicit safe harbor because the fair use doctrine is notoriously ambiguous and businesses need certainty to thrive. The fair use doctrine’s factors are defined in general terms that tend to defy a bright-line definition.²³¹ They have no relative weight and none of them are either necessary or sufficient.²³² As a result, judges can apply the test arbitrarily based on their own sentiments.²³³ This level of ambiguity allows a copyright owner, such as a major broadcast corporation, to credibly threaten to sue a cloud-computing company for copyright infringement and tie the company up in years of expensive litigation.²³⁴ This kind of threat will be sufficient to deter companies from entering the cloud-computing industry.²³⁵ Moreover, there are substantial benefits to a rule that creates certainty, which the current

17 U.S.C. § 107 (2012). This Section was designed to codify the common-law doctrine of fair use and not to change it in any way. See *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 549 (1985).

230. If the defendant meets all four factors of the fair use test, then “victory on the fair use playing field is assured.” *Arica Inst., Inc. v. Palmer*, 970 F.2d 1067, 1078 (2d Cir. 1992).

231. See *Monge v. Maya Magazines, Inc.*, 688 F.3d 1164, 1171 (9th Cir. 2012).

232. See *id.* One commentator called the factors “billowing white goo,” while another commentator called them “naught but a fairy tale.” Jessica Litman, *Billowing White Goo*, 31 COLUM. J.L. & ARTS 587, 596 (2008); David Nimmer, “*Fairest of Them All*” and Other Fairy Tales of Fair Use, 66 LAW & CONTEMP. PROBS. 263, 287 (2003).

233. See *Monge*, 688 F.3d at 1171.

234. Cf. Phillip Pavlick, *Music Lockers: Getting Lost in a Cloud of Infringement*, 23 SETON HALL J. SPORTS & ENT. L. 247, 254–56 (2013) (discussing operational strategies that cloud-computing companies have employed to reduce the probability of copyright liability).

235. Cf. *id.* at 277.

fair use doctrine lacks.²³⁶ Certainty allows businesses to predict the outcome of a legal dispute.²³⁷ It helps to resolve disputes quickly, since parties will settle rather than attempt litigation.²³⁸ So, an explicit safe harbor is necessary for the fair use doctrine to achieve its purpose.

A. Initial Access or Creation

The first element requires that the service did not create or provide access to the copy used for the performance. It would be permissible for a customer to upload their own copy, but not for the service to provide access to a cable or broadcast stream.²³⁹ This factor derives directly from the fourth factor of the fair use doctrine, the effect on the market for the copyrighted work.²⁴⁰ For the fair use doctrine, this is the single most important factor.²⁴¹ This is because the fundamental goal of copyright law is to encourage authors to create by allowing them to pick the fruits of their labor.²⁴² If the use has no impact on the work's market or value, then it does not need to be prohibited to protect the author's incentive.²⁴³ The goal is to determine whether the use appropriates the market for the original work.²⁴⁴

If the service does not provide access to the copy, then the user must have acquired the copy, hopefully by purchasing a legal copy. Even if the customer acquired the copy without paying, the infringement is his or her own and does not create liability for the service.²⁴⁵ As a result, the service does not affect the market for the work. If anything, these services should expand the ability of the user

236. See Paul E. Loving, *The Justice of Certainty*, 73 OR. L. REV. 743, 746 (1994). Certainty in the context of legal rules can be defined as "the ability to predict the legal consequences of one's conduct." *Id.* at 748.

237. See *id.* at 746.

238. See *id.* Certainty also allows the law to resolve similar cases in a similar manner. See *id.*

239. Cf. *supra* Part IV.C.

240. See 17 U.S.C. § 107 (2012).

241. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 566 (1985).

242. See A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 642 (4th Cir. 2009) (quoting Pierre N. Leval, Commentary, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1124 (1990)).

243. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 450 (1984).

