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## Code-ifying Copyright: An Architectural Solution to Digitally Expanding the First Sale Doctrine

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## CODE-IFYING COPYRIGHT: AN ARCHITECTURAL SOLUTION TO DIGITALLY EXPANDING THE FIRST SALE DOCTRINE

*Evan Hess\**

*As the internet blossomed into ubiquity, piracy mushroomed with it. To control the threat, Congress passed the Digital Millennium Copyright Act (DMCA). The DMCA created a number of safeguards for copyright holders. But the DMCA purposely ignored whether copyright holders could restrict future transfers of their legally purchased work—a concept known in physical property as the “first sale doctrine.” As a result, copyright holders began using licenses to control future transfers of their digital property.*

*This was not the first time copyright holders have attempted to gain greater control over their work. The history of copyright law demonstrates a pattern of struggle between competing interests—with public access to creative works on one side and the need for incentive to create on the other side. Over time, courts and legislators have chosen different responses to this struggle. Each has encountered varying levels of success. But all have dealt exclusively in physical property.*

*The world of physical property is different from that of digital property for two reasons. In the physical world, it is difficult and costly to duplicate works, and over time, these works degrade. By contrast, in the digital world, copying a book, a song, or a movie requires only a couple of keystrokes and a mouse click. Additionally, copying a digital file does not affect its quality. In light of these differences, scholars have offered a number of solutions, focusing on the difference in copying difficulty between physical and digital property. This Note examines the history of copyright law to understand the various solutions available to lawmakers when dealing with the threat of piracy and considers the possibility of a solution focusing instead on the degradation difference between physical and digital property.*

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#### INTRODUCTION

It is easy to identify tangible property’s digital counterparts. For example, a paperback novel transforms into an e-book and a phonorecord becomes an MP3 file. But simply because these digital counterparts fulfill the same role as their tangible ancestors does not mean that they share all of their physical predecessors’ characteristics. The differences between digital property and its physical antecedents become clear when one considers the two types of property through business and legal lenses. One example can be found in the rental-by-mail and online streaming media company Netflix.

On September 18, 2011, Netflix CEO Reed Hastings followed an unpopular price change for his company with a blog post apologizing to his customers.<sup>1</sup> During this apology, Hastings announced a company split.<sup>2</sup> The Netflix name would be used solely for streaming movies over the internet, while the DVD-by-mail service that had made Netflix a household name would be renamed “Qwikster.”<sup>3</sup> Netflix and Qwikster would operate as completely separate entities.<sup>4</sup> As soon as three weeks later, one million customers canceled their subscriptions to Netflix,<sup>5</sup> and the company’s stock price plummeted more than 60 percent.<sup>6</sup> As a result, Hastings abandoned the idea of Qwikster, and Netflix remained the “one place to go for streaming and DVDs.”<sup>7</sup>

Many customers expressed outrage at Hastings’ move.<sup>8</sup> Journalists characterized it as a “corporate debacle[.]”<sup>9</sup> and drew comparisons to “a list

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1. See Reed Hastings, *An Explanation and Some Reflections*, NETFLIX (Sept. 18, 2011, 8:59 PM), <http://blog.netflix.com/2011/09/explanation-and-some-reflections.html>.

2. See *id.*

3. See *id.*

4. See *id.*

5. Curt Finch, *Netflix Kills Qwikster After 1 Million Subscribers Leave*, INC. (Oct. 11, 2011), <http://www.inc.com/tech-blog/netflix-kills-qwikster-after-1-million-subscribers-leave.html>.

6. Stu Woo, *Under Fire, Netflix Rewinds DVD Plan*, WALL ST. J., Oct. 11, 2011, at A1.

7. Reed Hastings, *DVDs Will Be Staying at Netflix.com*, NETFLIX (Oct. 10, 2011, 5:00 AM), <http://blog.netflix.com/2011/10/dvds-will-be-staying-at-netflixcom.html>.

8. Finch, *supra* note 5.

9. *Id.*

of companies with embarrassing flip-flops,” including Coca-Cola Co.’s “New Coke.”<sup>10</sup> But industry commentators believe the relationship between Netflix and its wholesalers (i.e., movie copyright owners) drove Hastings’ decision.<sup>11</sup>

Movie copyright owners and secondary-market businesses, like Netflix, occupy inverse positions when dealing with physical property and with digital property.<sup>12</sup> Namely, when dealing in physical property, secondary-market businesses are afforded leverage through the first sale doctrine.<sup>13</sup> If the copyright owners do not reach a reasonable agreement with secondary-market businesses, these businesses can purchase the property elsewhere and then lend or rent it.

By contrast, because no first sale doctrine presently exists for digital property,<sup>14</sup> movie copyright holders retain considerable leverage in negotiations over the license agreements reached with secondary-market businesses for digital property.<sup>15</sup> If secondary-market businesses cannot reach a reasonable license agreement with copyright owners, there is no legal alternative to lending or renting the property.<sup>16</sup> Any Netflix subscriber knows that there is an essential difference between the physical DVD service and the digital streaming service: “[t]he DVD section has a better selection, with newer releases.”<sup>17</sup>

This imbalance and its effects are not limited to the film industry. Other online streaming media services have suffered from the current digital property regime. Pandora, a streaming music service, has never turned a profit—reporting losses exceeding \$105 million for the five fiscal years between February 2007 and January 2012.<sup>18</sup> Additionally, “Spotify is likely to report a loss [in 2012] . . . . Last year, the company lost about \$60 million.”<sup>19</sup> And on April 11, 2012, the U.S. Department of Justice “accused

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10. Woo, *supra* note 6.

11. See Nick Wingfield & Brian Stelter, *A Juggernaut Stumbles*, N.Y. TIMES, Oct. 25, 2011, at B1; Henry Blodget, *With All Due Respect to Reed Hastings, the Netflix-Qwikster Split Sucks for Customers*, BUS. INSIDER (Sept. 19, 2011), [http://articles.businessinsider.com/2011-09-19/tech/30174644\\_1\\_reed-hastings-netflix-ceo-netflix-competitors](http://articles.businessinsider.com/2011-09-19/tech/30174644_1_reed-hastings-netflix-ceo-netflix-competitors); Eliot Van Buskirk, *Netflix-Qwikster Split: It's the Licensing, Silly*, WIRED (Sept. 20, 2011, 2:02 PM), <http://www.wired.com/business/2011/09/netflix-qwikster-split-licensing/>.

12. See Buskirk, *supra* note 11.

13. See *infra* Part I.A.1.

14. See *infra* notes 323–42 and accompanying text.

15. See Buskirk, *supra* note 11.

16. See Blodget, *supra* note 11 (explaining that “[t]o rent a DVD, Netflix need merely buy it . . . . To stream a show or movie, meanwhile, Netflix *has* to pay a direct licensing fee.” (emphasis added)).

17. *Id.*

18. Mark Rogowsky, *Pandora Finds Little Profit in Reinventing Radio*, FORBES (Sept. 10, 2012, 4:27 AM), <http://www.forbes.com/sites/markrogowsky/2012/09/10/pandora-finds-little-profit-in-reinventing-radio/>.

19. Evelyn M. Rusli & Michael J. De La Merced, *Spotify's Financing Is Said To Lift Value to \$4 Billion*, N.Y. TIMES (May 17, 2012, 12:35 PM), <http://dealbook.nytimes.com/2012/05/17/spotify-is-raising-millions-in-a-deal-that-would-value-it-at-4-billion/>.

Apple, Inc. and five of the nation's largest publishers . . . of conspiring to raise e-book prices . . . [to] ensure that e-books are profitable."<sup>20</sup>

The only analogous online streaming media service to report profitability, Hulu, is a joint venture of ABC, Fox, and NBC.<sup>21</sup> Hulu's contracts with network providers are unique because Hulu does not pay for any of the costs of running advertisements—not even bandwidth costs.<sup>22</sup> In addition, Hulu is the only online streaming media service to maintain advertisements despite user's payment of a subscription fee.<sup>23</sup> Hulu's internet service draws viewers away from TV and to the internet undercutting cable, satellite, and telecom providers who are a steady revenue stream to television networks to support the cost of producing content.<sup>24</sup> As a result, other content copyright holders like Viacom removed *The Daily Show* and *The Colbert Report* from Hulu because having this new content available on Hulu steered customers away from Viacom's Comedy Central website, reducing Viacom's possible direct advertisement revenue.<sup>25</sup> These actions lead to questions regarding Hulu's continued profitability.<sup>26</sup>

In addition to the effects on online streaming media outlets themselves, the lack of a digital analogue to the first sale doctrine has had startling effects on the private users of these outlets. In July 2009, Amazon unexpectedly deleted digital versions of George Orwell's *1984* and *Animal Farm* that customers had previously purchased.<sup>27</sup> Reports suggested that this deletion followed earlier removal of digital versions of *Harry Potter* books and Ayn Rand novels.<sup>28</sup> More recently, Barnes & Noble reportedly denied a customer access to a purchased digital book purportedly because

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20. Thomas Catan, Jeffrey A. Trachtenberg & Chad Bray, *U.S. Alleges E-book Scheme*, WALL ST. J. (Apr. 11, 2012, 10:58 PM), <http://online.wsj.com/article/SB10001424052702304444604577337573054615152.html>.

21. Brian Stelter, *Is Hulu Boxed In?*, N.Y. TIMES, July 24, 2011, at BU1.

22. Erik Sherman, *Hulu Makes a Profit. Video Content Owners? Not So Much*, CBSNEWS (Apr. 2, 2010, 12:01 PM), [http://www.cbsnews.com/8301-505124\\_162-43443210/hulu-makes-a-profit-video-content-owners-not-so-much/](http://www.cbsnews.com/8301-505124_162-43443210/hulu-makes-a-profit-video-content-owners-not-so-much/).

23. *Compare Why Are There Ads in Hulu Plus?*, HULU, <http://www.hulu.com/support/article/20356372> (last visited Feb. 15, 2013), with *Pandora One*, PANDORA, <http://www.pandora.com/one> (last visited Feb. 15, 2013) ("Pandora One is completely free of any sort of advertising."), *Spotify Premium*, SPOTIFY, <http://www.spotify.com/us/> (last visited Feb. 15, 2013) ("No ads & no commitment."), and *Ads and Pop-ups When Streaming to Your PC or Mac*, NETFLIX, <http://support.netflix.com/en/node/1891#gsc.tab=0> (last visited Feb. 15, 2013) ("Netflix does not push advertisements to members using our service.").

24. See Brian Stelter and Brad Stone, *Successes (and Some Growing Pains) at Hulu*, N.Y. TIMES, Apr. 1, 2010, at B1.

25. Sherman, *supra* note 22.

26. See *id.*

27. See Brad Stone, *Amazon Erases Two Classics from Kindle. (One Is '1984.')*, N.Y. TIMES, July 18, 2009, at B1.

28. See *id.*

the credit card the customer purchased the digital book with had expired long after the purchase.<sup>29</sup>

These instances of copyright owners' attempts to control their works after distribution are not new. In 1908, the U.S. Supreme Court faced a similar problem in *Bobbs-Merrill Co. v. Straus*.<sup>30</sup> This Note looks to that decision, its reasoning, and the realities that surrounded it for guidance in restoring the balance between the copyright holders, the secondary market, and end users. By focusing on an element present in the physical-property marketplace, degradation, this Note argues that the balance between copyright holders, the secondary market, and end users may be restored. Part I of this Note provides background information on the origin of copyright law, the first sale doctrine, and the Digital Millennium Copyright Act<sup>31</sup> (DMCA). Next, Part II explores previous scholarship regarding the first sale doctrine in digital property, proposed solutions, and where available, the governmental response to these proposals. Finally, Part III offers the opportunity to introduce degradation into digital property to reestablish a balance between copyright holders and the secondary market.

#### I. COPYRIGHT'S FOUNDATION AND ITS SUPPORTING POLICIES

The Founders so valued the production of creative works that they provided for their protection in the Constitution: "The Congress shall have Power . . . [t]o 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."<sup>32</sup> The importance of copyright protection persisted, as the first Congress enacted a copyright statute in 1790,<sup>33</sup> and copyright protection by federal statute remains in force today.<sup>34</sup> Many scholars interpret the Founders' desire "[t]o promote the Progress of Science and useful Arts" to be a balancing test.<sup>35</sup> The public's interest in

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29. See Laura Northrup, *Here's Why Digital Rights Management Is Stupid and Anti-consumer*, CONSUMERIST (Nov. 26, 2012), <http://consumerist.com/2012/11/26/heres-why-digital-rights-management-is-stupid-and-anti-consumer/>.

30. 210 U.S. 339 (1908).

31. Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

32. U.S. CONST. art. I, § 8, cl. 8.

33. See Maurice J. Holland, *A Brief History of American Copyright Law*, in THE COPYRIGHT DILEMMA 3, 11 (Herbert S. White ed., 1978); see also Act of May 31, 1790, ch. 15, 1 Stat. 124.

