The Kindle Controversy: An Economic Analysis of How the Amazon Kindle’s Text-to-Speech Feature Violates Copyright Law

ABSTRACT

In 2009, Amazon released the Kindle 2 with a text-to-speech feature. This feature allows users of the Kindle 2 to download software to the device that will read e-books aloud. Authors and publishers of e-books immediately objected to the feature, arguing that it essentially created an unauthorized audiobook. Amazon maintained the legality of the text-to-speech feature, arguing that it does not copy, perform, or create a derivative work. Amazon decided to avoid a legal battle by allowing rightsholders to decide whether to enable the text-to-speech feature for each individual title. The copyright community, however, responded swiftly and nearly unanimously, siding with Amazon and arguing that authors and publishers were seeking to stifle innovation and the free flow of knowledge and information.

This Note addresses whether the text-to-speech feature violates copyright law by creating a copy, public performance, or derivative work of the original e-book. It also analyzes whether Amazon would be secondarily liable for copyright violations committed by users of the text-to-speech feature. This Note concludes that were Amazon to allow its users to download e-books and read them aloud using the text-to-speech feature without permission from the authors, it would be contributorily liable for the creation of infringing derivative works. The Kindle 2 neither creates a copy nor renders a public performance. No copy exists because the Kindle file—stored only in RAM—lacks fixation; moreover, it alters the creative expression of the original work. No public performance takes place, because any performance created by the Kindle 2 occurs in private. Nonetheless, when the text-to-speech feature reads an e-book aloud, it creates a derivative work that infringes on the copyrights of authors and publishers, because it creates a substantially similar market replacement for an audiobook derived from an e-book.
From its beginning, copyright law has developed in response to significant changes in technology. The invention of a new form of copying equipment—the printing press—gave rise to the original need for copyright protection. The law, in turn, shapes technology by influencing the emergence, design, and architecture of new media platforms. Copyright law has always had an uncomfortable and conflicting relationship with the development of new technologies. This inherent tension emerges when designers must integrate new platforms with traditional forms of creative expression.

The smoldering conflict between technology and copyright law reignited recently with the release, in February 2009, of Amazon's Kindle 2, with a text-to-speech functionality. The feature, powered by Nuance Realspeak technology, allows the user to download software to the device that will read e-books aloud. Amazon licensed the right to distribute e-books from publishers and authors, and made them

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available for consumers to read on the Kindle 2. The Authors Guild, however, claimed that the text-to-speech feature created unauthorized audiobooks in violation of authors' copyrights.

Some commentators argue that copyright law has strayed from its original purpose and become a sword to strike down innovation. Although they agree that, as enumerated in Article I of the Constitution, copyright law seeks “[t]o promote . . . the useful Arts,” they complain that in recent years, as technology has developed at an ever-quickening pace, copyright owners have reacted reflexively and myopically against innovation. As one copyright commentator noted, “I cannot think of a single significant innovation in either the creation or distribution of works of authorship that owes its origins to the copyright industries.”

Such criticism, however, ignores half the rationale behind copyright law. Promoting “the Progress of . . . the useful Arts” requires a balance between compensating authors and promoting public access to their works, what one scholar has coined the “incentives-access paradigm.” Copyright law promotes this “Progress” by providing authors, for “limited Times,” with certain exclusive rights to their works. This exclusivity not only compensates authors for their labors, but also provides potential writers with the incentive to create works that enrich public knowledge and well-being. “An absence of copyright protection would lead to unchecked and uncompensated copying, which would discourage creation.” At least some would-be producers of creative

5.  Id.
13.  See U.S. CONST. art. I, § 8, cls. 1, 8 (“The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . .”).
14.  According to the Supreme Court's interpretation, the purpose of copyright law is “to motivate the creative activity of authors and inventors by the provision of a special reward . . . the monopoly created by copyright.” Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 546 (1985) (quoting Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417, 429, 477 (1984)).
15.  Carrie Ryan Gallia, Note, To Fix or Not to Fix: Copyright’s Fixation Requirement and the Rights of Theatrical Collaborators, 92 MINN. L. REV. 231, 236 (2007).
expression presumably need reassurance that the law will limit the copying of their works, enabling them to capture the economic benefits of their creation.  

These competing interests collide in the debate over the Kindle 2. On one hand are authors and publishers of e-books who may have less incentive to create works if they do not receive the monetary rewards they expect and believe they deserve. On the other hand, if copyright protection expands too far, companies like Amazon may lose the necessary economic incentive to produce innovative technology, such as the text-to-speech feature, and public access to e-books will decrease.

If economic incentive were dispositive, the audio renditions created by the text-to-speech feature would clearly constitute infringing works. The feature reduces the incentive to create new e-books in two distinct but related ways. First, it adds value to e-books for which Amazon has not reimbursed the authors or publishers. Had the rightsholders known about the feature, they could have negotiated a higher price to license their e-books. Second, it potentially allows Amazon to encroach on the audiobook market, which authors and publishers enjoy the sole right to exploit. While different from an audiobook in important ways, the text-to-speech function essentially allows the Kindle 2 to operate as a market replacement for audiobooks, from which authors and publishers derive a large part of their revenue.  

The inability of authors, either to negotiate for full value in their licensing agreements or to reap the rewards of the audiobook market, diminishes the incentive for authors to create original works.

This Note addresses whether the text-to-speech feature violates copyright law. Part I provides background information concerning

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16. Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417, 438 (1984) (“Copyright is based on the belief that by granting authors the exclusive rights to reproduce their works, they are given an incentive to create, and that ‘encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors . . . .'” (quoting Mazer v. Stein, 347 U.S. 201, 219 (1954))).

17. See Blount, supra note 6 (“Audio books are a billion-dollar market, and growing. Audio rights are not generally packaged with e-book rights. They are more valuable than e-book rights. Income from audiobooks helps not inconsiderably to keep authors, and publishers, afloat.”).

18. Two more recent versions of the Kindle have been launched since the start of the Kindle 2 controversy, the Kindle DX on May 6, 2009, and the Kindle 3 on July 28, 2010. See Press Release, Amazon.com, Announcing a New Generation of Kindle: The All-New Kindle is Smaller, Lighter, and Faster, with 50 Percent Better Contrast (July 28, 2010), available at http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1453463; Press Release, Amazon.com, Introducing Kindle DX--Amazon's Large Screen Addition to the Kindle Family of Wireless Reading Devices (May 6, 2009), available at http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1285140. Both devices have a text-to-
the Kindle 2, the text-to-speech feature, and the reactions of Amazon, the rightsholders, and copyright commentators. Part II discusses the license agreement between Amazon and the Authors Guild and analyzes whether the authors and publishers granted Amazon the right to sell their e-books with the text-to-speech feature. Part III considers whether use of the feature violates any of the reproduction, performance, or derivative work rights of the authors and publishers. Part IV covers secondary liability; that is, whether Amazon may be held contributorily or vicariously liable for creating a device that infringes the copyrights of authors and publishers. This note concludes that the text-to-speech feature does, in fact, create infringing derivative works for which Amazon could be held contributorily liable, as summarized in Part V.

I. THE CONTROVERSY OVER THE KINDLE 2

The Amazon Kindle is a software and hardware platform for reading e-books and other digital media. The Kindle 2, like the original, is a portable, wireless, paperback-size device, onto which users can download a virtual library of digitalized e-books. Amazon sells these downloads, and if the books are under copyright, it pays royalties to the authors and publishers under the terms of a license agreement. With the Kindle 2, users can download e-books from Amazon at the Amazon Kindle store. As of this writing, Amazon has over 850,000 e-books, newspapers, magazines, and blogs available for download.

The text-to-speech feature immediately drew attention from the Authors Guild (“Guild”) an agency representing published

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23. Id.
authors, which claimed that it violates the rights of authors who hold copyrights to the books. In an op-ed piece in the New York Times, Guild president Roy Blount, Jr. laid out the Guild’s reasons for opposing the feature. He complained that an e-book, when used with the text-to-speech feature, essentially rolls into one an e-book and an audiobook. He also argued that publishers never consented to this use as an audiobook when they licensed the works to Amazon. Indeed, the Guild viewed the text-to-speech feature as an encroachment on the lucrative audiobook industry. Audiobooks comprise a billion-dollar market—growing larger every year—whereas e-books have yet to win mainstream enthusiasm. Authors and publishers generally do not package these rights together because audio book rights are more valuable than e-book rights. Indeed, income from audio books accounts for a large share of the total revenue that authors and publishers derive from a book.