244. See NXIVM Corp. v. Ross Inst., 364 F.3d 471, 482 (2d Cir. 2004).

245. The service may still be a contributory infringer if the customer is illegally copying works; but that is a separate question and is beyond the scope of this Note.

to enjoy the work, increase the incentive for the user to purchase a copy, and thereby further the goals of copyright law.²⁴⁶

B. Alternative Primary Purpose

The second element requires that the service have a primary purpose other than performing the copyrighted work. By and large, the remote storage of data will suffice, while other purposes may suffice as well. This element derives from the first fair use factor, the purpose and character of the use.²⁴⁷ A use that has a commercial focus tends to weigh against a finding of fair use.²⁴⁸ However, applying the factor requires understanding whether the user stands to profit from the exploitation of copyrighted work without paying for it.²⁴⁹ Most secondary users will seek some commercial gain from their use, and so it is important not to overly emphasize the commercial motivation without respect to how that motivation relates to the copyrighted work.²⁵⁰

In addition, courts have emphasized that a transformative use can compensate for the commercial nature of the use.²⁵¹ A transformative use is one that uses the work “in a different manner or for a different purpose from the original.”²⁵² Thus, the user does not need to literally transform the work.²⁵³ The work can remain unchanged so long as it is being used for a different purpose than originally intended.²⁵⁴ For example, in *Perfect 10, Inc. v. Amazon.com, Inc.*,²⁵⁵ Google’s use was considered “highly transformative” when it used images to create thumbnails, even though it reproduced the photos without altering them.²⁵⁶ The court noted that it provided a new context for the work and thus essentially transformed the work into a new creation.²⁵⁷

246. As a matter of standard economic theory, the more value that the customer derives from a product, the more that they are willing to pay for that product. If the customer buys a DVD and can only play it on their television, then the customer will necessarily pay at least the same amount for a DVD that they play through their television, their laptop, and their cell phone, as a result of a cloud-computing service.

247. 17 U.S.C. § 107 (2012).

248. See *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 562 (1985).

249. See *id.*

250. See *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 921 (2d Cir. 1994).

251. See, e.g., *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578–79 (1994).

252. *A.V. ex rel. Vanderhye v. iParadigms, LLC*, 562 F.3d 630, 638 (4th Cir. 2009) (quoting *Leval*, *supra* note 242, at 1111).

253. See *id.*

254. See *id.*

255. 508 F.3d 1146, 1146 (9th Cir. 2007).

256. See *id.* at 1164–65.

257. See *id.* at 1165.

In a similar manner, the service will have a transformative use so long as the performance is incidental to the main service it provides to its customers. Thus, the service transforms the public performance of the work by adding private storage of the user's personal copy. The storage function acts as a new context for the public performance. Even though the service is creating a public performance of the work, it is doing so to provide private storage of the user's private copy of the work. The sheer idiosyncrasy of using a public performance to provide private storage and the difference between these two concepts—public performance and private storage—demonstrates vividly how transformative this use is.

Importantly however, the service must demonstrate that the performance is not the primary purpose of the work. An add-on service used solely to disguise the public performance will not suffice.

C. Resemble a Series of Private Performances

The third element requires the services' public performances to each resemble a series of private performances. This occurs, as with cable and broadcast performances, where the users each experience the performance in their homes or on a personal electronic device. While this sort of performance would be considered public for the sake of Section 106, the fair use doctrine, through the Fair Performance Doctrine, one can still take this important distinction into account.²⁵⁸ There is something fundamentally different between broadcasting a performance into people's homes and playing a performance at a movie theater.²⁵⁹ In the earlier example, each space is a private space, while in the later example, the space is public.

This element follows from the second fair use factor, the nature of the copyrighted work.²⁶⁰ A work is entitled greater protection as it comes closer to the copyright's core purpose of creative expression.²⁶¹ On its face, it would appear that movies and television shows would have the kind of creative nature that requires the greatest level of protection.²⁶² However, the nature of the use must also be taken into

258. Cf. 17 U.S.C. § 107 (2012). Fair use is an equitable doctrine that can account for distinctions that cannot be easily distilled into rules or standards. See, e.g., *Weissman v. Freeman*, 868 F.2d 1313, 1324 (2d Cir. 1989).

259. When an individual watches a movie from a cloud computer, they are essentially playing a personal copy for themselves. When an individual watches a movie at a movie theater, they are of course viewing a public performance. However, this distinction is difficult to pin down from a technical or physical perspective. See *supra* Part IV.