34. See generally 17 U.S.C. § 101 (2006).

35. See, e.g., Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Systems*, 84 HARV. L. REV. 281, 281 (1970) ("Macaulay's statement that copyright was 'a tax on readers for the purpose of giving a bounty to writers' reveals the conflict of interest between the reader and the book producer that underlies much of the discussion about copyright law." (footnote omitted)); Gerald Dworkin, *Copyright, the Public Interest and Freedom of Speech: A U.K. Copyright Lawyer's Perspective*, in COPYRIGHT AND FREE SPEECH: COMPARATIVE AND INTERNATIONAL ANALYSES ¶ 7.03, at 154 (Jonathan Griffiths & Uma Suthersanen eds., 2005) ("Copyright and the public interest are inextricably linked. All copyright systems seek to strike an appropriate balance between the rights of the copyright owner and the public interest."); William M. Landes and Richard A.

ready access to information and art rests on one side,<sup>36</sup> on the other rests the need to incentivize creators.<sup>37</sup>

The first sale doctrine is a thumb on the scale in favor of access in this balancing test between public access and control for creator incentive. The current form of the first sale doctrine provides that “the owner of a particular copy or phonorecord lawfully made under [the Copyright Act], 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.”<sup>38</sup> The first sale doctrine became law in *Bobbs-Merrill Co.*, a 1908 Supreme Court decision. The following year, as part of a larger overhaul of the Copyright Act, Congress codified the first sale doctrine.<sup>39</sup> Since that time, scholars have come to view the first sale doctrine as important to promoting policies embraced by copyright law more generally.<sup>40</sup> Part I.A examines these policies and their rationales to frame an analysis of the repeating struggle between public access and control for creator incentive in copyright history and to understand why public access usually wins. Part I.B reviews the history of this struggle and the results of choosing law or legislation in favor of one side over the other. Part I.C discusses the digital revolution, the governmental response—particularly through the DMCA—and how the DMCA’s “wait and see” approach has currently shifted the balance from public access toward control for creator incentive.

#### A. *The Policies Supporting the First Sale Doctrine*

Scholars have identified at least six policies that the first sale doctrine promotes: (1) access, (2) preservation, (3) privacy, (4) transactional clarity, (5) innovation, and (6) platform competition.<sup>41</sup> Access is discussed first because it provides the basis for the remaining policies. Without providing access, these other important policies would be difficult to achieve.

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Posner, *An Economic Analysis of Copyright Law*, 18 J. LEG. STUD. 325, 326 (1989) (“Copyright protection . . . trades off the costs of limiting access to a work against the benefits of providing incentives to create the work in the first place. Striking the correct balance between access and incentives is the central problem in copyright law.”).

36. See Dworkin, *supra* note 35, ¶ 7.03, at 154; Landes & Posner, *supra* note 35, at 326.

37. See Dworkin, *supra* note 35, ¶ 7.03, at 154; Landes & Posner, *supra* note 35, at 326.

38. 17 U.S.C. § 109(a).

39. Copyright Act of 1909, ch. 320, § 41, 35 Stat. 1075, 1084 (codified as amended at 17 U.S.C. § 109(a)).

40. See Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889, 894–901 (2011); see also, e.g., Joseph P. Liu, *Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership*, 42 WM. & MARY L. REV. 1245, 1310–38 (2001); R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 585–610 (2003); Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885, 917–24 (2008).

41. See, e.g., Perzanowski & Schultz, *supra* note 40, at 894–901; see also Liu, *supra* note 40, at 1310–38; Reese, *supra* note 40, at 585–610; Van Houweling, *supra* note 40, at 917–24.



## 1. Access

The first sale doctrine improves access to property in two ways: affordability and availability.<sup>42</sup> The restriction on copyright owners' rights after the initial sale enables retail competition, secondary markets, rental markets, and public lending, which help make copyrighted materials far more affordable to consumers.<sup>43</sup>

The first sale doctrine generates retail competition because once a copyright holder sells copies of his work to a retailer, the retailer can legally resell the copies to the public at any price it chooses.<sup>44</sup> As a result, the public benefits from competition between retailers.<sup>45</sup> The Court addressed this exact situation in *Bobbs-Merrill Co.*<sup>46</sup>

In addition, the first sale doctrine allows privately owned copies to be resold on the secondary market.<sup>47</sup> The secondary market increases affordability because these copies are often used and usually sell at a lower price compared to new copies.<sup>48</sup> For some consumers, this opportunity to resell also encourages purchases of new copies because subsequent resale results in a lower net cost.<sup>49</sup>

Next, the first sale doctrine makes copyrighted material more affordable by creating a rental market. The rental of copies provides access for individuals who cannot afford or are unwilling to pay the price of acquiring ownership.<sup>50</sup> Although the rental market for copyrighted works today is primarily limited to motion pictures as a result of rental amendments to the current Copyright Act,<sup>51</sup> rental markets have existed in the past when the

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42. See Perzanowski & Schultz, *supra* note 40, at 894.

43. See Reese, *supra* note 40, at 585–92.

44. See *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350 (1908) (“In our view the copyright statutes, . . . do not create the right to impose, by notice, . . . a limitation at which the book shall be sold at retail by future purchasers . . .”).

45. See Reese, *supra* note 40, at 585 (“More efficient retailers, with lower overhead costs, may be able to sell copies at a lower mark-up than less efficient retailers or retailers who wish to maintain a higher price-point for marketing reasons.”).

46. See *infra* notes 207–14 and accompanying text.

47. See John A. Rothchild, *The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?*, 57 RUTGERS L. REV. 1, 79 (2004); see also Perzanowski & Schultz, *supra* note 40, at 894 (discussing used bookstores and online auction sites specifically).

48. See, e.g., Ed Christman, *As Used-CD Biz Grows, Chains Get in on Act*, BILLBOARD, July 10, 1999, at 1, 92 (noting that used CDs sell at prices between \$5.99 and \$8.99 compared to \$17.98 “for a catalog CD”); Erik Gruenwedel, *Blockbuster Testing New, Used DVD Sales on Web*, HOME MEDIA MAG., May 27–June 2, 2007, at 1 (noting that used DVDs sell at prices between \$4.99 and \$9.99 compared to new DVDs costing between \$16.99 and \$21.99).

49. See Ed Christman, *Both Retailer, Label Claims Backed by Used-CD Survey*, BILLBOARD, Oct. 2, 1993, at 4, 112 (discussing a National Association of Recording Merchandisers study that showed 24.6 percent of respondents said the potential for resale factored into their purchase, but 41.4 percent said it did not).

50. See Reese, *supra* note 40, at 587–88.

51. See *infra* notes 231–42, 287–92 and accompanying text.

means of copying were more difficult than in the recorded music and computer software fields.<sup>52</sup>

Finally, the first sale doctrine reduces the cost of copyrighted works by making copies available through public lending libraries.<sup>53</sup> Public lending is the epitome of affordability because the public gains access to the copy often without a direct charge.<sup>54</sup> However, the individual does incur nonmonetary costs. These nonmonetary costs include: waiting for the library to obtain a copy, waiting her turn to borrow the copy if the library lends the copy to someone else first, returning the copy after a specified period of time at the risk of incurring fines, and possessing the copy subject to the library's recall.<sup>55</sup> These nonmonetary costs thus sacrifice availability for affordability.<sup>56</sup>

In addition to affordability, the first sale doctrine ensures the availability of copyrighted works.<sup>57</sup> Copyrighted works may become unavailable for several reasons. For example, copyright owners may allow the work to go out of print because it is not economically viable to continue to produce copies.<sup>58</sup> Of the 187,280 books published in the United States between 1927 and 1946, only 4,267 remain in print today.<sup>59</sup> This means that over 97 percent of the copyrighted works published during that time lie commercially dormant and inaccessible.<sup>60</sup> Similarly, of the 157,068 titles listed in the Turner Classic Movies' database, fewer than 4 percent are available on home video.<sup>61</sup> Simply because the demand for a work is

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52. See, e.g., CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES* 95 (1999) (observing that, in response to demand, booksellers began renting books and that these circulating libraries survived from sometime before 1814 and well into the 1950s); see also CHARLES KNIGHT, *THE OLD PRINTER AND THE MODERN PRESS* 229–36 (1854) (discussing the effect of the circulating library on public literacy and the availability of books).

53. See Robert M. Glushko, *The Future of Copyright*, INFO. OUTLOOK, Oct. 1, 2010, at 14, 15 (“[T]he first sale doctrine is the current cornerstone of library lending.”).

54. See Reese, *supra* note 40, at 588. Of course, many library users pay for the library through a tuition charge or taxes. See *id.* at 589. Still others may pay a membership fee or borrowing charge. See *id.*

55. See COMM. ON INTELLECTUAL PROP. RIGHTS & THE EMERGING INFO. INFRASTRUCTURE, NAT'L RESEARCH COUNCIL, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 101 n.13 (2000); see also Reese, *supra* note 40, at 588 n.42.

56. See Reese, *supra* note 40, at 589.

57. See Perzanowski & Schultz, *supra* note 40, at 895; Reese, *supra* note 43, at 592.

58. See LAWRENCE LESSIG, *FREE CULTURE* 112–13 (2004) (describing creative property as experiencing “different lives” and observing that books go out of print very quickly).

59. See Deirdre K. Mulligan & Jason M. Schultz, *Neglecting the National Memory: How Copyright Term Extensions Compromise the Development of Digital Archives*, 4 J. APP. PRAC. & PROCESS 451, 472 (2002).

60. See *id.*

61. See Anthony Kaufman, *The Vanishing: The Demise of VHS, and the Movies Disappearing Along With It*, MUSEUM MOVING IMAGE (Feb. 26, 2009), <http://www.movingimagesource.us/articles/the-vanishing-20090226>.

insufficient to make it economically viable to produce copies does not mean that the demand is nonexistent, or even negligible.<sup>62</sup>

Moreover, copyright owners may wish to suppress their work because their views on it have changed.<sup>63</sup> For example, on his deathbed, Virgil asked that *The Aeneid* be burned.<sup>64</sup> More recently, film director Tony Kaye attempted to thwart the success of his film *American History X*.<sup>65</sup> Additionally, successors in copyright may have different views from the original copyright owner and may wish to remove the work from public access.<sup>66</sup>

Also, copyright owners sometimes purposely withdraw their work from the marketplace temporarily in order to generate demand.<sup>67</sup> One well-known example of a company who employs this marketing strategy is Walt Disney, Co.<sup>68</sup> The company routinely limits the availability of its animated films for viewing in theatres and purchase on videocassette and DVD by withdrawing them from the market for a number of years.<sup>69</sup> This builds demand for the movie by making its availability artificially scarce.<sup>70</sup>

In each of these cases, the first sale doctrine provides an individual who wants to access a work that the copyright holder wishes to suppress with the opportunity to purchase a used copy on the secondary market, rent a copy on the rental market, or borrow a copy through public lending.<sup>71</sup>

## 2. Preservation

Statistically speaking, a work has a better chance of surviving over time if more copies of that work exist.<sup>72</sup> One reason is that different copy owners will treat their copies differently.<sup>73</sup> One “dramatic example of the

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62. See, e.g., Motoko Rich, *Publisher and Authors Parse a Term: Out of Print*, N.Y. TIMES, May 18, 2007, at C3 (discussing Paula Fox, an author of six out-of-print novels who revived her career after a *Harper's Magazine* article cited her work).

63. See Reese, *supra* note 40, at 595.

64. See THE VIRGILIAN TRADITION: THE FIRST FIFTEEN HUNDRED YEARS 420–25 (Jan Ziolkowski & Michael C.J. Putnam eds., 2008).

65. See Benjamin Svetkey, *X Marks the Spot*, ENT. WKLY., Oct. 23, 1998, at 28, 33–36 (discussing Kaye's attempt to pull the film from the Toronto film festival and running advertisements negatively portraying the film).

66. See Reese, *supra* note 40, at 595 (explaining that James Boswell's son believed that Boswell's *Life of Johnson* portrayed his father in a bad light and would have suppressed the work if he succeeded in copyright ownership).

67. See *id.* at 602.

68. See Eric Felten, *Disney's Movie Vault: Scarily Creating a Fantasia of Scarcity*, WALL ST. J. (May 20, 2011), <http://online.wsj.com/article/SB10001424052748704904604576333344180431886.html> (describing Disney's “longstanding practice” of taking its films off the market).

69. See *id.*

70. See *id.* (suggesting that Disney's “dreaded vault isn't so much about creating excitement as it is about creating fear”).