Amazon maintained the legality of the text-to-speech feature, arguing that it does not copy, perform, or create a derivative work. Furthermore, according to the company, Amazon did not intend to seize a slice of the audiobook market, but rather to “introduce new customers to the convenience of listening to books and thereby grow the professionally narrated audiobooks business.” Amazon emphasized its current status as a major participant in the recorded audiobook business through its subsidiary, Audible. Moreover, according to Amazon, the Kindle 2 is wholly dissimilar to an

25. Id.
26. Id.
27. Id.
28. Id.
29. Id.
30. Id.
31. Id.
32. Id.
34. Id.
35. Id.
audio book because the “text-to-speech software provides a completely different experience from a professionally recorded audiobook.” Indeed, Amazon predicted that sales of its e-books would fuel sales of its audiobooks. A spokesperson for Amazon pointed out that “when you listen to yourself read out loud, you’re not performing, you’d need an audience for that, and you’re not making a copy.” Amazon decided to avoid a legal battle though, by allowing rightsholders to decide whether to enable the text-to-speech feature for each individual title.

The copyright community responded to the controversy swiftly and nearly unanimously. The vast majority of bloggers and other commentators found the Guild’s position unreasonably petulant, legally unfounded, and unduly obstructive to the progress of technology. Blount’s comments drew withering criticism from the Electronic Frontier Foundation (EFF), a prominent non-profit group that advocates for consumers’ free speech rights in the digital arena. The EFF warned that if the Guild succeeded, “[p]arents everywhere should be on the lookout for legal papers hailing them into court for reading to their kids.” The National Federation of the Blind accused the Guild of limiting access to books not available in audio or Braille formats. In a similar vein, Text to Speech Blog featured an article entitled “Author’s Greed Denies Blind the Right to Read,” and the Reading Rights Coalition started an online petition encouraging the Guild to reverse its position.

Many commentators agreed with Amazon that, despite the Guild’s contentions to the contrary, the text-to-speech feature was perfectly legal: “[l]uckily for parents, teachers, and everyone else who likes to read aloud, the Authors Guild is simply wrong.” At least one blogger has doubted whether the feature creates any work at all, much less a derivative one. While the conflict over the text-to-speech feature has largely dissipated, its legality remains important. Neither

37. Mottl, supra note 3.
38. Press Release, Amazon.com, supra note 33.
40. Press Release, Amazon.com, supra note 33.
41. See, e.g., sources cited supra note 36.
42. Kwun, supra note 36.
43. Id.
44. Doctorow, supra note 36.
45. White, supra note 36.
46. Id.
47. Kwun, supra note 36.
Amazon nor the Guild has backed down from their rhetoric about whether the feature violates the copyrights or license agreements of e-books. Thus, Amazon may yet decide that the potential financial gain outweighs the costs of a legal battle, and renege on the authors’ option to disable the text-to-speech function for their works.

The current peace exists partly because the technology behind the text-to-speech feature remains too primitive to attract many customers. With relatively little money at stake, Amazon would gain little by engaging in a legal battle. However, the likelihood of renewed conflict will increase as the technology improves. With more nuanced, life-like voices, the Kindle 2 could become a legitimate competitor to the audiobook market. Given the profits that Amazon can eventually expect to reap from its text-to-speech feature, an ensuing storm will likely disrupt the current calm.

As with music just a few years ago, books are expanding into the digital world at a rapid pace. The debate over the Kindle 2 coincides with attempts by many companies to make content available to mobile device users. In February 2009, just before the release of the Kindle 2, Google launched a mobile version of Google Book Search, providing 1.5 million public domain books to readers on the go. As part of its settlement with the Guild and the Association of American Publishers, Google will build a $34.5 million book rights registry to help locate rightsholders and ensure that they receive their share of the settlement. Moreover, Amazon recently announced that, for the first time, the company sold more e-books in a quarter than hardcovers. As the e-book industry explodes, the controversy over the text-to-speech feature is also likely to reignite.

49. Susabelle, Why Text-to-Speech is No Threat to Publishers, ACCESS TECHS. HIGHER EDUC. NETWORK (Feb. 12, 2009 11:32 AM), http://athlonpro.blogspot.com (“Being a provider of alternate format, I can tell you that no one wants to have to listen to the electronic voice of a text-to-speech conversion unless their disability requires it. Even the best voices still sound monotone, despite some of the recent advances in voice technology that have occurred.”).


52. Mottl, supra note 3.

53. Id.

II. INTERPRETING THE LICENSE AGREEMENT

The first crucial question to address in this controversy is whether the license agreements between Amazon and various publishers grant Amazon the right to sell e-books with a text-to-speech feature. The publishers licensed their e-book rights to Amazon in return for royalties, payable whenever a Kindle user downloads one of their books. The licensing agreement is crucial because if it grants Amazon the right to distribute the books with a text-to-speech feature, Amazon has not infringed upon the publishers’ copyrights. If, however, the license does not cover the distribution of e-books with the text-to-speech feature, its inclusion without permission could constitute a copyright violation. A license permitting dissemination of a copyrighted work in a particular medium extends to “any uses which may reasonably be said to fall within the medium as described in the license.”56 A number of cases address whether licensees may exploit licensed works through new marketing channels opened by technologies that developed after execution of the licensing contract.57 The Second Circuit has termed such disputes “new use” cases.58 In Random House, Inc. v. Rosetta Books LLC, the United States District Court for the Southern District of New York held that a license to distribute a work does not grant the distributor the right to present the work on a digital platform.59 A license of rights to copyrighted works of fiction “in book form” did not extend to “e-books” on the Internet.60 The court’s ruling turned on its finding that the “new use” at issue—electronic digital signals transmitted over the Internet—is a different medium than printed words on paper.61

Furthermore, courts have long held that the language of a contract governs a contract dispute.62 If the contract is more reasonably read to convey one meaning, the party benefitting from that reading may rely on it; the party seeking limitation of or deviation from that meaning bears the burden of negotiating for language that would express the limitation or deviation.63 A licensee

55. Blount, supra note 6.
58. See Boosey & Hawkes 145 F.3d at 486.
60. Id.
61. Id.
62. Boosey & Hawkes. 145 F.3d at 487.
may use a work in a format unanticipated at the time of the contract if
the language of the grant can reasonably be interpreted to include
that use.\footnote{See id. (holding that a grant of the motion picture rights to a
musical play included the rights to show that movie on television
because the language of the grant was “broad enough
to cover the new use”).}

In the case of the Kindle 2, however, the language of the
licenses presumably granted Amazon the right to distribute e-books
and did not anticipate the text-to-speech feature.\footnote{See E-book
Rights Alert: Amazon’s Kindle 2 Adds “Text-to-Speech” Function, The
The term “e-book”
cannot be reasonably interpreted to include a text-to-speech feature.
The Merriam-Webster Online Dictionary defines an e-book as “a book
composed in or converted to digital format for display on a computer
(last visited Mar. 15, 2011).} The plain meaning of the term does not
include software that reads the text aloud. Since the text-to-speech
feature changes the medium of the e-book from the written to spoken
word, Amazon cannot extend its license to include the right to
distribute the e-books with the text-to-speech feature.

III. POSSIBLE AREAS OF INFRINGEMENT

If the publishers of the e-books available on the Kindle 2 did
not grant Amazon the right to offer them with a text-to-speech
function, the question becomes whether this function violates their
exclusive rights. Section 106 of the 1976 Copyright Act grants certain
exclusive rights to the owner of the copyright,\footnote{17 U.S.C. §106
(2006).} including the rights to
reproduce, distribute, and perform a work, as well as to create
derivative works.\footnote{Id.} Although the Guild claimed that the text-to-
speech feature violated the rights of its members, some copyright
commentators dismissed the possibility that the text-to-speech
function could violate any of the authors’ rights.\footnote{See Rob
Beschizza, Author’s Guild Claims Text-to-Speech Software is Illegal,
BOING BOING GADGETS (Feb. 10, 2009, 2:49PM), http://gadgets.boingboing.net/2009/02/10/authors-guild-
claims.html; Kwun, supra note 36.} Additionally, the EFF, and other commentators have all argued that the file created by
the text-to-speech feature cannot be a copy or a derivative work
because it lacks fixation, and cannot be a public performance because
it lacks a public audience. This Note will address each of these contentions in the sections that follow and conclude that the text-to-speech feature creates an infringing derivative work.