260. See § 107.

261. See *Bond v. Blum*, 317 F.3d 385, 395 (4th Cir. 2003).

262. See *Stewart v. Abend*, 495 U.S. 207, 237 (1990) (noting that fair use is less likely to be found when the copyrighted work is a creative product).

account.²⁶³ In *A.V. ex rel. Vanderhye v. iParadigms, LLC*, the court concluded that this factor did not undermine the fair use defense even though the works were admittedly creative.²⁶⁴ The infringer, iParadigms, had created a database of student papers to prevent future students from getting away with plagiarism.²⁶⁵ Even though the students' essays were creative in nature, iParadigms's use was unrelated to that creative core.²⁶⁶ In a similar manner, if each performance resembles a series of private performances, then the use is farther away from the "creative core" of the private performance. At the very least, the factor should be considered neutral and not support a finding of infringement.²⁶⁷

D. Infringement Limited to Performing

The final element requires that the Fair Performance Doctrine can only apply to performances. If the service acts to copy the work or to publish or distribute the work for the wider public, then it cannot receive the benefit of the fair performance.

The fourth element follows from the third factor of the fair use defense, the amount and substantiality of the portion used.²⁶⁸ Generally, as the amount of the copyrighted material increases, the likelihood that the use will constitute fair use decreases.²⁶⁹ The extent of permissible copying generally varies with the purpose and character of the use.²⁷⁰ In *iParadigms*, the court found that this factor did not favor either party, even though the infringer used substantially all of the students' works.²⁷¹ The use of the students' work was limited in purpose and scope to comparing it to other students' works.²⁷² Thus, it is important in this factor to take into account the purpose of the work.²⁷³ Similarly, in *Perfect 10*, the court found that Google's substantial reproduction of the defendant's photos was reasonable in

263. See *A.V. ex rel. Vanderhye v. iParadigms, LLC*, 562 F.3d 630, 640 (4th Cir. 2009).

264. See *id.* at 640–42.

265. See *id.*

266. See *id.* at 641.

267. Even if a court determines this factor to weigh against the cloud-computing companies, the companies should still gain the protection of the fair use doctrine. This factor tends to be less significant than the other factors and thus cannot outweigh them. See *FMC Corp. v. Control Solutions, Inc.*, 369 F. Supp. 2d 539, 579 (E.D. Pa. 2005); see also 4 NIMMER ON COPYRIGHT, *supra* note 180, § 13.05[A][2][a].

268. See 17 U.S.C. § 107 (2012).

269. See *Bond v. Blum*, 317 F.3d 385, 396 (4th Cir. 2003).

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

271. See *A.V. ex rel. Vanderhye*, 562 F.3d at 642.

272. See *id.*

273. See *id.*

relation to its purpose, to allow the search engine's users to decide whether to pursue additional information.²⁷⁴ As a result, the court found that the factor did not favor either party.²⁷⁵

In a similar manner, it is likely that customers will perform a substantial amount of the work. However this use is reasonable in relation to the use, which is to create a performance. More importantly, the public performance right is just one of the copyright holder's six exclusive rights.²⁷⁶ As a result, even though the service publicly performs substantially all of the work, it does not appropriate a substantial amount of the copyright holder's rights in their work.

VII. CONCLUSION: THE SHOW MUST GO ON

Through the course of history, copyright policy has evolved only when threatened by new and evolving technology.²⁷⁷ The original invention of the printing press, the first form of copying equipment, gave rise to the need for copyright protection.²⁷⁸ The radio and cable television similarly changed how Americans enjoyed creative content and forced the copyright regime to adapt, but at the cost of awkwardly projecting archaic distinctions onto new mediums. As America enters the digital age, copyright law will again need to adjust the rights and protections provided to authors. However, the digital world has obliterated the distinction between a copy and a performance, and the copyright regime must be reimagined from the ground up. In the meantime, the cloud-computing industry will suffer the threat of legal liability, potentially crippling a great force for innovation. To avoid this problem, courts should construct a Fair Performance Doctrine, based on the fair use doctrine but with bright-line rules to create the certainty necessary for businesses to thrive.

*Patrick C. Tricker**

274. See *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1167 (9th Cir. 2007).

275. See *id.* at 1167–68.

276. See 17 U.S.C. § 106 (listing the copyright author's six exclusive rights of reproduction, derivative works, distribution, displaying, and performing a song or movie publicly).

277. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 430 (1984).

278. See *id.*

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