71. See Reese, *supra* note 40, at 595.

72. See *id.* at 605.

73. See *id.* at 606.

preservation impact of diversely situated copy holders” can be seen in old movie reels.<sup>74</sup>

In the 1920s, movie reels were often shown in a distribution chain from one town to the next.<sup>75</sup> This distribution chain ended in Dawson City, in Canada’s Yukon Territory.<sup>76</sup> Motion picture copyright owners often retained the rights to the reels and asked for their return at the end of the distribution period.<sup>77</sup> To save the expense of returning the reels, distributors left the prints in the Canadian Bank of Commerce’s custody.<sup>78</sup> By 1929, around five hundred films accumulated in Dawson City.<sup>79</sup> These reels were later used to fill in a swimming pool to convert it into an ice rink.<sup>80</sup> In 1978, a building project excavation uncovered the reels, which had remained in surprisingly good condition due to the frigid temperatures of the Yukon.<sup>81</sup> Although these were not the only copies of the reels initially distributed, those other copies were lost, destroyed, or deteriorated.<sup>82</sup> As a result of Dawson City’s unique conditions, however, portions of some motion pictures that otherwise do not exist, remain viewable today.<sup>83</sup>

The ability to alienate a copy from one’s possession under the first sale doctrine is important to preservation because it results in wider distribution and dissemination.<sup>84</sup> Presumably, without the first sale doctrine, the consumer who moves locations, runs out of storage room, or simply wants to get rid of her copy would discard it if she could not sell or give the used copy to another owner.<sup>85</sup> Thus, a work that may otherwise disappear remains accessible to the public.

### 3. Privacy

The first sale doctrine permits copy owners to transfer their copies without the permission of the copyright holder.<sup>86</sup> This independence fosters privacy and anonymity.<sup>87</sup> Because copyrighted works can be controversial

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74. *Id.*

75. *See id.*

76. *See* Sam Kula, *Rescued from the Permafrost: The Dawson Collection of Motion Pictures*, 8 *ARCHIVARIA* 141, 142 (1979).

77. *See* Reese, *supra* note 40, at 606. This, of course, takes the film reels out of the first sale doctrine. However, the example serves as one of the successes of distribution in copies for preservation. This is an aspect that the first sale doctrine supports in its normal operation.

78. *See* Kula, *supra* note 76, at 142.

79. *See id.* at 144.

80. *See id.* at 142.

81. *See id.* at 143.

82. *See* Reese, *supra* note 40, at 607.

83. *See* Kula, *supra* note 76, at 146.

84. *See* Reese, *supra* note 40, 607.

85. *See id.* at 607–08.

86. *See* Perzanowski & Schultz, *supra* note 40, at 896.

87. *See id.*

or stigmatized, lack of anonymity in distribution could chill the activity.<sup>88</sup> An individual may not wish to be affiliated with the authors or subject matter that she chooses to purchase, although that individual may have valid reasons for purchasing the work.<sup>89</sup> The first sale doctrine encourages distribution and free expression by permitting anonymous transfer without the copyright holder's permission.<sup>90</sup>

#### 4. Transactional Clarity

The first sale doctrine also clarifies a purchaser's rights, resulting in market efficiency.<sup>91</sup> The law recognizes only a limited number of property rights because limitless variety raises transaction and information costs.<sup>92</sup> For example, if the Copyright Act permitted copyright owners to control future sales in a myriad of different ways, including setting certain prices, selling to certain types of consumers, alienating only certain portions, selling only in or to certain geographic locations, and so on, the consumer would be forced to sift through "a fragmented and confusing constellation of terms and restrictions" for each transaction in a secondary market.<sup>93</sup> Instead, the first sale doctrine permits the consumer to engage in clear, and comparatively simple, transactions.<sup>94</sup>

#### 5. Innovation

The first sale doctrine also promotes innovation.<sup>95</sup> Copyright owners must innovate in order to compete with secondary markets.<sup>96</sup> For example, after a work is circulated for several years, a copyright owner will release new editions of material including remastered material, additional content, updates, or add-on features.<sup>97</sup>

Similarly, forum providers for the secondary market innovate in order to compete with one another.<sup>98</sup> The possibility of resale encourages the

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88. See Julie E. Cohen, *A Right To Read Anonymously: A Closer Look at "Copyright Management" in Cyberspace*, 28 CONN. L. REV. 981, 1010–11 (1996).

89. See *id.* at 1014 ("I may read *The Turner Diaries* or *The Fountainhead* for purely scholarly reasons, without any intent or desire to associate myself with the movements they have come to represent.").

90. See Perzanowski & Schultz, *supra* note 40, at 896.

91. See *id.*

92. See Van Houweling, *supra* note 40, at 897–98.

93. See Perzanowski & Schultz, *supra* note 40, at 896; see also, e.g., Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 11 (2000) (discussing a similar closed universe in interpreting landlord-tenant law where "[l]eases are limited to four recognized types").

94. See Perzanowski & Schultz, *supra* note 40, at 896.

95. See Zbigniew J. Bednarz, *Unreal Property: Vernor v. Autodesk, Inc. and the Rapid Expansion of Copyright Owners' Rights by Granting Broad Deference to Software License Agreements*, 61 DEPAUL L. REV. 939, 962 (2012) ("[T]he second important public interest protected by the first-sale doctrine [is] the promotion of entrepreneurship and innovation.").

96. See Perzanowski & Schultz, *supra* note 40, at 897.

97. See *id.*

98. See *id.* at 897–98.

creation of new business models and technologies.<sup>99</sup> Examples of such innovation include Amazon, eBay, Netflix, and Redbox.<sup>100</sup>

Lastly, the first sale doctrine encourages innovation on the part of the copy owner.<sup>101</sup> The first sale doctrine allows users to reenvision their copies into completely new objects. Examples include “a handbag made from a classic novel, a clock made from old music CDs, or a flashing bike light made from an old Nintendo NES video game controller.”<sup>102</sup> The first sale doctrine also mitigates restrictions on property that are contrary to desirable goals that only become apparent at a later date.<sup>103</sup> One example is the software application Snappli, available for Apple’s iPhone. Snappli compresses data received by the phone to reduce network usage that can result in large bills for users without unlimited data plans.<sup>104</sup> In order to work, Snappli requires users to install the application and a configuration profile.<sup>105</sup> The configuration profile interrupts the transmission of wireless data to a user’s phone so that Snappli’s servers can compress the data.<sup>106</sup> These features “are, in theory, restricted by Apple.”<sup>107</sup> However, these features are desirable to both wireless network carriers and end users because they reduce the use of bandwidth,<sup>108</sup> a valuable commodity for wireless networks<sup>109</sup> and one source of extra charges for smartphone users.<sup>110</sup> Apple has approved at least two applications using this technique

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99. See Bednarz, *supra* note 95, at 962 (“A robust secondary market creates opportunities for entrepreneurs to create businesses, such as used-book stores, thrift stores, and used-record stores, thereby expanding the economy.”).

100. See Perzanowski & Schultz, *supra* note 40, at 898.

101. See Katherine J. Strandburg, *Users As Innovators: Implications for Patent Doctrine*, 79 U. COLO. L. REV. 467, 495 (2008) (discussing the first sale doctrine in the patent context and noting that the related “right to repair a patented device protected and encouraged user innovation”).

102. See Perzanowski & Schultz, *supra* note 40, at 899 (footnotes omitted).

103. See Van Houweling, *supra* note 40, at 901 (“The problem of [excessive control by one party over the freedom and flexibility of the other] is further compounded when a servitude arises in a context of rapid and unpredictable change, making unforeseen obsolescence especially likely.”).

104. See Rachel Metz, *App Shrinks Your Data, Then Your Bill*, MIT TECH. REV. (Sept. 18, 2012), <http://www.technologyreview.com/news/429165/app-shrinks-your-data-then-your-bill/>.

105. See Rachel Metz, *Developers Use a Workaround To Make iPhone Apps Do More*, MIT TECH. REV. (Oct. 23, 2012), <http://www.technologyreview.com/news/429651/developers-use-a-workaround-to-make-iphone-apps-do-more/>.

106. See *id.*

107. *Id.*

108. See Metz, *supra* note 104.

109. See David Goldman, *Sorry, America: Your Wireless Airwaves Are Full*, CNN MONEY (Feb. 21, 2012, 5:30 PM), [http://money.cnn.com/2012/02/21/technology/spectrum\\_crunch/index.htm](http://money.cnn.com/2012/02/21/technology/spectrum_crunch/index.htm) (“Wireless spectrum—the invisible infrastructure over which all wireless transmissions travel—is a finite resource. When, exactly, we’ll hit the wall is a subject of intense debate, but almost everyone in the industry agrees that a crunch is coming.”).

110. See Julianne Pepitone, *iPhone 5 WiFi Bug Leads to Giant Cellular Data Overages*, CNN MONEY (Oct. 1, 2012, 5:27 PM), <http://money.cnn.com/2012/10/01/technology/iphone-5-data-coverage/index.html> (“Carriers are using carrots and sticks to move customers away from unlimited data and toward metered billing plans that cap customers’ data use and charge them for overages.”).

and allows users to download them in its application marketplace, the App Store.<sup>111</sup>

## 6. Platform Competition

The first sale doctrine reduces consumer lock-in and, thus, encourages platform competition.<sup>112</sup> Consumer lock-in results when the costs of switching to a new vendor or technology platform are high enough to discourage consumers from purchasing an otherwise preferable, competitive product.<sup>113</sup> Consumer lock-in impedes new market participants who develop similar, but better, products.<sup>114</sup> Accordingly, consumer lock-in creates competitive concerns and detracts from incremental innovation.<sup>115</sup> However, because an individual who wants to switch from Microsoft's Xbox video game system to Sony's PlayStation system can recover a substantial amount of his investment by selling the Xbox in the secondary market, the first sale doctrine lowers the consumer lock-in barrier to switching.<sup>116</sup>

With these policies in mind, this Note next examines the impetus behind the creation of copyright law starting first with the introduction of the printing press in England in 1476. Because the digital revolution that began four hundred years later follows a very similar path, examining the initial fluctuation between open public access and copyright protection is valuable to crafting the proper response for digital property.

### *B. The Origin of Copyright Law in the Physical Domain*

In 1476, William Caxton introduced the printing press to England.<sup>117</sup> Along with the ability to produce a large amount of printed material, Caxton's introduction brought a "new trade to be encouraged,"<sup>118</sup> the "creation of a new form of property,"<sup>119</sup> and the potential for piracy.<sup>120</sup>

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111. See Metz, *supra* note 105.

112. See Perzanowski & Schultz, *supra* note 40, at 900.

113. See SHAPIRO & VARIAN, *supra* note 52, at 11 (describing the ability of CDs to overcome lock-in, while "[q]uadrophonic sound, stereo AM radio, PicturePhones, and digital audiotape did not fare as well").

114. See Perzanowski & Schultz, *supra* note 40, at 900.

115. See *id.*

116. See *id.*

117. See LYMAN RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE 20 (1968).

118. *Id.* at 21.

119. *Id.* at 20.

120. It appears that Caxton was not a victim of piracy himself, *see id.* at 21, but at least one scholar asserts that "had there been any competitor possessed of sufficient capital to be a really formidable pirate," then there may have been "a very early recognition of an author's rights to the fruits of his brain." ALFRED W. POLLARD, SHAKESPEARE'S FIGHT WITH THE PIRATES AND THE PROBLEMS OF THE TRANSMISSION OF HIS TEXT 1 (1917).

### 1. The Evolution of Copyright in England: Finding the Balance Between Public Access and Control

At first, the British government failed to regulate the new trade.<sup>121</sup> As the trade grew, native printers repeatedly sought to eliminate foreign competition,<sup>122</sup> sometimes by violence.<sup>123</sup> In response, the British government passed statutes that included printing and bookselling in their protection of domestic trade.<sup>124</sup> Throughout this time, the printers continued to seek greater control over their trade.<sup>125</sup>

In 1557, Queen Mary chartered the Royal Stationers' Company of London.<sup>126</sup> This charter granted the printers a monopoly on publishing,<sup>127</sup> permitting the Stationers' Company to control the book trade and, subsequently, to seek even further expansion of that control.<sup>128</sup>

However, the Stationers' Company's monopoly did not last forever. In 1694, the House of Commons allowed the copyright statute, then known as the Licensing Act, to lapse.<sup>129</sup> Among the House of Commons' reasons for opposing renewal of the Licensing Act was that the Act gave the Stationers' Company the right to impede the printing of all books, including those considered "innocent and useful."<sup>130</sup>

Once the Licensing Act expired, however, "piracy sprouted."<sup>131</sup> In Scotland, "no centrali[z]ed limitation was placed on the proliferation of

121. See PATTERSON, *supra* note 117, at 21–22 (discussing the exception of printing and bookselling from a 1484 statute regulating foreign trade); H.G. Aldis, *The Book-Trade, 1557–1625*, in 4 CAMBRIDGE HISTORY OF ENGLISH LITERATURE 432, 458 (A.W. Ward & A.R. Waller eds., 1910) ("In the early days of printing in England, when the native press produced but a very small proportion of the books in demand, the foreign printer and stationer were so freely tolerated, if not actively encouraged, that a large part of the trade fell into the hands of strangers.").

122. See Aldis, *supra* note 121, at 458.

123. See PATTERSON, *supra* note 117, at 22 (discussing both the case of *Pynson v. Squyer* involving "murderous attacks" by printers against a "Norman-born printer," and "the 'Evil May Day' of 1517, when a mob of two thousand attacked the French and Flemish quarters and sacked the houses.").