Critiquing these arguments requires an understanding of one aspect of the technology behind the text-to-speech function, which this Note refers to as “automaticity.” The Kindle 2 derives the audio file of an e-book from a series of recorded texts, read by a narrator, which contain every possible sound in the chosen language. The software then slices and organizes the recordings into an acoustic database, by segmenting the speech into diphones, syllables, morphemes, words, phrases, and sentences. To reproduce words from a text, the software performs a sophisticated linguistic analysis that transforms written text into phonetic text. A grammatical and syntactic analysis then allows the program to decide how to pronounce each word to reconstruct the sound. Finally, the software associates the phonetic writing with the tone and required length of the pronunciation by selecting the best units stocked in the acoustic database to generate sound. The automatic nature of this process makes the feature unique—and the copyright analysis much more complex. The automaticity involved in creating the audio file undermines its originality and has implications for each of the legal issues examined in this Part.

A. The Reproduction Right

1. Substantial Similarity

The Kindle 2’s text-to-speech feature does not violate the authors’ reproduction rights because, whether or not it creates a work substantially similar to the original e-book, it does not create a fixed work. Section 106 of the Copyright Act grants the copyright holder the exclusive right to reproduce the copyrighted work in copies or phonorecords. According to the Act, “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,

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70. See Rob Beschizza, Author’s Guild Claims Text-to-Speech Software is Illegal, BOING BOING GADGETS (Feb. 10, 2009, 2:49PM), http://gadgets.boingboing.net/2009/02/10/authors-guild-claims.html; Kwun, supra note 36.
72. Id.
73. Id.
74. Id.
75. Id.
reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” Copyright law does not require an exact replication of the original work to infringe on the author’s reproduction right. Rather, a copy infringes on this right if it bears a “substantial similarity” to the original work, which means that it takes expression quantitatively or qualitatively important to the original work.

Two works can be substantially similar even when created in different media because “[i]n copyright law, the medium is not the message, and a change in medium does not preclude infringement.” Indeed, in *Falk v. T.P. Howell & Co.*, decided more than a century ago, the Southern District of New York rejected the proposition that a mere change in medium could allow the defendant to escape liability for unlawful copying, noting that “[d]ifferences which relate merely to size and material are not important.” In *Rogers v. Koons*, an artist had sculpted a piece based on a copyrighted photograph. The Second Circuit, affirming the district court, rejected the sculptor’s argument that because he had created his work in a different medium than the original photograph, it could not be a copy. The district court noted that:

> [It is] fundamental that copyright in a work protects against unauthorized copying not only in the original medium in which the work was produced, but also in any [other] medium as well . . . . The fact that a work in one medium has been copied from a work in another medium does not render it any less a “copy.”

The key question, according to the Second Circuit, is whether an average lay observer would recognize one work as having been appropriated from another. Under this analysis, a change in medium is not dispositive.

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77. Id. § 101.
78. See Nichols v. Universal Pictures Corp., 45 F.2d 119, 120 (2d Cir. 1930) (“[A]s soon as literal appropriation ceases to be the test, the whole question is necessarily at large . . . . Then the question is whether the part so taken is substantial.”); Arnstein v. Porter, 154 F.2d 464, 473 (2d Cir. 1946) (finding that illicit copying of a musical work is established when “the defendant took from plaintiff’s works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff”).
79. See Nichols, 45 F.2d at 120.
82. 37 F. 202, 202 (S.D.N.Y. 1888).
84. Id.
The original e-book is the digital equivalent of a conventional printed book.\textsuperscript{87} The Kindle 2 transforms the e-book into an audio file, another medium change. As noted above, however, this change in medium does not determine substantial similarity.\textsuperscript{88} In the case of the Kindle 2, the text-to-speech feature, like the sculptor in \textit{Koons}, changes the medium of the e-book without altering its content. An average lay observer would easily recognize that the audio playback had been appropriated from the original e-book. Thus, while expressed in different mediums, the original e-book and the Kindle file created by the text-to-speech feature are substantially similar.

However, as explained in greater detail in Section C of this Part, the Kindle file is best understood as a derivative work and not a copy.\textsuperscript{89} Both copies and derivative works must be substantially similar to the original work to infringe on the author’s copyright.\textsuperscript{90} Derivative works, however, add artistic creativity above and beyond the original work.\textsuperscript{91} As will be discussed in more detail in the section on derivative works, developments in text-to-speech technology now allow a wide variety of human voices to read the text, each bearing a distinct accent and inflection.\textsuperscript{92} Thus, the feature adds creative expression to the printed word, rather than just translating it into a new medium, in much the same way that an audiobook does.

2. Fixation

Lack of fixation is the simpler and more persuasive rationale for why the Kindle file is not a copy. Under the Copyright Act, a “copy” must be “fixed by any method now known or later developed [the fixation requirement], and from which the work can be perceived,

\textsuperscript{87} This Note will refer to this work created by the text-to-speech feature as the “Kindle file.”

\textsuperscript{88} See Pickett v. Prince, 207 F.3d 402, 405 (7th Cir. 2000) (holding that a guitar in the shape of a copyrighted symbol was an infringing work because any differences in appearance were nothing more than functional differences between a two-dimensional symbol and a guitar in the shape of that symbol).

\textsuperscript{89} See \textit{infra} Part III.C.

\textsuperscript{90} See \textit{Castle Rock Entm’t Inc. v. Carol Publ’g Grp., Inc.}, 150 F.3d 132, 137 (2d Cir. 1998) (discussing the substantial similarity standard as applied to both copies and derivative works).

\textsuperscript{91} Mass. Museum of Contemporary Art Found., Inc. v. Buchel, 593 F. 3d 38, 64—65 (1st Cir. 2010) (“A derivative work within the meaning of the Copyright Act ‘consists of a contribution of original material to a pre-existing work so as to recast, transform or adapt the pre-existing work,’ and the variation from the original must be ‘sufficient to render the derivative work distinguishable from its prior work in any meaningful manner.’” (quoting 3 \textsc{Melville B. Nimmer & David Nimmer}, \textsc{Nimmer on Copyright} § 3.03[A] (1989))).

\textsuperscript{92} \textit{Fact Sheet, Audio Publisher’s Association}, http://www.audiopub.org/LinkedFiles/APA_Fact_Sheet.pdf (last visited Sept. 20, 2010).
reproduced, or otherwise communicated, either directly or with the aid of a machine or device [the duration requirement].” To convert text into speech, the Kindle 2 undoubtedly copies e-book text and stores some portion of the resulting audio file in its random-access memory (RAM). Even though its duration may be fleeting, this copy is unauthorized. Whether storing portions of a work in RAM meets the fixation requirement remains an open question.

The EFF dismisses contentions that the text-to-speech feature violates the reproduction right because it believes that the feature creates a work that lacks fixation. The EFF relies on Cartoon Network LP v. CSC Holdings, Inc., in which the Second Circuit held that a copy stored in RAM must remain there for “more than a transitory duration,” and therefore data stored in a RAM buffer for no more than a second or two fails to meet the fixation requirement. The Second Circuit’s holding in Cartoon Network, however, departed from prior cases that defined a work as “fixed” so long as its embodiment endures long enough to be perceived, reproduced, or communicated. The court’s conclusion is also at odds with the position of the Copyright Office itself, which has stated that if a work is copied in a medium for any amount of time, then it meets both the embodiment and duration requirements. Nor does the fixation requirement dictate the medium in which a work must be fixed, as long as that work can be perceived.

The specifics of the Kindle 2’s technology should determine whether a copyrightable derivative work arises. If the text-to-speech function creates an entire file that the device saves and plays back, it looks more like a fixed, copyrightable work. On the other hand, if the device creates the audio data, and stores it in a continually overwritten buffer, it looks less like a fixed, copyrightable work.

94. Kwun, supra note 36. RAM is a memory device used by computers in which information can be accessed in any order. Kristen J. Mathews, Note, Misunderstanding RAM: Digital Embodiments and Copyright, 1997 B.C. INT’L PROP. & TECH. F. 41501, at *9—10 (1997). Some types of RAM store information in such a way that the information is lost when the machine is turned off. Id.
95. See Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 130 (2d Cir. 2008) (holding that RAM stored for only a “transitory duration” does not constitute a fixed work). But see MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511, 518 (9th Cir. 1993) (holding that RAM copies are sufficiently fixed for the purposes of copyright law).
96. Kwun, supra note 36.
98. See MAI Systems, 991 F.2d at 517—18.
100. Gallia, supra note 15.
Both the technology of the text-to-speech feature and the economic rationale behind the reproduction right imply that the Kindle file is not a fixed copy. Comparing the text-to-speech feature to SONAR technology may clarify the transitive and automatic nature of the Kindle file. A SONAR machine translates sound waves into an image, but no one would argue that it creates a fixed copy of the original physical object, especially if the image is transient. The SONAR machine merely transforms a signal from one medium to another. Similarly, the text-to-speech feature transforms text from the original e-book into audio.101 As discussed above, the process occurs automatically and the feature acts passively: Amazon has not created, in advance, an audio recording of a narrator reading the selected e-book aloud.102 Rather, the Kindle 2 passes the written words of the e-book through a database of sounds and creates a new audio file each time the user activates the feature.103 Thus, the text-to-speech technology changes the underlying work, but does not create a fixed copy.

The purpose behind the fixation requirement further clarifies the fixation analysis of the Kindle file: The copying must harm the copyright holder to infringe the exclusive right to make reproductions.104 Only fixed copies can be transported and reproduced. Thus, only fixed copies can be considered infringing replacements for the original work. The economic rationale behind copyright protection is that a free-riding copyist can purchase one original work and make and distribute copies relatively cheaply, thus destroying the market for the original work and the incentive to create such works.105

Even if the text-to-speech feature creates a temporary audio file in RAM, this copy would not threaten the benefits that copyright holders derive from their works in the way that copies traditionally do. An unauthorized copy harms the copyright holder because it can be reproduced and sold, acting as a market replacement for the original work. A RAM embodiment, however, cannot be transported and has no market value. As such, it cannot act as a market

104. Matthews, supra note 94.
105. Id.
replacement for the original e-book. Even if the text-to-speech feature makes a copy of the e-book each time a user activates it, only the consumer who purchased the e-book for download can experience it. Thus, the economic dangers inherent in a fixed copy are not present in this case.

B. The Performance Right

Neither does the text-to-speech feature of the Kindle 2 violate the author’s performance right. The Copyright Act affords the copyright owner of a musical work the exclusive right to perform the work publicly.\textsuperscript{106} Thus, whether the text-to-speech feature violates the public performance right turns on whether it produces a “performance” and whether that performance is “public.”\textsuperscript{107} A recent decision in the Southern District of New York, \textit{U.S. v. American Society of Composers}, concluded that digitally downloading musical works does not constitute public performance.\textsuperscript{108}

The Copyright Act defines “perform” to mean “[r]ecite, render, [or] play . . . either directly or by means of any device or process.”\textsuperscript{109} The court concluded that this definition requires “contemporaneous perceptibility,” a quality digital downloads lack:

The downloads at issue in this appeal are not musical performances that are contemporaneously perceived by the listener. They are simply transfers of electronic files containing digital copies from an on-line server to a local hard drive. The downloaded songs are not performed in any perceptible manner during the transfers; the user must take some further action to play the songs after they are downloaded.\textsuperscript{110}

While the decision in \textit{American Society of Composers} involved downloads of music files, rather than audiobooks, the court’s reasoning applies to the Kindle file. A consumer cannot use the text-to-speech feature while downloading an e-book. Furthermore, as with the music files in \textit{American Society of Composers}, once the e-book is downloaded, the consumer must take further steps to listen to it, by activating the text-to-speech feature and pressing play. Thus, under the reasoning of \textit{American Society of Composers}, downloading an e-book, without more, is not a performance.

\textsuperscript{106} 17 U.S.C. § 106 (2006) (“[T]he owner of copyright under this title has the exclusive rights to do and to authorize any of the following: . . . (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly . . . ”).

\textsuperscript{107} Id.


\textsuperscript{109} 17 U.S.C. § 101.

\textsuperscript{110} Am. Soc’y of Composers, 2010 WL 3749292, at *4.
The real issue, however, is not the downloading of the e-book, but whether using the text-to-speech feature to listen to that e-book constitutes a performance. Even if listening to an e-book with the text-to-speech feature is a performance, the performance is not "public," which 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 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.111

The EFF likened the text-to-speech feature to reading aloud to one's children.112 Obviously, the private performance of a book within the "circle of the family" is not a public performance under the Copyright Act.

Amazon could argue, on two separate grounds, that the performance affected by the text-to-speech function does not meet the criteria of the first prong of the public performance test: at most, there are numerous private performances, which copyright law permits; moreover, the user—not Amazon—does the performing. This Note will address arguments concerning direct and secondary liability in Part V, but no matter the potential defendant, Kindle 2 performances are not public and thus do not infringe upon the public performance right. Amazon designed the Kindle 2 for personal use, not mass transmission or public performance.113 The vast majority of users presumably activate the text-to-speech feature to listen to e-books with headphones or in the privacy of their own homes.

The Guild could argue, however, that the text-to-speech feature implicates the second clause of the public performance definition, the transmission clause, since the device technically "transmits" the Kindle file to the public. Precedent, however, suggests that this argument would fail. In Cartoon Network, the court concluded that because the RS-DVR system,114 as designed, could only transmit—to a

112. Kwun, supra note 36.
113. Amazon Kindle: License Agreement and Terms of Use, AMAZON.COM, http://www.amazon.com/gp/help/customer/display.html?nodeId=200144530 (last updated Feb. 9, 2009) ("Amazon grants you the non-exclusive right to keep a permanent copy of the applicable Digital Content and to view, use, and display such Digital Content an unlimited number of times, solely on the Device or as authorized by Amazon as part of the Service and solely for your personal, non-commercial use.") (emphasis added).
114. A digital video recorder (DVR) is a device that records video in a digital format to a disk drive. Consumer electronics manufacturers offer televisions with DVR hardware and software that allows consumers to record and store television programs for viewing at a later time. A Remote Storage Digital Video Recorder (RS-DVR) is a network-based digital video
single subscriber—a copy made by that subscriber, the device did not transmit any copy to the “public.” The court concluded that because only one subscriber could receive the transmission, the performance was not public and did not violate the transmission clause.

American Society of Composers specifically rejected the contention that digital downloads are transmissions to the public. Quoting Cartoon Network, the court held that “when Congress speaks of transmitting a performance to the public, it refers to the performance created by the act of transmission,’ not simply to transmitting a recording of a performance.” Thus, because the downloading of digital music (unlike streaming) does not immediately produce sound, the process of downloading is not itself a public performance.

A similar analysis of the Kindle 2 leads to the same conclusion. Like the DVR subscriber in Cartoon Network, the Kindle 2 user can download only individual copies of works. These downloads transmit copies to individual users, not the “public”. Moreover, while downloading e-books from the Amazon website clearly constitutes transmissions, they are authorized transmissions, which users pay to receive. Thus, the Kindle 2, like the DVR, can only download individual copies of authorized works.

Furthermore, Amazon is not liable for direct infringement of the performance right because it did not engage in volitional conduct causally related to the purported infringement. The court in In re Cellicom Partnership followed this reasoning and concluded that ringtones downloaded by Verizon customers did not violate the music publishers’ public performance right. The decision turned on the fact that Verizon did not control—or even monitor—when and where the ringtones played and earned no money from the ringtones beyond the fee paid for the initial download. The transmissions did not

recorder (DVR) stored at the provider’s central office rather than at the consumer’s private home. Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 123—26 (2d Cir. 2008).