124. See *id.* at 22–23 (citing 14 & 15 Hen. 8, c. 2 (1523) (Eng.), 21 Hen. 8, c. 16 (1529) (Eng.), and 25 Hen. 8, c. 15 (1533) (Eng.)).

125. See *id.* at 29 (noting that "[a]s early as 1542, the [printers] had requested a charter" of incorporation).

126. See JOHN GANTZ & JACK B. ROCHESTER, *PIRATES OF THE DIGITAL MILLENNIUM: HOW THE INTELLECTUAL PROPERTY WARS DAMAGE OUR PERSONAL FREEDOMS, OUR JOBS, AND THE WORLD ECONOMY* 34 (2005); PATTERSON, *supra* note 117, at 28.

127. See GANTZ & ROCHESTER, *supra* note 126, at 34; see also PATTERSON, *supra* note 117, at 31 (discussing the Stationers' Company's "high degree of autonomy in controlling the book trade").

128. See CYPRIAN BLAGDEN, *THE STATIONERS' COMPANY: A HISTORY, 1403–1959*, at 40 (1960); see also PATTERSON, *supra* note 117, at 38 (noting that this incorporation "marked the first round in the continuing struggle of the stationers to enhance their monopoly").

129. See PATTERSON, *supra* note 117, at 139.

130. See *id.* (quoting 11 H.C. JOUR. (1695) 305–06 (Eng.)).

131. GANTZ & ROCHESTER, *supra* note 126, at 34; see also R.R. BOWKER, *COPYRIGHT: ITS LAW AND ITS LITERATURE* 5 (1886) ("With the expiration of [licensing] acts in 1679 legislative penalties lapsed, and piracy became common. . . . [After a second lapse in 1694, p]iracy again flourished."); DAVID SAUNDERS, *AUTHORSHIP AND COPYRIGHT* 53 (1992) (citing



presses” and, by comparison to England, copyright was limited.<sup>132</sup> As a result, Scottish publishers could copy English books and resell them in England at a much lower cost.<sup>133</sup>

The Stationers’ Company repeatedly, but unsuccessfully, attempted to regain control through censorship laws—the government’s original purpose in granting the monopoly.<sup>134</sup> In 1707, however, the publishers refocused attention from censorship laws to their property interest and the incentive to continue printing.<sup>135</sup>

On December 12, 1709, the bill that became the first copyright statute started with a petition similar to the 1707 bill.<sup>136</sup> In 1710, the British government enacted the Statute of Anne.<sup>137</sup> At the time of its passage, the sought-after statute represented a victory for the Stationers’ Company.<sup>138</sup> As time went on, however, Professor Feather asserts that the 1710 Act proved to be “thoroughly unsatisfactory.”<sup>139</sup>

The most notable characteristic of the Statute of Anne is that it placed limits on the term of the copyright.<sup>140</sup> Shortly after the passage of the Statute of Anne, the Stationers’ Company’s behavior demonstrates no discernable difference in the law.<sup>141</sup> But, by 1731, the copyrights that existed before 1710 approached expiration.<sup>142</sup> In response, the Stationers’ Company sought expansion of the copyright term in Parliament into perpetuity.<sup>143</sup>

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a petition before Parliament in 1710 “arguing that in [the Licensing Act’s] absence those booksellers who legally buy their copies are ruined by the pirates who do not”); Daniel DeFoe, *An Essay on the Regulation of the Press* (1704), available at <http://www.luminarium.org/renascence-editions/defoe2.html> (discussing “a certain sort of Thieving which is now in full practice in England, and which no Law extends to punish, viz. some Printers and Booksellers printing Copies none of their own”).

132. Alastair J. Mann, “A Mongrel of Early Modern Copyright”: *Scotland in European Perspective*, in *PRIVILEGE AND PROPERTY: ESSAYS ON THE HISTORY OF COPYRIGHT* 51, 55, 57 (Ronan Deazley, Martin Kretschmer & Lionel Bently eds., 2010).

133. GANTZ & ROCHESTER, *supra* note 126, at 34.

134. See PATTERSON, *supra* note 117, at 140–41.

135. See 15 H.C. JOUR. (1707) 313 (Eng.). Facially, confusion exists as to the date of the bill’s introduction. Compare JOHN FEATHER, *PUBLISHING, PIRACY, AND POLITICS: AN HISTORICAL STUDY OF COPYRIGHT IN BRITAIN* 56 (1994) (placing the bill in February 1707), with PATTERSON, *supra* note 117, at 142 (identifying the date as February 26, 1706 (O.S.)). This discrepancy arises from British use of the Julian calendar through 1752. See *The 1752 Calendar Change*, CONN. ST. LIBR. (Sept. 2008), <http://www.cslib.org/CalendarChange.htm>. Where applicable, this Note attempts to modernize the dates in adherence with the Gregorian calendar.

136. See PATTERSON, *supra* note 117, at 142.

137. An Act for the Encouragement of Learning by Vesting the Copies of Printed Books in the Authors or Purchasers of Such Copies, 8 Ann., c. 19 (1710) (Eng.); see GANTZ & ROCHESTER, *supra* note 126, at 35.

138. See FEATHER, *supra* note 135, at 62.

139. See *id.* at 64.

140. See GANTZ & ROCHESTER, *supra* note 126, at 35.

141. See FEATHER, *supra* note 135, at 67–68; PATTERSON, *supra* note 117, at 152.

142. See FEATHER, *supra* note 135, at 68.

143. See PATTERSON, *supra* note 117, at 154–58.

When this failed, the Stationers' Company turned to the courts.<sup>144</sup> The Stationers' Company's attempt to protect the copyrights expiring under the Statute of Anne did not seek an extension of limits, but rather aimed to establish a perpetual copyright.<sup>145</sup> In order to do so, their "principal weapon" was the idea of the common law copyright.<sup>146</sup> This idea asserted that copyright is, in its essence, the author's natural right.<sup>147</sup>

In 1769, the King's Bench ruled, in *Millar v. Taylor*,<sup>148</sup> that a common law copyright did exist.<sup>149</sup> However, *Millar* did not last long as precedent.<sup>150</sup> After the decision in *Millar*, a Scottish bookseller named Alexander Donaldson purposely reprinted the same work in dispute in *Millar*.<sup>151</sup> In response, the copyright holders brought an action for an injunction.<sup>152</sup> The House of Lords, in *Donaldson v. Beckett*,<sup>153</sup> held that the Statute of Anne destroyed and replaced the author's common law right to the sole printing, publishing, and vending of his works.<sup>154</sup> As a result, the *Donaldson* case ended the printers' claim to perpetual monopoly.<sup>155</sup> The *Donaldson* case's view of copyright as limited in term was the view received into the fledgling United States of America just a few years later.<sup>156</sup>

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144. *See id.* at 158.

145. *See id.* at 153.

146. *See id.*

147. *See id.*

148. (1769) 98 Eng. Rep. 201 (K.B.).

149. *Id.* at 256–57; *see* ISABELLA ALEXANDER, COPYRIGHT LAW AND THE PUBLIC INTEREST IN THE NINETEENTH CENTURY 30 (2010).

150. *See* ALEXANDER, *supra* note 149, at 30; PATTERSON, *supra* note 117, at 172 ("*Millar v. Taylor* . . . lasted as a precedent for only five years.>").

151. *See* ADRIAN JOHNS, PIRACY: THE INTELLECTUAL PROPERTY WARS FROM GUTENBERG TO GATES 123 (2009) (referring to Donaldson's choice as a "calculated decision"); *see also* *Donaldson v. Beckett*, (1774) 1 Eng. Rep. 837 (H.L.) 838.

152. *See* JOHNS, *supra* note 151, at 124.

153. (1774) 1 Eng. Rep. 837 (H.L.) 838.

154. *See* 17 PARL. HIST. ENG. (1774) 953, 1003; PATTERSON, *supra* note 117, at 174 ("The actual holding of the *Donaldson* case is that the author's common-law right to the sole printing, publishing, and vending of his works, a right which he could assign in perpetuity, is taken away and supplanted by the Statute of Anne.>").

155. *See* PATTERSON, *supra* note 117, at 178 (noting that "the *Donaldson* case was widely approved at the time of its rendering, except by the few monopolists whom it affected directly" and discussing these monopolists' plea to Parliament for relief, just six days after the decision in *Donaldson*, "contending that in reliance on the *Millar* case they had invested thousands of pounds in the purchase of old copyrights not protected by statute"); *see also* 17 PARL. HIST. ENG. (1774) 1078.

156. *See* PATTERSON, *supra* note 117, at 179; *see also* U.S. CONST. art. I, § 8, cl. 8 ("The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times . . . Authors and Inventors the exclusive Right to their respective Writings and Discoveries.>").

## 2. The American Version: Balancing Public Access and Control from the Outset

The American response to the printing press, like much of American jurisprudence, mirrors that of England in many respects. In 1638, the first printing press arrived in Cambridge, Massachusetts.<sup>157</sup> Like England, authorities in Massachusetts treated the press as requiring supervision and suppression.<sup>158</sup> However, these authorities also viewed the press as a public utility, and this view balanced the need to regulate.<sup>159</sup> As a result, “[t]hroughout the colonial period . . . the press was seen as an important but dangerous public resource to be encouraged and used by the government, but also to be restricted and regulated.”<sup>160</sup>

On September 5, 1787, during the Constitutional Convention, a committee submitted a proposal reflecting this concern of balancing access and control: “To promote the progress of science and the useful arts, by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries.”<sup>161</sup> The delegates adopted this clause without debate.<sup>162</sup>

On May 31, 1790, the First Congress passed the first federal copyright act.<sup>163</sup> The title of this act again highlights the balance between access and control<sup>164</sup>: “An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned.”<sup>165</sup>

In 1834, *Wheaton v. Peters*,<sup>166</sup> the first landmark copyright case in the United States came before the Supreme Court.<sup>167</sup> Henry Wheaton authored twelve United States Supreme Court reporters, known as *Wheaton’s Reports* between 1816 and 1827.<sup>168</sup> In June 1828, Wheaton’s successor,

157. See Oren Bracha, *Early American Printing Privileges. The Ambivalent Origins of Authors’ Copyright in America*, in PRIVILEGE AND PROPERTY, *supra* note 132, at 89, 91.

158. See *id.* at 92.

159. See *id.* (“The Massachusetts authorities perceived the importance of the press to both the authority of civil government and the religious and intellectual mission of the colony’s elite. . . . Alongside its public utility, the press could also be a dangerous catalyst of civil and religious dissent and unrest.”).

160. See *id.* at 95–96.

161. JONATHAN ELLIOT, DEBATES ON THE ADOPTION OF THE FEDERAL CONSTITUTION IN THE CONVENTION HELD AT PHILADELPHIA IN 1787, at 510–11 (1845).

162. See *id.* at 512.

163. See PATTERSON, *supra* note 117, at 197; see also Act of May 31, 1790, ch. 15, 1 Stat. 124.

164. See *supra* notes 35–37 and accompanying text.

165. Act of May 31, 1790, ch. 15, 1 Stat. 124; see PATTERSON, *supra* note 117, at 197.

166. 33 U.S. (8 Pet.) 591 (1834).

167. BENJAMIN W. RUDD, NOTABLE DATES IN AMERICAN COPYRIGHT, 1783–1969, at 138, available at <http://www.copyright.gov/history/dates.pdf>. There are only two decisions in American jurisprudence pertaining to copyright during the period from 1790 to 1834: *Nichols v. Ruggles*, 3 Day 145 (Conn. 1808), and *Ewer v. Coxe*, 8 F. Cas. 917 (C.C.E.D. Pa. 1824) (No. 4584), each dealing with the technical requirements of the 1790 Act. See PATTERSON, *supra* note 117, at 207 n.15.

168. See *id.* at 593.

Richard Peters, circulated a letter proposing to replace the twenty-five volumes previously published by Alexander Dallas, William Cranch, and Wheaton with six volumes at one-fifth of their cost.<sup>169</sup> In May 1831, after Peters published his third volume (and the first to contain *Wheaton's Reports*), Wheaton filed a bill in the Circuit Court for the Eastern District of Pennsylvania seeking an injunction and accounting against Peters.<sup>170</sup>

In 1834, the case came before the Supreme Court upon the circuit court's dissolution of the injunction and dismissal of the bill.<sup>171</sup> Wheaton claimed a copyright under both the common law and the Copyright Act.<sup>172</sup> Justice John McLean, writing for the Court, adopted the position that no common law copyright existed in the United States.<sup>173</sup> First, the Court observed that there was no federal common law.<sup>174</sup> Accordingly, any asserted common law right must arise from the state in which the controversy originated.<sup>175</sup> For this reason, the Court examined whether the state of Pennsylvania, where *Wheaton's Reports* was first published, had adopted English common law copyright (assuming one existed).<sup>176</sup> Despite modern evidence to the contrary,<sup>177</sup> the Court took the view that English judicial history of author's literary property began in 1760.<sup>178</sup> With this date in mind, the Court found no common law copyright existed "when the colony of Penn was organized"<sup>179</sup> and that the controversy over the existence of a common law copyright did not arise until "[l]ong afterwards."<sup>180</sup>

The majority found a close parsing of the language used in Article 1, Section 8 of the Constitution, and the Copyright Act of 1790 even more conclusive.<sup>181</sup> The Court rejected the argument that "secure" as used in the Article 1, Section 8 of the Constitution meant "to preserve," because the founders referred to "securing" a right to both authors and inventors.<sup>182</sup> Based on this phrasing, "secure" must mean a future right because no one

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169. See PATTERSON, *supra* note 117, at 203–04.