115. Id. at 135.
116. Id.
118. Id. (quoting Cartoon Network, 536 F.3d at 136).
119. See Cartoon Network, 536 F.3d at 131 (concluding that to be held liable for direct infringement of the performance right a defendant must have engaged in conduct that was volitional or causally related to that purported infringement).
121. Id. at 367.
cause a public performance, and thus Verizon could not be responsible for direct infringement of the public performance right.122

C. The Derivative Work Right

The text-to-speech feature violates the derivative work right of authors by creating a new work substantially similar to the original e-book. The Kindle file takes creative, copyright-protected expression from the e-book in the same way an audiobook takes from the original book. Authors have the exclusive right to create works, known as derivative works, that take from their own original works.123 The Copyright Act defines a derivative work as one “[b]ased upon one or more pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.”124 “A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a ‘derivative work.’”125

Comparing the Kindle file to an audiobook illuminates the salient issues in determining whether the text-to-speech feature creates a derivative work. A pre-recorded audiobook is clearly a derivative work. It is a work based on the underlying book that has been transformed from the written word into an audio format. Moreover, an audiobook fits within the statutory definition of sound recordings which are “works that result from fixation of a series of musical, spoken, or other sounds.”126 The Copyright Act specifically lists sound recordings as an example of derivative works.127 Important differences exist, however, between audiobooks and the Kindle file that the text-to-speech feature creates. First, an audiobook is fixed in permanent form, usually on a CD or cassette tape. As discussed above, the work that the text-to-speech feature creates is not fixed in any meaningful way. Second, an audiobook clearly “transforms” the underlying book by adding creative expression. A company produces an audiobook by having someone, usually the author or a voice actor, come into a studio and record himself reading

122. Id. at 377.  
124. Id. § 101.  
125. Id.  
126. Id.  
127. Id.
the book aloud.\textsuperscript{128} This process adds creative expression to the underlying book. The reader adds emotion and inflection to the words on the page; he repeats line deliveries to perfect these qualities, and the producers edit the work to ensure that these nuances are captured in the final product.\textsuperscript{129} By contrast, the automaticity of the text-to-speech feature makes it different from a recorded audiobook.\textsuperscript{130} The Kindle 2 does not contain recorded audiobooks; rather, it simply includes technology that reads aloud the text which Amazon has properly licensed from the publishers.\textsuperscript{131} One could argue that the text-to-speech feature simply reads the e-books, without the expressive nuance provided by a human being.

As the preceding discussion illustrates, determining whether the text-to-speech feature creates a derivative work from the original e-book raises two distinct questions. The first is whether a work must be fixed in order to violate the derivative work right. The second is whether the feature “adapts, recasts, or transforms” the original e-book.\textsuperscript{132}

1. Fixation

Authorities conflict on whether a derivative work must be fixed to infringe. Some argue that the text of the Copyright Act and its legislative history demonstrate that Congress intended that substantially similar works should not escape liability for lack of fixation.\textsuperscript{133} A number of courts, however, have resisted this expansive view of liability for derivative works by imposing their own quasi-fixation requirement.\textsuperscript{134} In \textit{Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.}, the defendant manufactured an add-on product called Game Genie, which allowed users to modify video games by entering certain codes.\textsuperscript{135} Nintendo, which sold a video game system and video games that Game Genie could modify, sued Galoob for copyright

\begin{itemize}
  \item \textsuperscript{128} \textit{Fact Sheet, AUDIO PUBLISHER’S ASSOCIATION}, http://www.audiopub.org/LinkedFiles/APA_Fact_Sheet.pdf (last updated Oct. 18, 2005).
  \item \textsuperscript{129} \textit{Id}.
  \item \textsuperscript{131} \textit{Id}.
  \item \textsuperscript{133} Tyler T. Ochoa, \textit{Copyright, Derivative Works, and Fixation: Is Galoob a Mirage or Does the Form(Gen) of the Alleged Derivative Work Matter?} 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 991, 1000—01 (2004).
  \item \textsuperscript{134} \textit{Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc. (Galoob II)}, 964 F.2d 965, 967—69 (9th Cir. 1992).
  \item \textsuperscript{135} \textit{Lewis Galoob Toys, Inc. v. Nintendo of Am., Inc. (Galoob I)}, 780 F. Supp. 1283, 1286 (N.D. Cal. 1991), aff’d, 964 F.2d 965 (9th Cir. 1992).
\end{itemize}
infringement, arguing that the device made derivative works. The Ninth Circuit rejected this contention, holding that in order to infringe, a derivative work must exist in "some concrete or permanent form." Applying this test, the *Galoob* court concluded: "The Game Genie merely enhances the audiovisual displays (or underlying data bytes) that originate in Nintendo game cartridges. The altered displays do not incorporate a portion of the copyrighted work in some concrete or permanent form." From an economic perspective, however, a fixation requirement for derivative works would not offer authors sufficient protection. As discussed above, the logic behind requiring fixation for a finding of infringement is that only a relatively permanent or concrete copy can be transported, reproduced, or shared. Thus, only a fixed copy can act as an economic replacement for the original work. Derivative works, however, can cause economic harm without being fixed so long as they add unlicensed value, or act as a market replacements for other derivative works. In this case, the text-to-speech feature could potentially harm the audiobook market, which the copyright holders enjoy the exclusive right to exploit. The economic significance of the Kindle file is not that users can reproduce, transport, or share it; rather the file acts as a market replacement for audiobooks. The Kindle file performs this replacement role regardless of whether it is fixed.

The District Court in *Galoob* considered potential market harm in its analysis of the Game Genie, noting that "[n]one of those practices permanently modifies or alters the original work, none produces a separate work which can then be transferred in any way, none replaces the original work, and none deprives the copyright holder of current or expected revenue." All of these statements about the Game Genie are true of the Kindle file, except the last. The

136. *Id.*
137. *Galoob II*, 964 F.2d at 969 (internal quotation omitted).
138. *Id.* at 968.
139. *See discussion supra* Part III.A.
140. *See Castle Rock Entm't*, Inc. v. Carol Publ'g Grp., Inc., 150 F.3d 132, 145—46 (2d Cir. 1998) (analyzing the fourth factor of fair use of a copyrighted work by noting "our concern is not whether the secondary use suppresses or even destroys the market for the original work or its potential derivatives, but whether the secondary use usurps or substitutes for the market of the original work").
Game Genie made modifications to Nintendo games, but it did not replace any new games, or additions to the original games, that Nintendo might make. Each modification that the user creates with the Game Genie is unique, so that Nintendo has no economic incentive to produce and market games that are altered in the same way.

In contrast, in Williams Electronics, Inc. v. Artic Int’l, Inc., the Third Circuit found an arcade game to be a fixed work, despite the fact that “there is no set or fixed performance and the player becomes a co-author of what appears on the screen.” Thus, another video game that copied its images and sounds infringed the copyright of the original. The variations of the game created during play were not sufficiently distinct because “there is always a repetitive sequence of a substantial portion of the sights and sounds of the game, and many aspects of the display remain constant from game to game regardless of how the player operates the controls.” In economic terms, the infringing game did not allow users to make distinctive modifications like the Game Genie did, it simply served as a market replacement for the original game. Similarly, the Kindle file can replace an audiobook, a derivative work that the authors and publishers have the exclusive right to produce, thus depriving rightsholders of expected revenue.

At least one commentator has argued that Congress omitted a fixation requirement for derivative works because it intended to prohibit only public performances of unfixed derivative works. Economics underlies this conception of derivative works. A publicly performed derivative work, though not fixed, is considered infringing because it encroaches on the derivative works market of the copyright holder. For example, an author who writes a book has the exclusive rights to create a derivative work, such as a play, based on that book. If a theatre group publicly performs its own version of the play, the commercial value of the authorized rendition will be reduced—whether or not the unauthorized version has been written, recorded, or otherwise fixed. Thus, this definition of infringing derivative works seems to track the economic underpinnings of copyright law. Limiting infringement of unfixed works to public performances, however, does not account for derivative works, neither fixed nor publicly performed, that impact markets for derivative works. The Kindle file is just such

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143. Id.
144. Williams Elecs., Inc. v. Artic Int’l, Inc., 685 F.2d 870, 874 (2d Cir. 1982).
145. Id.
146. Id.
147. See infra note 154 and accompanying text.
148. Ochoa, supra note 133, at 1020.
a work. The Kindle file encroaches on a derivative works market belonging to the copyright holders, regardless of fixation.

2. Originality

Having argued that the Kindle file need not be fixed to infringe on the derivative work right, the next question is whether the Kindle file is a derivative work. If the Kindle file is merely an audio reproduction of the original e-book, it is a copy and must be fixed in order to infringe. If, however, the Kindle file is substantially similar to the original e-book, but also adds creative expression, it is a derivative work, which need not be fixed to infringe on the original. Because this Note concludes that the Kindle file is not fixed, this inquiry is essential to determining whether the Kindle file infringes on the rights of authors and publishers.

The EFF levels two arguments on this front. First, it contends that the text-to-speech feature cannot create a derivative work because it changes only the medium and does not alter the original expression of the e-book. In other words, the Kindle file is merely an audio version of the e-book and thus does not possess sufficient originality to "represent an original work of authorship." In a related argument, the EFF contends that the text-to-speech feature does not create a derivative work because it does not create any work at all; Kindle is simply a device that consumers use to read the works Amazon has licensed. A hypothetical will help clarify this argument. Distributing special 3-D glasses with a holographic book that one has license to distribute would not violate any copyright. The glasses do not modify the work in any way. The distributor does not place the book on a different platform or in a new medium. The glasses are simply a means to access the work. At first glance, the comparison between the text-to-speech function and 3-D glasses seems meaningful. The text-to-speech feature appears to be simply another means for the consumer to experience e-books, which Amazon has legally distributed.

Upon closer inspection, however, these arguments show serious weaknesses. First, the EFF focuses on whether the audio produced by the text-to-speech feature would itself qualify for copyright protection. Commentators and courts have noted, however, that the

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149. See supra Part III.A.2.
150. Kwun, supra note 36.
151. Id.
152. Id.
153. Id.
The act of preparing a derivative work may infringe upon a copyright holder’s exclusive rights under the Copyright Act regardless of whether the Act entitles the derivative work itself to protection.\textsuperscript{154} The standard of originality needed to copyright the derivative works differs from that needed to avoid liability for infringing the underlying work. For a derivative work to be independently copyrightable, it must show “substantial variation” from the original work.\textsuperscript{155} For a work to infringe on the derivative work right it must be substantially similar to the original work. A single derivative work could potentially display sufficient differences from the original to be copyrightable and yet similar enough to the original to be infringing.\textsuperscript{156} This distinction makes sense from an economic perspective: Derivative works need no originality to cause economic harm.

On the contrary, the text-to-speech feature contributes creative expression to the original e-book. The Kindle 2 can read e-books aloud in both male and female voices,\textsuperscript{157} and future developments in text-to-speech technology will probably offer an experience even closer to a real person reading aloud. For example, text-to-speech software currently under development creates speech complete with contextually appropriate emotion and emphasis.\textsuperscript{158} As text-to-speech software becomes more advanced, the contention that such technology adds nothing original becomes less tenable.

3. Economic Incentives

Returning to the economic rationale for copyright law, the Kindle file should be deemed an infringing derivative work because it causes economic harm in the same ways that other derivative works do. First, as explained below, the feature exploits the work in a “public goods” mode,\textsuperscript{159} stripping the author of the opportunity to reap

\textsuperscript{154} See Galoob II, 964 F.2d 965, 968 (9th Cir. 1992) (“T]he Act does not require that the derivative work be protectable for its preparation to infringe.” (quoting Paul Goldstein, Derivative Rights and Derivative Works in Copyright, 30 J. COPYRIGHT SOC’Y U.S. 209, 231 n. 75 (1983))).

\textsuperscript{155} See generally L. Batlin & Son, Inc. v. Snyder, 536 F.2d 486, 491 (2d Cir. 1976) (following the school of cases requiring “at least some substantial variation, not merely a trivial variation such as might occur in the translation to a different medium”).

\textsuperscript{156} See Galoob II, 964 F.2d at 968 (citing Lone Ranger Television v. Program Radio Corp., 740 F.2d 718, 722 (9th Cir. 1984)).


\textsuperscript{159} Amy B. Cohen, When Does a Work Infringe the Derivative Works Right of a Copyright Owner?, 17 CARDozo Arts & Ent. L.J. 623, 650 (1999).
the full value of his book. Second, with the feature, the Kindle 2 operates as a market replacement for audiobooks, which the rightsholders enjoy an exclusive right and expectation to exploit. The text-to-speech feature essentially allows Amazon to take value belonging to the author or publisher. These kinds of harms are precisely what Congress intended to prevent by enacting the derivative works section of the Copyright Act.

The Kindle file is a derivative work because it exploits the underlying e-book in a “public goods” mode. “A public goods use is one that recasts, transforms, or adapts a work into a different format or medium.” For example, a book turned into a movie or an audiobook has certainly been “recast, transformed, or adapted.” With public goods uses, the derivative user need not incorporate an actual copy of the underlying work into each copy of the derivative work produced. Rather, public goods uses allow the derivative user to purchase only one copy of the underlying work and then “replicate the attraction of the underlying work from a single copy . . . to satisfy many derivative consumers with only one copy of the underlying work.” Public goods uses certainly fit within the statutory definition of a derivative work.

In contrast, where a new work “consumes” an actual copy of the underlying work it does not infringe the original work. For example, in Lee v. A.R.T. Co., a vendor who bought cards from an artist, mounted them on ceramic tiles, and resold them as home decorations engaged in a consumptive use. Judge Easterbrook found that the vendor was merely reselling the cards, as he had a right to do under the “first sale doctrine,” rather than transforming

160. See supra note 154 and accompanying text.
161. See supra note 154 and accompanying text.
162. Cohen, supra note 159, at 628.
163. Id. at 650—51.
164. Id. at 651.
165. Id. at 650.
167. Id. at 651.
168. Id. at 652.
170. The First Sale Doctrine states that “the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.” 17 U.S.C. § 109(a) (2006); see also Bobbs-Merrill Co. v. Strauss, 210 U.S. 339, 349 (1908) (“It is not denied that one who has sold a copyrighted article, without restriction, has parted with all right to control the sale of it. The purchaser of a book, once sold by authority of the owner of the copyright, may sell it again, although he could not publish a new edition of it.”).
the cards into derivative works.\textsuperscript{171} Mounting a card on the tile did not transform it; rather, the entire card was present and unaltered in the new work.\textsuperscript{172} Policy reasons support treating these consumptive derivative uses as non-infringing. “Uses that require the derivative user to purchase a number of copies of the underlying work reasonably proportionate to the number of derivative consumers to be satisfied . . . should not be infringing . . . because such uses do not affect copyright owners significantly . . . in economic terms.”\textsuperscript{173} The vendor of the tiles, for example, must purchase a new card for every tile he creates. Because the vendor has not changed the creative expression of the cards, he is essentially just reselling the cards, which he has the right to do. But, if the vendor does alter the expression of the cards by adding creative elements, he is not reselling the cards, but rather selling a new work. He will have created and distributed an infringing derivative work that only the copyright holder in the original cards has the right to produce.

In determining whether the creator of the new altered work should have to compensate the creator of the underlying work, the important question is whether the creator had an opportunity to “[c]apture the value of her art’s contribution” to that derivative work.\textsuperscript{174} A consumptive use occurs when an artist sells or licenses his work to a middle man who creates a new work by merely repackaging and reselling the underlying work without altering its creative expression.\textsuperscript{175} In such a situation, the artist has already received full compensation for his contribution to the new work. Presumably, the artist set the price for his work with the knowledge that it could be resold to consumers:

\begin{quote}
[As long as that derivative use is a customary use or reasonably expected use of such works, the copyright owner has had, at least in theory, an opportunity to calculate the potential value of his or her art’s contribution to such derivative uses and could have priced that work accordingly to capture that value.\textsuperscript{176}
\end{quote}

In contrast, if the middle man alters the creative expression of the underlying work to create a new work, he has engaged in a public goods use of the work. The creator did not have an opportunity to charge a price reflecting the full value of the work because creative

\textsuperscript{171} See \textit{Lee}, 125 F.3d at 580. \textit{But see} Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341 (9th Cir. 1988) (finding, in a situation almost identical to that in \textit{Lee}, that cards mounted on ceramic tiles were infringing derivative works).