170. See *Wheaton v. Peters*, 29 F. Cas. 862 (C.C.E.D. Pa. 1832) (No. 17,486).

171. See *id.* at 872; see also *Wheaton*, 33 U.S. at 591, 592.

172. See *Wheaton*, 33 U.S. at 596–617.

173. See *id.* at 661. Only six justices sat in decision over the *Wheaton* case: Chief Justice John Marshall, and Associate Justices Henry Baldwin, Gabriel Duval, John McLean, Joseph Story, and Smith Thompson. See FREDERICK C. HICKS, *MEN AND BOOKS FAMOUS IN THE LAW* 209 (1921).

174. See *Wheaton*, 33 U.S. at 657 ("It is clear, there can be no common law of the United States. The federal government is composed of twenty-four sovereign and independent states; each of which may have its local usages, customs and common law.").

175. See *id.*

176. See *id.* at 658–59.

177. See *supra* notes 117–47 and accompanying text.

178. See *Wheaton*, 33 U.S. at 658.

179. *Id.* at 660. King Charles II granted Pennsylvania to William Penn as payment for a debt of £16,000 owed to his father Admiral Sir William Penn on March 4, 1681. See *The Quaker Province: 1681–1776*, PA. GEN. ASSEMBLY, [http://www.legis.state.pa.us/wu01/vc/visitor\\_info/pa\\_history/II.htm](http://www.legis.state.pa.us/wu01/vc/visitor_info/pa_history/II.htm) (last visited Feb. 15, 2013).

180. See *Wheaton*, 33 U.S. at 660.

181. See *id.* at 661.

182. See *id.*

ever “pretended . . . in this country or in England, that an inventor has a perpetual right, at common law, to sell the thing invented.”<sup>183</sup>

Similarly, the Court found that Congress was referring to a future right in the Copyright Act of 1790 by its use of the language “shall have the sole right and liberty of printing.”<sup>184</sup> From this reasoning, the Court concluded that in order to secure his right, Wheaton must have strictly complied with all of the requirements of the Copyright Act in order to obtain the copyright.<sup>185</sup> Because the record failed to disclose whether Wheaton complied with these requirements, the order to dissolve the injunction was vacated and the case was remanded.<sup>186</sup>

By holding as it did, the Court incorporated the philosophy espoused in *Donaldson* into American law: an author’s copyright is a statutory grant of monopoly limited in duration “in derogation of the rights of the public.”<sup>187</sup> A limited copyright, however, is important to provide an incentive to create and must not always yield to public access.<sup>188</sup>

Nearly twenty years after *Wheaton*, the Court faced a new question: Are copyright and property rights separate? In *Stephens v. Cady*<sup>189</sup> and *Stevens v. Gladding*,<sup>190</sup> the Court answered this question in the affirmative.<sup>191</sup> Both *Cady* and *Gladding* involved the same petitioner and arose from the same set of facts. The petitioner, James Stevens, registered the copyright to a map of Rhode Island that he engraved onto a copperplate on April 23, 1831.<sup>192</sup> The defendant in *Cady*, Isaac Cady, purchased this copperplate for \$245 under a sale on an execution from a judgment against Stevens.<sup>193</sup> The defendants in *Gladding*, Royal Gladding and Isaac T. Proud, sold maps that Cady printed from the copperplate.<sup>194</sup> Stevens asserted that, by doing so, the defendants violated his copyright, which was separate from the property right in the copperplate.<sup>195</sup>

In *Cady*, the defendant did not follow the appeal into the Court.<sup>196</sup> As a result, the Court did not receive any arguments for sustaining the lower court’s dismissal of Stevens’s complaint.<sup>197</sup> In *Gladding*, the defendants argued that whenever a copyright owner creates a plate that is incapable of

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183. *Id.*

184. *Id.* (internal quotation marks omitted).

185. *See id.* at 667.

186. *See id.* at 667–68.

187. Howard B. Abrams, *The Historic Foundation of American Copyright Law: Exploding the Myth of Common Law Copyright*, 29 WAYNE L. REV. 1119, 1185 (1983).

188. *See supra* notes 131–35 and accompanying text (describing the rise of piracy in the absence of copyright protection and the negative effect of piracy on creator incentive).

189. 55 U.S. (14 How.) 528 (1852).

190. 58 U.S. (17 How.) 447 (1854).

191. *See id.* at 453; *Cady*, 55 U.S. at 532.

192. *See Gladding*, 58 U.S. at 450; *Cady*, 55 U.S. at 529.

193. *See Gladding*, 58 U.S. at 450; *Cady*, 55 U.S. at 529.

194. *See Gladding*, 58 U.S. at 450.

195. *See id.*

196. *See Cady*, 55 U.S. at 530.

197. *See id.*

beneficial use beyond printing his map, “he thereby annexes to the plate the right to use it for printing that map, and also the right to publish and sell the copies when printed.”<sup>198</sup>

In *Cady*, Justice Samuel Nelson delivered the opinion of the Court.<sup>199</sup> The Court cited to *Millar*, observing that copyright includes “an incorporeal right to print and publish the map.”<sup>200</sup> In essence, the Court reasoned that to find that the copyright inhered in the property right “would be saying . . . that the exclusive right to make any given work of art necessarily belonged to the person who happened to become the owner of the tools with which it was made.”<sup>201</sup> As a result, the Court reversed the decree below.<sup>202</sup>

In *Gladding*, Justice Benjamin R. Curtis delivered the opinion of the Court, adding to the decision in *Cady*.<sup>203</sup> The Court found that selling a copperplate transfers the right to lawfully use it “but not the right to a use thereof, by reason of the ownership of something else which he has not bought, and which belongs to a third person.”<sup>204</sup> Because the copyright existed distinctly and independently from the property right, by grant from the federal government, it is not annexed to the property “either by the act of its owner or by operation of law.”<sup>205</sup> Therefore, the Court reversed the decree of the court below.<sup>206</sup>

With copyright and property rights firmly defined as separate, copyright owners sought to gain greater control over the copies they produced. Just over fifty years after *Cady* and *Gladding*, the Court considered whether a copyright permits the holder to restrict resale of the copies she produced.

In *Bobbs-Merrill Co.*, Bobbs-Merrill Co. owned the copyright for a book entitled *The Castaway*.<sup>207</sup> In copies of the book, Bobbs-Merrill printed the following notice, immediately below the copyright notice: ““The price of this book at retail is one dollar net. No dealer is licensed to sell it at a less price, and a sale at a less price will be treated as an infringement of the copyright.””<sup>208</sup>

The defendants, Isidor and Nathan Straus, partners at R. H. Macy & Co., purchased copies of the book for retail sale.<sup>209</sup> Macy’s purchased 90 percent of the copies at a wholesale price, about 40 percent below retail.<sup>210</sup> Macy’s purchased the remaining 10 percent at full retail price.<sup>211</sup> Both the

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198. See *Gladding*, 58 U.S. at 450.

199. See *Cady*, 55 U.S. at 529.

200. *Cady*, 55 U.S. at 530; see *Millar v. Taylor*, (1769) 98 Eng. Rep. 201 (K.B.) 251 (The copy is “a property in notion, and has no corporeal tangible substance.”).

201. *Cady*, 55 U.S. at 530.

202. See *id.* at 532.

203. See *Gladding*, 58 U.S. at 450.

204. *Id.* at 453.

205. *Id.*

206. See *id.* at 455.

207. *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 341 (1908).

208. *Id.*

209. See *id.*

210. See *id.* at 341–42.

211. See *id.* at 342.

defendants and the wholesale dealers knew that *The Castaway* was copyrighted.<sup>212</sup> Nevertheless, Bobbs-Merrill and the wholesale dealers had no agreement to restrict the wholesalers' sales to retailers who would observe the terms of the notice.<sup>213</sup> As a result, Macy's sold copies of the book for eighty-nine cents each without Bobbs-Merrill's consent.<sup>214</sup>

Bobbs-Merrill asserted that because the Copyright Act vested it with the sole right to "vend," the Copyright Act permitted Bobbs-Merrill to restrict future sales.<sup>215</sup> Justice William R. Day wrote the opinion for the Court.<sup>216</sup> The Court turned first to precedent, citing *Wheaton* to confirm that the published works' copyright originated solely from statute.<sup>217</sup> Next, the Court cited *Cady* to establish that "the main purpose" of the Copyright Act of 1790 and its successive amending statutes was to "secure the author the right to multiply copies of his work."<sup>218</sup>

With this historical backdrop in mind, the Court turned to a close parsing of the language of the statute, focusing on three sections: §§ 4952, 4965, and 4970.<sup>219</sup> The Court determined that the right to vend was of primary importance to achieving the statute's main purpose of securing the sole right to multiply copies of the work to the copyright holder.<sup>220</sup> However, the copyright owner exhausted her right to vend upon completion of the first sale.<sup>221</sup> Any reading of the statute that extended the right to vend to a right to control future sales "extend[ed the statute's] operation, by construction, beyond its meaning."<sup>222</sup> Accordingly, the Court affirmed the lower court's decree dismissing Bobbs-Merrill's complaint.<sup>223</sup>

Shortly after the Supreme Court's decision in *Bobbs-Merrill Co.*, Congress embraced the holding in its 1909 revision of the Copyright Act, which provided that "nothing in this Act shall be deemed to forbid, prevent, or restrict the transfer of any copy of a copyrighted work the possession of which has been lawfully obtained."<sup>224</sup> In fact, through the first seventy-five years after its codification, neither Congress nor the courts sought to alter the first sale doctrine in any meaningful way.<sup>225</sup>

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212. *See id.*

213. *See id.*

214. *See id.*

215. *See id.* at 343.

216. *See id.* at 341.

217. *See id.* at 346.

218. *Id.* at 347 (citing *Stephens v. Cady*, 55 U.S. (14 How.) 528, 530 (1852)).

219. *See id.* at 348.

220. *See id.* at 350–51.

221. *See id.* at 351.

222. *Id.*

223. *See id.*

224. Copyright Act of 1909, ch. 320, § 41, 35 Stat. 1075, 1084 (codified as amended at 17 U.S.C. § 109(a) (2006)).

225. *See* Perzanowski & Schultz, *supra* note 40, at 909 n.96 (noting that "[t]he next major revision"—the Copyright Act of 1976—simply clarified that first sale doctrine protection extended only to those copies created under the copyright holder's authority).

### 3. New Media, New Battles Between Access and Control, and the Legislative-Judicial Divide: *Betamax* and the Record Rental Amendment

During the first seventy-five years after the codification of the first sale doctrine, media consumption remained relatively static. Television broadcasted programs and theaters showed movies,<sup>226</sup> radio played music and people listened to audio recordings on vinyl records,<sup>227</sup> and people read paperback and hardcover books.<sup>228</sup>

In fact, despite the introduction of the audiocassette in the 1960s, home taping did not become popular until the late 1970s. At that time, cassette quality increased, Sony released its portable cassette player (the Walkman), and automobile sound systems converted from 8-track tape (a playback-only medium) to audiocassette.<sup>229</sup> Also around this time, the videocassette recorder, like Sony's Betamax and JVC's VHS, became affordable for the average customer.<sup>230</sup>

As access to these media and technology grew, so did the potential for piracy and concern over copyright holders' inadequate control. In June 1980, the first commercial record rental operation opened in Japan.<sup>231</sup> In September 1981, the first U.S. rental record shop, Rent-A-Record, opened in Providence, Rhode Island.<sup>232</sup> These shops spread quickly with more than 250 opening in the United States by April 1983.<sup>233</sup> Often, the rental record shops provided blank audiocassette tapes at deep discounts or even free with record rentals.<sup>234</sup> In Japan, the Japan Phonograph Record Association blamed the proliferation of record rental shops for the first drop in record sales in twenty-five years.<sup>235</sup>

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226. See, e.g., *Golden Age, 1930's through 1950's*, FCC (Nov. 21, 2005), <http://transition.fcc.gov/omd/history/tv/1930-1959.html>; *Wired, Zapped, and Beamed, 1960's Through 1980's*, FCC (Nov. 21, 2005), <http://transition.fcc.gov/omd/history/tv/1960-1989.html>.

227. See, e.g., David H. Horowitz, *The Record Rental Amendment of 1984: A Case Study in the Effort To Adapt Copyright Law to New Technology*, 12 COLUM.-VLA J.L. & ARTS 31, 42-43 (1987); *The Ideas that Made Radio Possible*, FCC (Nov. 21, 2005), <http://transition.fcc.gov/omd/history/radio/ideas.html>.