\textsuperscript{172} \textit{Lee}, 125 F.3d at 582.

\textsuperscript{173} \textit{Cohen}, supra note 159, at 652.

\textsuperscript{174} \textit{Id.} at 654.

\textsuperscript{175} \textit{Id.}

\textsuperscript{176} \textit{Id.} at 658; \textit{see also}, Bobbs-Merrill Co. v. Strauss, 210 U.S. 339, 351 (1908).
expression has been added.\textsuperscript{177} If no transformation occurs, and the new work consumes the original work, the copyright owner knew exactly what he was selling and should have priced it accordingly. But, if the new work transforms the underlying work, the rightsowner has unwittingly given away the value of the difference between the original work and the new altered work.

The text-to-speech feature appears to be a consumptive use of the original e-book. While Amazon has not purchased multiple “copies” of the original e-book, it has paid a licensing fee proportionate to the number of downloads it expected to sell. Thus, as with the tile in \textit{Lee v. A.R.T. Co.}, Amazon has essentially purchased one original e-book for each Kindle file it “sells.” As a result, the e-books’ rightsholders appear to have captured the full value of their work. However, if Amazon has added creative expression to the original e-book, then the company has entered into a derivative market which only the rightsholders may exploit. Authors and publishers lose an opportunity to create and profit from audio versions of their e-books—whether Amazon has purchased an original e-book for each one it plans to sell, or has created multiple audio versions from just one e-book.

At first glance, the Kindle file appears to entirely consume the original e-book, since the text-to-speech feature does not appear to change the expressive elements of the e-book. One might compare the audio produced by the text-to-speech function to the home decorations produced by mounting an artist’s cards onto tiles. In \textit{Lee}, the court determined that mounting artwork on a tile did not amount to a derivative work because it did not alter the creative expression of the original.\textsuperscript{178} One could argue that, like mounting art to a tile, the text-to-speech feature is merely a means to display and access the expressive elements of the work, which remain unaltered.

Upon closer inspection, however, the Kindle file is a public goods use of the underlying e-book. The text-to-speech feature, unlike tile-mounted art, adds expressive elements not present in the original work. As a result, from an economic perspective, the text-to-speech feature is closer to a public goods use. By adding creative expression to the e-book, Amazon strips the copyright holders of an opportunity to calculate the potential value of Amazon’s contribution to the Kindle

\textsuperscript{177} Cohen, \textit{supra} note 159, at 654.

\textsuperscript{178} \textit{Lee v. A.R.T. Co.}, 125 F.3d 580, 582 (7th Cir. 1997) (“We asked at oral argument what would happen if a purchaser jotted a note on one of the note cards, or used it as a coaster for a drink, or cut it in half, or if a collector applied his seal (as is common in Japan); Lee’s counsel replied that such changes prepare derivative works, but that as a practical matter artists would not file suit. A definition of derivative work that makes criminals out of art collectors and tourists is jarring despite Lee’s gracious offer not to commence civil litigation.”).
and to negotiate e-book licenses capturing that value. Putting a frame on a painting does not add value to the painting itself. Downloading an e-book into a Kindle 2 with the text-to-speech feature, however, adds value to the e-book by essentially converting it into an audiobook. Additionally, the Kindle 2 does not just create an audiobook that will compete with any authorized audiobooks; with the text-to-speech feature, the e-book becomes both a print and an audiobook. Including both media in one device greatly increases the value of the Kindle 2. The dual capabilities of the Kindle 2, audio and text, make it more attractive to consumers and make it unlikely that traditional audiobooks can successfully compete. Moreover, on average, audiobooks are sold to consumers at much higher prices than e-books, and, correspondingly, the amounts paid to publishers and authors for audiobook rights are substantially greater than the compensation received for the e-book rights.\(^\text{179}\) The audiobook market is not merely a hypothetical market that the authors and publishers in this case may hope to exploit one day. Rather, this lucrative market represents a large portion of the total revenue that comes from creating and publishing books.\(^\text{180}\) At the time they entered into the Kindle licensing agreements with Amazon, the publishers and authors did not know that the Kindle 2 would be able to create audio versions of the e-books and thus encroach on the audiobook market.\(^\text{181}\) Had they known, they could have raised the price for the licenses accordingly, or refused to license the e-books altogether for fear of reducing their revenue from audiobooks. By introducing a text-to-speech feature on the Kindle 2, without providing additional compensation to copyright holders, Amazon has secured for itself expensive audiobook rights at inexpensive e-book prices. Consequently, from an economic perspective, the Kindle files are properly characterized as derivative works, which therefore infringe the derivative works rights of the authors and publishers.

Amazon itself recognizes the economic harm that its feature could bring upon the audiobook market. Indeed, Amazon has offered a revealing explanation for why it reversed course in the Kindle controversy: “[W]e ourselves are a major participant in the


\(^{181}\) See Blount, supra note 6 (argument relying on ignorance of authors and publishers about TTS).
professionally narrated audiobooks business.”  One commentator has argued, given the significant difference in quality between e-books read aloud by the Kindle 2 and professionally produced audiobooks, that the fear that audiobook sales may suffer in the near term as a result of the text-to-speech functionality is unfounded. Yet, Amazon is surely aware of the rapidly developing state of text-to-speech technology. As a major player in the audiobook business, Amazon presumably wants to prevent its growing e-book business from cannibalizing its audiobook market.

This analysis shows that the Kindle file—as a derivative work—infringes the copyright of the original e-book. True, as demonstrated above, the text-to-speech feature changes the medium and alters the expression of the e-book. Nevertheless, the feature erodes the incentives for authors to create original works by reducing the revenue they earn from derivative ones. As Amazon encroaches on a lucrative derivative works market—the audiobooks business—the company receives greater value from the text-to-speech feature than it bargained for in licensing the original works.

IV. DIRECT VERSUS SECONDARY LIABILITY

If the text-to-speech feature creates a work that infringes on the copyrights of authors and publishers, then who is responsible for this infringement? In principle, Amazon could be directly held liable, secondarily liable, or not liable. Amazon has created a device that allows its users to create an unauthorized derivative work. Creating that work, however, is not the sole, or even the primary function of the Kindle 2. While Amazon produced and distributed the Kindle 2 with the text-to-speech function, it requires individual users to activate the feature and directly create the infringing work.

A. Direct Liability

Kindle 2 users who activate the text-to-speech feature, not Amazon, are the direct infringers here. Direct infringement requires volition by the infringer. Secondary liability, in contrast, allows

182. Press Release, Amazon.com, supra note 33.
184. Religious Tech. Ctr. v. Netcom On-Line Commc’n Servs., Inc., 907 F. Supp. 1361, 1370 (N.D. Cal. 1995) (“Although copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant’s system is merely used to create a copy by a third party.”).
“the imposition of liability on certain parties who have not engaged in the infringing activity.” Amazon itself does not create the infringing work, or engage in any other § 106 activity; rather, Amazon distributes a device that allows others to do so. Moreover, the Kindle 2 does not automatically produce a derivative work once the user turns on the device; rather, the user must select a downloaded e-book and activate the text-to-speech feature to read it aloud. Thus, the user, not Amazon, engages in the volitional conduct that creates the infringing derivative work.

**B. Secondary Liability**

Courts have long held that distributors of devices that facilitate copyright infringement should not escape liability simply because they do not “push the button.” These manufacturers can be held secondarily liable in one of two ways: (1) by intentionally inducing or encouraging direct infringement (contributory infringement); and (2) by profiting from direct infringement while declining to exercise a right to stop or limit it (vicarious infringement).

Vicarious liability imposes legal responsibility on a third party that profits from the infringement and has the right and ability to supervise the direct infringer. This theory of liability evolved from the common law doctrine of respondeat superior, (“let the master answer”), which generally holds a principal liable for the acts of an agent. Vicarious liability attributes the infringing act to the third party by virtue of its relationship with the direct infringer, not the direct infringement.

In contrast, contributory liability developed from the tort theory of enterprise liability. This theory of liability holds the third party liable for infringement by virtue of its relationship with the actual harm, because the third party either enabled the harm or benefitted from it. Contributory liability requires both (1) knowledge of the direct infringement and (2) material contribution to

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186. Id. at 417.
187. See Gershwin Publ’g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971).
189. See, e.g., Id., 316 F.2d at 308; Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co., 36 F.2d 354, 355 (7th Cir. 1929).
190. BLACK’S LAW DICTIONARY 1338 (8th ed. 2004).
191. Perfect 10, Inc. v. Vista Int’l Serv. Ass’n., 494 F.3d 788, 794—95 (9th Cir. 2007).
192. Fonovisa, Inc. v. Cherry Auction, Inc. 76 F.3d 259, 264 (9th Cir. 1996).
the direct infringer. The district court in *Sony* warned that “the lines between direct infringement, contributory infringement and vicarious liability are not clearly drawn.” Indeed, the distinction between these theories of secondary liability is subtle. Vicarious liability depends on the relationship between the third party and the infringer, while contributory liability turns on the connection between the third party and the infringement. In fact, Amazon is liable contributorily, but not vicariously, for the direct infringement of consumers using the text-to-speech feature.

Amazon is not vicariously liable for the direct infringement because it cannot control the infringing actions of Kindle 2 users. Amazon merely produces and distributes the Kindle 2 with a text-to-speech feature. The only contacts between Amazon and individual users occur during the sale of the device and the downloading of e-books. The *Sony* Court specifically rejected vicarious liability in this kind of relationship.

In *Sony*, the Court held that VCR manufacturers were not liable for the personal video libraries the device enabled. The Court emphasized that consumers could use VCRs for both infringing and non-infringing purposes, and that Sony had no control over such use. As in *Sony*, Amazon has no control over consumers who engage in infringing activity. The user alone activates the text-to-speech feature and creates the infringing derivative work.

Amazon is, however, contributorily liable because it distributes a product, the text-to-speech feature, for the sole purpose of creating infringing derivative works. Both prongs of the test for contributory infringement—knowledge and material contribution—follow from the lack of lawful uses for the text-to-speech feature. The *Sony* Court concluded that distributing a device does not amount to contributory infringement if consumers use it for legitimate, unobjectionable purposes. For the manufacturer to avoid liability for contributory infringement, the device must be “capable of substantial noninfringing uses.” Conversely, courts will hold manufacturers contributorily liable where a device can only be used for an infringing purpose and no public interest exists to prevent a court from presuming or imputing an intent to infringe.

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193. *Id.*
196. *Id.* at 456.
197. *Id.* at 438.
198. *Id.* at 442.
What it means for a device to be “capable of substantial noninfringing uses” remains an open question, one that divided the Supreme Court in *MGM Studios, Inc. v. Grokster, Ltd.* In *Grokster*, the defendants operated a peer-to-peer file sharing network, largely used illegally to download music, videos, and other protected works. Based on testimony that no more than 10% of the music shared on the network belonged to the public domain, the defendants argued that, like the VCR in *Sony*, the file sharing service had actual or potential, non-infringing uses. The Court did not directly address this argument, and instead found that the defendants had induced consumers to infringe on copyrights, thus rendering them secondarily liable.

Under the “inducement theory” of secondary liability, “one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties.” In separate, concurring opinions, Justices Ginsberg and Breyer disagreed on whether or not the actual and potential noninfringing uses for the network were “substantial.” Ginsburg dismissed the testimony purporting to establish noninfringing uses as anecdotal and found that the network was “overwhelmingly used to infringe.” Justice Breyer, in contrast, found the noninfringing uses significant enough to pass the *Sony* test.

While *Grokster* leaves the standard for contributory liability uncertain, the text-to-speech feature is probably not capable of significant non-infringing uses. Of course, the infringement here is the creation of a derivative audio file from a downloaded e-book. When the original work resides in the public domain, however, creation of this derivative work infringes no copyright. Public domain works, however, are unlikely to account for a significant percentage of the total number of e-books converted to audio by the text-to-speech feature. This situation differs from *Sony* where the VCR had many legitimate, noninfringing uses. Selling a device with a feature capable of very few uses, other than to infringe copyrighted works,

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200. *Sony*, 464 U.S. at 442.
202. *Id.* at 933.
203. *Id.* at 936—37.
204. *Id.*
205. *Id.* at 942, 948.
206. See *id.* at 952 (Breyer, J., concurring).
207. *Id.* at 932 (majority opinion); *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 417 (1984).
demonstrates that Amazon had knowledge of, and materially contributed to, the infringement.

V. CONCLUSION

Were Amazon to back away from its present compromise with book publishers and allow its users to download e-books and read them aloud using the text-to-speech feature without permission from the authors, it would be contributorily liable for the creation of infringing derivative works. Case law suggests that, to avoid liability, the author must grant explicit permission to use her works on platforms enabled by new technologies.\textsuperscript{208} As such, the authors and publishers probably did not license to Amazon the right to distribute their e-books on a device with a text-to-speech feature. An economic analysis reveals that the Kindle 2 neither creates a copy nor renders a public performance.\textsuperscript{209} No copy exists because the Kindle file—stored only in RAM—lacks fixation; moreover, it alters the creative expression of the original work. No public performance takes place, because any performance created by the Kindle 2 occurs in private.

Nonetheless, when the text-to-speech feature reads an e-book aloud, it does create a derivative work that infringes on the copyrights of authors and publishers. Even without fixation, the text-to-speech feature creates a derivative work, because it creates a market replacement for an audiobook derived from an e-book. Whether or not the author has actually created such a derivative work is irrelevant, as the author enjoys the exclusive right to benefit from such works. While the audio file, contrary to many commentators, does add creative expression to the e-book, it nevertheless bears a substantial similarity to the underlying work. While Amazon is not directly liable for creating this derivative work, it could not escape secondary liability. Were Amazon to allow use of the feature without the permission of the rightsholders, it would be contributorily liable.

The stated goal of copyright law is to preserve incentives for the creation of new works by ensuring that unauthorized uses do not strip original works of their commercial value. As such, the best way to determine whether a work infringes on a copyright is to evaluate how the work affects the economic incentives of the copyright holder. Similarly, determining the type of infringing work (copy, performance, derivative) requires establishing how the work reduces incentives to create new works. Under this analysis, the Kindle file is an infringing derivative work.

\textsuperscript{208} See supra note 59 and accompanying text.
\textsuperscript{209} See supra Parts III.A, III.B.
The unauthorized creation of a derivative work harms the market for potential derivative works. The text-to-speech feature of the Kindle 2 harms this potential market because the differences between the e-books and the Kindle files have economic significance. A user can listen to the Kindle file, while he cannot listen to the e-book. Authors and publishers fear that this change in medium will allow the Kindle 2 to encroach on the audiobook market, a market they have an exclusive right to exploit. Part of the incentive for authors to create original works is the sole right to produce such derivative works. The authors have been compensated for any copies that the Kindle 2 makes through the original license for e-books, but they have not been compensated for any derivative works. Thus, the work that the text-to-speech feature creates affects the incentive to create new works insofar as that incentive derives from the economic return on derivative works. Consequently, the Kindle file is more accurately classified as a derivative work than a copy.

Critics will undoubtedly contend that the economic analysis applied in this Note to the Kindle 2 focuses on the incentives aspect of the “access-incentives paradigm” while ignoring altogether the need for authors and technological innovators to access and use the works of others. On the contrary, classifying the Kindle file as a derivative work properly balances the incentives of authors with allowing the public access to literary works in a variety of media. Recognizing that the Kindle file is a derivative work levels the playing field during licensing negotiations, by placing the authors and publishers in the correct bargaining positions without restricting access to e-books in the long term. Access will follow once Amazon pays rightsholders a fair return for the right to create derivative works with the text-to-speech feature. Kindle 2 users can still experience e-books in an easily accessible audio form, as long as Amazon bargains for the rights to use the e-books on a device with the text-to-speech feature.

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