228. See, e.g., Anne Trubek, *How the Paperback Novel Changed Popular Literature*, SMITHSONIAN (Mar. 31, 2010), <http://www.smithsonianmag.com/arts-culture/How-the-Paperback-Novel-Changed-Popular-Literature.html>.

229. See Horowitz, *supra* note 227, at 42-43.

230. See *50 Years of the Video Cassette Recorder*, WIPO MAG. (World Intellectual Prop. Org., Geneva, Switz.), Nov. 2006, at 8, 8-9, available at [http://www.wipo.int/wipo\\_magazine/en/pdf/2006/wipo\\_pub\\_121\\_2006\\_06.pdf](http://www.wipo.int/wipo_magazine/en/pdf/2006/wipo_pub_121_2006_06.pdf).

231. See *Audio and Video Rental: Hearing on S. 32 and S. 33 Before the Subcomm. on Patents, Copyrights and Trademarks of the S. Comm. on the Judiciary*, 98th Cong. 238 (1983) [hereinafter *Rental Hearing*] (joint statement of AGAC/The Songwriters Guild, The National Association of Recording Merchandisers, The National Music Publishers' Association, and the Record Industry Association of America). By February 1983, more than 1600 rental shops opened in Japan. See *id.*

232. Irv Lichtman, *Rent-A-Record Bows Unit in U.S.*, BILLBOARD, Sept. 19, 1981, at 3, 3.

233. See *Rental Hearing*, *supra* note 231, at 238.

234. See *id.* at 239-43.

235. See Shig Fujita, *Japanese Disk Production Off: Rental Blamed*, BILLBOARD, Feb. 27, 1982, at 1, 1.



Also in 1983, the music industry braced for what was then heralded as “the biggest phenomenon . . . since stereo was introduced”: the compact disc.<sup>236</sup> At the time, music industry commentators viewed the compact disc to be “virtually indestructible. Scratch them, walk on them, play them as many times as you like and they lose none of their quality.”<sup>237</sup>

In response to these burgeoning developments, the Copyright Act of 1976 seemingly offered no protection for the copyright holder. Section 106 granted the copyright holder the exclusive right of reproduction and distribution.<sup>238</sup> However, the first sale doctrine limited § 106: “the owner of a particular copy or phonorecord lawfully made under this title . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”<sup>239</sup> Under this statutory provision, the copyright holder could prevent a record rental store from actively making copies, but it could not prevent a record rental store from simply renting records while consumers made copies privately.<sup>240</sup>

As a result, Congress passed the Record Rental Amendment of 1984.<sup>241</sup> This amendment added a new subsection to the codification of the first sale doctrine, 17 U.S.C. § 109(b), excepting commercial “rental, lease, or lending” from the rights of a phonorecord owner under the first sale doctrine.<sup>242</sup>

In 1992, Congress passed similar legislation entitled the Audio Home Recording Act<sup>243</sup> (AHRA) in response to another new technology: digital audiotape (DAT). This legislation broadly defines a “digital audio copied recording” to include “a reproduction in a digital recording format of a digital musical recording, whether that reproduction is made directly from another digital musical recording or indirectly from a transmission.”<sup>244</sup> In addition, the AHRA permitted limited copying through the use of a Serial

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236. Craig Unger, *The Compact Discs: Hearing Is Believing*, N.Y. MAG., Apr. 4, 1983, at 55, 56.

237. *Id.*

238. See Horowitz, *supra* note 227, at 34 (citing 17 U.S.C. § 106(1), (3) (1982)).

239. See *id.* (quoting 17 U.S.C. § 109(a) (1982)).

240. See *id.* at 34–35; see also, e.g., *Elektra Records v. Gem Elec. Distribs.*, 360 F. Supp. 821, 823 (E.D.N.Y. 1973) (holding that a store owner’s practice of lending an album to a patron to make a copy on recording equipment in the store constituted “commercial exploitation by [the store owners] for profit in derogation of [the copyright holders’] rights of exclusive publication.”).

241. Pub. L. No. 98-450, 98 Stat. 1727 (codified as amended at 17 U.S.C. § 109(b) (2006)).

242. See § 2(2), 98 Stat. at 1727 (“Notwithstanding the provisions of subsection (a), unless authorized by the owners of copyright in the sound recording and in the musical works embodied therein, the owner of a particular phonorecord may not, for purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending.”).

243. Pub. L. No. 102-563, 106 Stat. 4237 (codified as amended at 17 U.S.C. §§ 1001–1010 (2006)).

244. 17 U.S.C. § 1001(1) (2006).

Copying Management System.<sup>245</sup> The Serial Copying Management System permits copying from a legally purchased copy (i.e., first generation copying), but not from copies made from the legally purchased copy (i.e., second generation copying).<sup>246</sup> However, subsequent interpretation has limited the scope of AHRA to DAT format.<sup>247</sup>

While Congress considered how to balance public access with copyright holder control in audiocassettes, the judiciary tackled the same problem in videocassettes.<sup>248</sup> This judicial review culminated in *Sony Corp. of America v. Universal City Studios, Inc. (Betamax)*.<sup>249</sup>

In *Betamax*, Universal Studios and Walt Disney Productions sought to hold Sony liable for copyright infringement because “some individuals had used Betamax video tape recorders . . . to record some of [Universal and Walt Disney]’s copyrighted works which had been exhibited on commercially sponsored television.”<sup>250</sup> Justice John Paul Stevens wrote the opinion of the Court, from which four justices dissented.<sup>251</sup>

The *Betamax* Court found that the evidence supported the idea that the majority of VCR users utilized the recording technology for time-shifting purposes (i.e., users would record a program in order to view it once at a different time).<sup>252</sup> When considering whether this use infringed on Universal and Walt Disney’s copyrights, the Court stated it “must be circumspect in construing the scope of rights created by a legislative enactment which never contemplated such a calculus of interests.”<sup>253</sup> In so doing, it focused on “[t]he sole interest of the United States and the primary object in conferring the [limited copyright] monopoly,” which it identified

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245. See *id.* §§ 1001(11), 1002(a); see also June M. Besek, *Anti-circumvention Laws and Copyright: A Report from the Kernochan Center for Law, Media and the Arts*, 27 COLUM. J.L. & ARTS 385, 437 (2004).

246. See 17 U.S.C. §§ 1001(11), 1002(a); see also Besek, *supra* note 245, at 437.

247. See Kenneth Long, *The RIAA’s Case Against Ripping CDs: When Enough Is Enough*, 11 HOUS. BUS. & TAX L.J. 173, 188 (2011); see also Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1078–79 (9th Cir. 1999) (observing that the AHRA does not govern computers or MP3 players); Kimberly D. Simon, *Establishing Accountability on the Digital Frontier: Liability for Third Party Copyright Infringement Extends to Manufacturers of Audio Compression Software*, 52 SYRACUSE L. REV. 921, 931–36 (2002) (summarizing cases finding that the AHRA is limited to DAT technology). For a concise explanation of DAT technology, see Taro J. Kawamura, *Digital Audio Tape Technology: A Formidable Challenge to the American Copyright System*, 4 AM. U.J. INT’L L. & POL’Y 409, 409 n.1 (1989).

248. See Horowitz, *supra* note 227, at 38–39 (“In the late 1970s and early 1980s, the copyright issues presented by the new home videocassette recorder (“VCR”) were being tested, not in Congress, but in the courts.”).

249. 464 U.S. 417 (1984).

250. See *id.* at 420.

251. Justice Harry A. Blackmun wrote the dissenting opinion and was joined by Justices Thurgood Marshall, Lewis F. Powell, and William H. Rehnquist. See *id.* at 457 (Blackmun, J., dissenting).

252. See *id.* at 423 (majority opinion).

253. *Id.* at 431.

as “the general benefits derived by the public from the labors of authors.”<sup>254</sup> With these principles in mind, the Court determined that private, time-shifting use of VCR technology constituted fair use under 17 U.S.C. § 107.<sup>255</sup>

Although *Betamax* does not expressly implicate the first sale doctrine, its contemporaneity undoubtedly influenced the scope of the rental right.<sup>256</sup> Perhaps ironically, the Supreme Court’s opinion in *Betamax* likely excluded motion pictures from the Record Rental Amendment.<sup>257</sup> However, it is important to note that the underlying technology involved in *Betamax* and the Rental Amendment are different in two significant respects: (1) the quality of the resultant copy; and (2) the costs associated with making that copy.<sup>258</sup> Music and software copying allow for pristine, near perfect replication at relatively small cost.<sup>259</sup> By contrast, televised motion pictures include commercial interruptions.<sup>260</sup> Even with the ability to pause a recording during commercial breaks, or fast-forward past commercials, some motion picture content may be edited for televised broadcast.<sup>261</sup>

Because the copyright holder’s “private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the

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254. *See id.* at 432 (quoting *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932)) (internal quotation marks omitted).

255. *See id.* at 454–55.

256. *See* Horowitz, *supra* note 227, at 43 (“Almost immediately [after the Ninth Circuit’s decision in *Betamax*], a flurry of bills were introduced in Congress to overrule the court’s decision by exempting home video recording from copyright infringement.”).

257. *See id.* at 43–46 (discussing two bills introduced in December 1981 proposing both compulsory licensing for home videotaping and amendments to the first sale doctrine that would give the copyright holder control over commercial videotape and audio recording rentals, but noting that when “the Supreme Court granted certiorari in the *Betamax* case . . . the momentum behind [these] bills died. It was clear that Congress was not going to deal with home videotaping if the Supreme Court might ultimately make it unnecessary for it to confront the issue at all.”).

258. *See Betamax*, 464 U.S. at 423 n.3 (quoting *Universal City Studios, Inc. v. Sony Corp.*, 480 F. Supp. 429, 436–37 (1979)) (“As evidence of how a [VCR] may be used, respondents offered the testimony of William Griffiths. . . . ‘He owns approximately 100 tapes. When Griffiths bought his Betamax, he intended not only to time-shift . . . but also to build a library of cassettes. Maintaining a library, however, proved too expensive, and he is now erasing some earlier tapes and reusing them.’”); Horowitz, *supra* note 227, at 41 n.48 (“In contrast to home audio cassette equipment, which enables the user to make tapes from LPs and cassettes (as well as off-the-air), VCRs in use [in 1987] in the United States d[id] not enable the user to make tapes from prerecorded cassettes. . . . ‘Dual cavity’ VCRs were introduced . . . by two Japanese manufacturers, but were later withdrawn from the market. This might have been to avoid a suit for contributory infringement under the test set forth in the Supreme Court decision in *Betamax* . . .” (citation omitted)).

259. *See* U.S. COPYRIGHT OFFICE, THE COMPUTER SOFTWARE RENTAL AMENDMENTS ACT OF 1990: THE NONPROFIT LIBRARY LENDING EXEMPTION TO THE “RENTAL RIGHT” 4 (1994) (“Perfect copies of software could be easily and cheaply duplicated.”); David Ladd, *Home Recording and Reproduction of Protected Works*, 68 A.B.A. J. 42, 42 (1982) (“[T]he same [home audio and video] reproduction devices once used only by the copyright owner are now widely owned.”).

260. *See, e.g., Gilliam v. Am. Broad. Cos.*, 538 F.2d 14, 18 (2d Cir. 1976) (stating that ABC edited certain Monty Python programs in part “to make time for commercials”).

261. *See id.*

other arts,”<sup>262</sup> the resulting effects on how these works are made available to the public may influence whether one believes a content-based solution (*Betamax*), a legislative solution (the Record Rental Amendment), or some combination most effectively achieves these goals.

### C. *The Evolution of Copyright Law into the Digital Domain*

In 2001, the U.S. Copyright Office concisely identified the difference between physical and digital copies: “Physical copies of works degrade with time and use, making used copies less desirable than new ones. Digital information does not degrade, and can be reproduced perfectly on a recipient’s computer.”<sup>263</sup> Despite this distinction, the development of digital property followed a very similar path to that of physical property from Caxton’s introduction of the printing press through *Bobbs-Merrill Co.*<sup>264</sup> But, in 1998, when Congress faced the first sale question in regard to digital property, it decided to wait to address the issue.<sup>265</sup>

#### 1. The Distinctly Physical Origin of Digital Property

While working on the 1880 U.S. Census, twenty-year old engineer Herman Hollerith became interested in automating the process of tabulating data.<sup>266</sup> By 1889, Hollerith invented technology consisting of punch cards and readers to tally results. With this technology, Hollerith won a contract to tabulate the 1890 Census.<sup>267</sup>

Instead of selling the equipment to the U.S. Census Bureau, Hollerith chose to lease it.<sup>268</sup> The technology proved successful, finishing in two and a half years a tally that previously took seven years to complete.<sup>269</sup> Hollerith’s technology performed other countries’ censuses and large firms’

262. *Betamax*, 464 U.S. at 432 (quoting *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932)) (internal quotation marks omitted).

263. U.S. COPYRIGHT OFFICE, DMCA SECTION 104 REPORT 82 (Aug. 2001), available at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf>; see also *Arguments Before the Comm. on Patents of the H.R. on H.R. 11943 To Amend Title 60, Chapter 3, of the Revised Statutes of the U. S. Relating to Copyrights*, 59th Cong. (1906) (statement of Arthur W. Tams, Owner, Music Library), reprinted in 4 LEGISLATIVE HISTORY OF THE 1909 COPYRIGHT ACT pt. F, at 10 (E. Fulton Brylawski & Abe Goldman eds., 1976) (discussing the performance right but noting that the music books in question were “printed on very bad paper, and [they] will not stand more than two years’ handling.”).

264. See *supra* Part I.B.1–2.

265. See U.S. COPYRIGHT OFFICE, *supra* note 263, at 2 (characterizing a report focusing in part on the first sale doctrine as “an outgrowth of proposals that were made contemporaneously with the consideration of the DMCA, but were not adopted in the law”).

266. See Emerson W. Pugh, *Origins of Software Bundling*, 24 IEEE ANNALS OF THE HIST. OF COMPUTING (Inst. Elec. & Elecs. Eng’rs, D.C.), Jan.–Mar. 2002, at 57, 57–58; see also JONATHAN ZITTRAIN, *THE FUTURE OF THE INTERNET—AND HOW TO STOP IT* 11 (2008).

267. See Frank da Cruz, *Herman Hollerith*, COLUM. UNIV. (Mar. 28, 2011, 10:38 AM), <http://www.columbia.edu/cu/computinghistory/hollerith.html>.

268. See ZITTRAIN, *supra* note 266, at 11; Pugh, *supra* note 266, at 58.

269. See ZITTRAIN, *supra* note 266, at 11.

payroll, inventory, and billing.<sup>270</sup> Hollerith continued to rent rather than sell the equipment.<sup>271</sup> Like London's Royal Stationers' Company of the fifteenth and sixteenth centuries,<sup>272</sup> Hollerith's choice to lease gave him control over the ongoing computing processes of his clients.<sup>273</sup>

By the 1960s, the company, now called International Business Machines (IBM), dominated the business computing industry.<sup>274</sup> IBM's computers were general processing units, meaning that they could easily be repurposed with new software to perform other tasks.<sup>275</sup> However, as a result of IBM's licensing system, no third-party software industry existed.<sup>276</sup> Instead, IBM sold its hardware and software bundled together as part of a "convenient one-stop-shopping approach to business computing."<sup>277</sup>

In 1969, under threat of an antitrust suit from its competitors, IBM unbundled its hardware from its software.<sup>278</sup> After the unbundling, the personal computer gained popularity.<sup>279</sup> In 1977, Apple introduced the Apple II Personal Computer.<sup>280</sup> Unlike IBM's customized machines, the Apple II was a blank slate.<sup>281</sup> Owners could program the machines themselves or, more commonly, could load software written and then shared or sold by programmers.<sup>282</sup>

In 1979, Software Arts released VisiCalc, the first digital spreadsheet software.<sup>283</sup> VisiCalc sales were significant enough that many dealers started to bundle the Apple II with VisiCalc.<sup>284</sup> VisiCalc's success helped vault Apple's sales into the tens of thousands simply because businesses wanted to use the digital spreadsheet.<sup>285</sup> By 1983, IBM and another software developer, Lotus, caught up and surpassed the Apple II and

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270. See William R. Aul, *Herman Hollerith: Data Processing Pioneer*, THINK (Int'l Bus. Machs., Armonk, N.Y.), Nov. 1972, at 22, 22, available at [http://www-03.ibm.com/ibm/history/exhibits/builders/builders\\_hollerith.html](http://www-03.ibm.com/ibm/history/exhibits/builders/builders_hollerith.html).

271. See *id.*

272. See *supra* notes 126–28 and accompanying text.

273. See ZITTRAIN, *supra* note 266, at 11. A notable difference is that the Stationers' Company operated under government charter while Hollerith's control resulted from private choice.

274. See *id.* at 12.

275. See *id.*

276. See *id.*

277. See *id.*

278. See Steven W. Usselman, *Unbundling IBM: Antitrust and the Incentives to Innovation in American Computing*, in THE CHALLENGE OF REMAINING INNOVATIVE: INSIGHTS FROM TWENTIETH-CENTURY AMERICAN BUSINESS 249, 265–66 (Sally H. Clarke, Naomi R. Lamoreaux & Steven W. Usselman eds., 2009).

279. See ZITTRAIN, *supra* note 266, at 1–2.

280. See *A History of the Computer: Micro*, PUB. BROAD. SERV., <http://www.pbs.org/nerds/timeline/micro.html> (last visited Feb. 15, 2013).

281. See ZITTRAIN, *supra* note 266, at 2.

282. See *id.*

283. See PUB. BROAD. SERV., *supra* note 280.

284. See *id.*

285. See Tom Hormby, *VisiCalc and the Rise of the Apple II*, ORCHARD (Sept. 25, 2006), <http://lowendmac.com/orchard/06/visicalc-origin-bricklin.html>.

VisiCalc with their own personal computer and spreadsheet software, Lotus 1-2-3.<sup>286</sup>

## 2. The Physical Response to the First Digital Problem of Balancing Public Access and Control for Creator Incentive

Personal computers opened the previously complex and technical world of computing to the masses through their ability to easily perform a multitude of tasks by the simple loading of software.<sup>287</sup> But one possible drawback of the software revolution for copyright holders was that software could be easily copied from the disc that stored it to an arguably infinite number of computers without quality loss.<sup>288</sup> Much like the renting of records,<sup>289</sup> software copyright holders feared the implications of software rental.<sup>290</sup> In response, Congress enacted a similar first sale doctrine exception just six years after the Record Rental Amendment: The Computer Software Rental Amendments Act of 1990.<sup>291</sup>

## 3. Digital Property Access Problems Shed Their Physical Frame

While the Computer Software Rental Amendments Act of 1990 may have helped curtail the physical lending of discs containing software, the amendment passed at a time when the internet was still in its infancy. As early as 1983, a home computer owner with a telephone line and a subscription to a network like CompuServe, The Source, America Online, Prodigy, Genie, or MCI Mail could access an Associated Press news feed, message on bulletin boards, play basic multiplayer games, and send private email to subscribers of the same network.<sup>292</sup> But much like Hollerith's IBM,<sup>293</sup> these systems were proprietary.<sup>294</sup>

Just like the Apple II, the development of the internet functionally replaced the host of proprietary network providers.<sup>295</sup> The beginning of the internet is traced to a message sent from UCLA to Stanford by computers hooked up to Interface Message Processors on October 29, 1969.<sup>296</sup>

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286. *See id.*

287. *See* ZITTRAIN, *supra* note 266, at 18.

288. *See* U.S. COPYRIGHT OFFICE, *supra* note 259, at 4.

289. *See supra* notes 231–42 and accompanying text.

290. *See* U.S. COPYRIGHT OFFICE, *supra* note 259, at 2–6.

291. Pub. L. No. 101-650, 104 Stat. 5134 (1990) (codified as amended at 17 U.S.C. § 109(b) (2006)).

292. *See* ZITTRAIN, *supra* note 266, at 23.

293. *See supra* notes 266–77 and accompanying text.

294. *See* ZITTRAIN, *supra* note 266, at 23.

295. *See id.* at 26.

296. *See* Guy Raz, 'Lo' and Behold: A Communication Revolution, NAT'L PUB. RADIO (Oct. 29, 2009, 4:00 PM), <http://www.npr.org/templates/story/story.php?storyId=114280698> (noting that the UCLA programmers typed "login" to begin logging in to the Stanford computer, but the Stanford computer crashed after the second letter, making "lo" the first internet message).

The internet began as governmental research in computer networks.<sup>297</sup> By the early 1990s, however, the government began to shift control of the internet to the private sector.<sup>298</sup> By 1997, the internet became “remarkably decentralized and uninstitutionalized.”<sup>299</sup> Also in the mid-1990s, Peter Tattam developed Trumpet Winsock, a program that allowed personal computers running Microsoft’s Windows operating system to connect to the internet through dial-up internet service providers.<sup>300</sup> Trumpet Winsock proved to be extremely successful and Microsoft bundled it with late versions of Windows 95.<sup>301</sup> The internet soon became a network that no particular person owned and anyone could join.<sup>302</sup> In 1990, less than 1 percent of Americans used the internet.<sup>303</sup> By 1999, over 35 percent of Americans were internet users.<sup>304</sup> The Computer Industry Almanac estimated this percentage to equate to 110,825,000 American internet users in 1999.<sup>305</sup>

As the number of internet users increased, so did the information and technology these users accessed and transferred. Perhaps the most notable technological improvement during this time was the MP3 technology<sup>306</sup> released in 1995.<sup>307</sup> MP3 technology is capable of encoding digital audio files at a size practical for internet transmission and computer storage.<sup>308</sup> Prior to the invention of MP3 technology, digital recording of a song required forty megabytes of space.<sup>309</sup> By comparison, an MP3 version needed only 3.5 megabytes.<sup>310</sup> With the internet connection technology available at the time, this reduction in required space meant files that previously required two hours to download could instead be downloaded in ten minutes.<sup>311</sup> In addition, because an MP3 is a digital file, it does not

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297. See Jay P. Kesan & Rajiv C. Shah, *Fool Us Once Shame on You—Fool Us Twice Shame on Us: What We Can Learn from the Privatizations of the Internet Backbone Network and the Domain Name System*, 79 WASH. U. L. REV. 89, 92 (2001).

298. See *id.*

299. BRIAN KAHIN & JAMES KELLER, COORDINATING THE INTERNET ix (1997).

300. See ZITTRAIN, *supra* note 266, at 29.

301. See *id.*

302. See *id.* at 30.

303. See *Internet Users (Per 100 People)*, UNDATA, [http://data.un.org/Data.aspx?d=WDI&f=Indicator\\_Code%3AIT.NET.USER.P2](http://data.un.org/Data.aspx?d=WDI&f=Indicator_Code%3AIT.NET.USER.P2) (select “United States”; then follow “Apply Filters” hyperlink) (last visited Feb. 15, 2013).

304. See *id.*

305. See *U.S. Tops 100 Million Internet Users According to Computer Industry Almanac*, COMPUTER INDUS. ALMANAC INC. (Nov. 4, 1999), <http://www.c-i-a.com/pr1199.htm>.

306. MP3 is an abbreviation of the name Motion Picture Experts Group (MPEG) Audio Layer III. Jacob Ganz & Joel Rose, *The MP3: A History of Innovation and Betrayal*, NAT’L PUB. RADIO (Mar. 23, 2011, 11:00 AM), <http://www.npr.org/blogs/therecord/2011/03/23/134622940/the-mp3-a-history-of-innovation-and-betrayal>.

307. *Id.*

308. See Fred Goodman, *MP3 Technology Poised To Redefine Music Industry*, ROLLING STONE (Mar. 9, 1999, 12:00 AM), <http://www.rollingstone.com/music/news/mp3-technology-poised-to-redefine-music-industry-19990309>.

309. See *id.*

310. See *id.*

311. See *id.*

degrade over time.<sup>312</sup> While using most compression technology will result in original quality loss in the file, MP3 technology manipulated psychoacoustic principles to make this quality loss generally imperceptible.<sup>313</sup> When a user copies a digital sound file like the MP3, there is no quality loss because the computer simply copies the numbers that make up the file and represent the sound sample.<sup>314</sup>

Quickly, the MP3 made it convenient and popular to transmit “containerless files via the Internet, followed by storage on home computers.”<sup>315</sup> Two groups enthusiastically embraced this method: musicians without recording contracts who benefited from the free publicity and high school and college students who discovered they could obtain MP3 copies of songs by most of their favorite musicians for free.<sup>316</sup>

#### 4. The Attempt To Regain Control: A Digital Stationers’ Company?

In December 1996, delegates from more than 150 countries met to negotiate the Copyright Treaty and the Performances and Phonograms Treaty under the guidance of the World Intellectual Property Organization (WIPO).<sup>317</sup> In July 1997, President William J. Clinton submitted the treaties for ratification by the Senate and proposed implementing legislation to Congress.<sup>318</sup>

What began as a modest implementation effort “became a far more comprehensive legislative project” and eventually “the most substantial revision of the nation’s copyright law since . . . 1976.”<sup>319</sup> In discussing what would become the DMCA, the House Committee on Commerce summarized its view on the new technology in no uncertain terms: “Much like the agricultural and industrial revolutions that preceded it, the digital revolution has unleashed a wave of economic prosperity and job growth. Today, . . . our telecommunications industry is developing new means of distributing information to . . . consumers in every part of the globe.”<sup>320</sup>

The DMCA addresses a number of copyright infringement concerns that are beyond the scope of this Note.<sup>321</sup> However, the DMCA consciously avoided one concern: the effects of the internet on the first sale doctrine.<sup>322</sup>

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312. See Lital Helman, *When Your Recording Agency Turns Into an Agency Problem: The True Nature of the Peer-to-Peer Debate*, 50 IDEA 49, 84 (2009); see also Duncan Branley, *Making and Managing Audio Recordings*, in RESEARCHING SOCIETY AND CULTURE 207, 214 (Clive Seale ed., 2004).

313. See Branley, *supra* note 312.

314. See *id.*

315. William Fisher, *Digital Music: Problems and Possibilities*, HARV. L. SCH. (Oct. 10, 2000), <http://www.law.harvard.edu/faculty/ffisher/Music.html>.

316. See *id.*

317. See H. R. REP. NO. 105-551, pt. 2, at 21 (1998); U.S. COPYRIGHT OFFICE, *supra* note 263, at 5.

318. See H. R. REP. NO. 105-551, pt. 2, at 21.

319. U.S. COPYRIGHT OFFICE, *supra* note 263, at 1.

320. H. R. REP. NO. 105-551, pt. 2, at 21.

321. For a concise summary of the DMCA, see U.S. COPYRIGHT OFFICE, THE DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998: U.S. COPYRIGHT OFFICE SUMMARY (Dec. 1998),



As early as 1995, the effects of the internet on the distribution rights of copyright holders and property owners were apparent.<sup>323</sup> At this time, the Information Infrastructure Task Force, established by President Clinton, determined that the first sale doctrine did not protect internet users who wished to distribute digital copies.<sup>324</sup> The task force reasoned that, in order to transmit a copy, computer technology required that an additional copy be made.<sup>325</sup> That is, when an internet user attempts to transmit his digital copy to another user, “the transmitter retains the original copy of the work while the recipient of the transmission obtains a reproduction of the original copy (*i.e.*, a *new* copy), rather than the copy owned by the transmitter.”<sup>326</sup> Due to this required reproduction, the transmission infringes the copyright holder’s sole right to reproduction.<sup>327</sup> As a result, the internet user would not be protected under the first sale doctrine because he would not be distributing his copy, but rather an unauthorized copy created by his computer.<sup>328</sup>

This incidental copying is not exclusive to digital transmission.<sup>329</sup> In fact, whenever a computer program or file is loaded “from a storage medium (hard disk, floppy disk, or [CD-ROM]) into the memory of a central processing unit (“CPU”)” a copy is made.<sup>330</sup> Further, “[s]treaming necessarily involves a making of a number of copies of [the medium]—or portions of the [medium]—along the transmission path to accomplish the delivery of the work.”<sup>331</sup>

There is a persuasive argument that these copies are not sufficiently “fixed”<sup>332</sup> to meet the definition of “copy”<sup>333</sup> under the Copyright Act.<sup>334</sup>

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available at <http://www.copyright.gov/legislation/dmca.pdf>. One fertile area of debate is the anticircumvention provision, which states, “No person shall circumvent a technological measure that effectively controls access to a work protected under [the Copyright Act].” 17 U.S.C. § 1201 (2006).

322. See U.S. COPYRIGHT OFFICE, *supra* note 263, at 2 (characterizing a report focusing in part on the first sale doctrine as “an outgrowth of proposals that were made contemporaneously with the consideration of the DMCA, but were not adopted in the law”).

323. See INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 90–95 (Sept. 1995), available at <http://www.uspto.gov/web/offices/com/doc/ipnii/ipnii.pdf>.

324. See *id.* at 1.

325. See *id.* at 92.

326. See *id.*

327. See *id.*

328. See *id.*; 17 U.S.C. § 109(a) (2006) (extending protection only to “the owner of a particular copy or phonorecord lawfully made under” the Copyright Act).

329. See NAT’L COMM’N ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 12–13 (1978).

330. MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 518 (9th Cir. 1993).

331. Notice of Inquiry, 66 Fed. Reg. 14,099, 14,101 (Mar. 9, 2001).

332. “A work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” 17 U.S.C. § 101.

However, this argument has not prevailed.<sup>335</sup> In light of this technological reality, Congress enacted 17 U.S.C. §§ 117 and 512. But, by their terms, these provisions only provide protection in very narrow circumstances.<sup>336</sup> Section 117 requires that the copy either be made “as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner”<sup>337</sup> or as an archival copy “for purposes only of maintenance or repair of [a particular] machine.”<sup>338</sup> Section 512 applies only to “service provider[s].”<sup>339</sup>

Considering these limitations, when Congress enacted the DMCA, it required the Register of Copyrights and the Assistant Secretary for Communications and Information of the Department of Commerce to jointly evaluate the effects of amendments made by DMCA, “the development of electronic commerce and associated technology,” and “the relationship between existing and emergent technology” with the first sale doctrine in a report no later than two years after DMCA’s enactment.<sup>340</sup>

## II. PROBLEMS OF POLICY AND PROBLEMS OF SOLUTION: WHAT ARE THE RIGHT REASONS FOR THE FIRST SALE DOCTRINE IN PHYSICAL PROPERTY? SHOULD DIGITAL PROPERTY SUPPORT AN ANALOGUE? AND CAN IT?

The dispute over expanding the first sale doctrine to encompass digital property can be viewed in two ways. First, conflict exists over the policies that support or should be thought to support the first sale doctrine. In light of this conflict, Part II.A.1 examines the policies behind the decision in *Bobbs-Merrill Co.* Next, Part II.A.2 analyzes the policies supporting the first sale doctrine identified by the U.S. Copyright Office in its DMCA-

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333. “‘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.” *Id.*

334. See, e.g., Jessica Litman, *The Exclusive Right To Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 42 (1994); Richard H. Stern, *Section 117 of the Copyright Act: Charter of the Software Users’ Rights or An Illusory Promise?*, 7 W. NEW ENG. L. REV. 459, 462–63 (1985).

335. Bob Hyde, *The First Sale Doctrine and Digital Phonorecords*, 1 DUKE L. & TECH. REV. 1, 3 (2001) (“[T]he prevailing view is that RAM copies are sufficiently fixed. . . . Congress implicitly supported [this view] when it altered Section 117 to specifically overrule the facts of *MAI [Sys. Corp. v. Peak Computer, Inc.]*, 991 F.2d 511 (9th Cir. 1993), while not overruling the legal propositions of the case. In fact, Congress specifically rejected a proposal to state that no RAM copying is infringement (and thus directly overturn *MAI*) in 1998.” (emphasis added) (footnotes omitted)).

336. See 17 U.S.C. §§ 117(a), 512(a).

337. See *id.* § 117(a).

338. See *id.* § 117(c).

339. See *id.* § 512(a).

340. See Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, § 104, 112 Stat. 2860, 2876 (codified as amended in scattered sections of 17 U.S.C.) (requiring an evaluation of the DMCA amendments’ effect on existing copyright law, specifically sections 109 and 117 of the Copyright Act).

mandated report and highlight the distinctions between these policies and those identified by scholars.

In addition to the policy conflict, there is a dispute over whether a digital first sale doctrine is even possible and, if so, what the best method is to implement it. In light of this dispute, Part II.B queries whether the first sale doctrine can be expanded to encompass digital property by exploring the technologies considered by the U.S. Copyright Office and those technologies developed after the report.

A. *What Are the Right Reasons for the First Sale Doctrine in Physical Property? And Should Digital Property Support an Analogue?*

The access-derived policies promoted by the first sale doctrine<sup>341</sup> are the products of scholarship and reflection developed after more than a century of experience living with the first sale doctrine. Regardless of the merits of these policies, the *Bobbs-Merrill Co.* Court saw its task in much simpler terms.

1. The *Bobbs-Merrill Co.* Reasoning: Interpreting the Statute Not To Infringe the Right to Alienation

The *Bobbs-Merrill Co.* decision is simply one of statutory interpretation.<sup>342</sup> When the Court needed to determine whether Macy's could resell *The Castaway* below Bobbs-Merrill's set price, it returned to the precise language of §§ 4952, 4965, and 4970 of the Revised Statutes of the United States.<sup>343</sup> In construing the definition of "vend," the Court looked to the statute's "main purpose," which it identified as "secur[ing] the right of multiplying copies of the work."<sup>344</sup> The Court determined this purpose by reference to its own precedent<sup>345</sup> and the Act's title, "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned."<sup>346</sup> In light of this purpose, the natural meaning of vend could not be read to infringe upon a lawful purchaser's right to subsequently alienate the copy he purchased, by qualifying the title of the purchaser.<sup>347</sup>

As a result, the first sale doctrine is founded upon the conventional and deep-rooted understanding of physical personal property ownership.<sup>348</sup> Just

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341. See *supra* Part I.A.

342. See *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 349–50 (1908) ("What does the statute mean in granting 'the sole right of vending the same'? . . . [T]his is purely a question of statutory construction.").

343. *Id.* at 348.

344. See *id.* at 350–51.

345. See *id.* at 346–47 (citing *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591 (1834) and *Stephens v. Cady*, 55 U.S. (14 How.) 528 (1852)).

346. See *id.* at 347 (quoting Act of May 31, 1790, ch. 15, 1 Stat. 124).

347. See *id.* at 351.

348. See Liu, *supra* note 40, at 1302.

like the purchaser of a radio or microwave can use it as often as she wishes, loan it to a friend, or sell it to another person, so can the purchaser of a lawfully created copy of a physical creative work.<sup>349</sup> This view contemplates copyright law as a statutory creature developed in a legal environment where the physical property ownership rights previously existed.<sup>350</sup>

## 2. The U.S. Copyright Office's Report: The Physicality of the Copy

When the Copyright Office published the DMCA-mandated report, it recommended no change to the Copyright Act.<sup>351</sup> In part, the Copyright Office's recommendation arose from its view of the policies supporting the first sale doctrine.<sup>352</sup>

Specifically, the Copyright Office expressed its view that the tangible nature of the copy is not a "mere relic," but rather a "defining element" of the first sale doctrine.<sup>353</sup> The Copyright Office viewed the physicality of property to be the defining element because *Bobbs-Merrill Co.* focused on the distinction between copyright ownership (i.e., the ownership of intangible intellectual property) and copy ownership (i.e., the ownership of tangible personal property).<sup>354</sup> Keeping this distinction in mind, the Copyright Office characterized the copyright owner's distribution right (i.e., the right to "vend") as a limit on the alienation right.<sup>355</sup> Following through on this concept, the Copyright Office concluded that the first sale doctrine cabins the distribution right's encroachment on the right to alienation.<sup>356</sup>

In support of its view, the Copyright Office offered the legislative history of the 1909 Copyright Act.<sup>357</sup> The Office conceded the brevity of the legislative history regarding the first sale doctrine, but stated that "[r]epeatedly, the congressional reports refer to the ability of the owner of a *material copy* to dispose of that copy as he sees fit."<sup>358</sup> In addition, the Office asserted that because the 1909 Act combined the first sale doctrine and the distinction between copyright ownership and physical copy ownership in the same section, it "demonstrate[d] that the concepts are two sides of the same coin."<sup>359</sup>

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349. *See id.*

350. *See id.*

351. U.S. COPYRIGHT OFFICE, *supra* note 263, at 97–101.

352. *See id.* at 86–91.

353. *See id.* at 86.

354. *See id.*

355. *See id.* at 86–87 ("The distribution right, nonetheless, enables the copyright owner to prevent alienation of the copy—up to a point[:] . . . when ownership of a lawfully made copy is transferred to another person—*i.e.*, first sale.").

356. *See id.* at 86.

357. *See id.* at 86 n.286, 87.

358. *See id.* at 86 n.286.

359. *See id.* at 87.

By contrast, the Office observed that transfer of a digital copy does not require physical alienation.<sup>360</sup> Instead, picking up where the Information Infrastructure Task Force left off,<sup>361</sup> digital transmission implicates the “central copyright right” of reproduction.<sup>362</sup> In this respect, the Office claimed that a simple transformation of the first sale doctrine to cover digital transmissions would not adequately address the balance of public access and control for creator incentive because the concerns that produced the first sale doctrine do not apply to digital transfer.<sup>363</sup>

In summarizing its view of the policy supporting the first sale doctrine, the Copyright Office concluded by refuting public comments it received in support of digital first sale expansion.<sup>364</sup> The Copyright Office’s report identified three specific arguments that commenters made under the broad assertion that a digital first sale doctrine furthers § 109’s purposes: (1) the first sale doctrine results from a calculation of incentives to create; (2) the first sale doctrine’s purpose is promoting progress of the arts; and (3) the first sale doctrine is based on a right of access.<sup>365</sup>

The Copyright Office quickly refuted the “incentive calculation” argument because this argument was not present in the first sale doctrine’s 1909 legislative history.<sup>366</sup> Even further, the Office claimed that digital first sale restrictions could harm the market and increase infringement so that the incentive to create declines.<sup>367</sup>

Similarly, the Office disposed of the argument that the first sale doctrine’s purpose is to promote the progress of the arts because this is the policy underlying the “entire Copyright Act.”<sup>368</sup> Without further explanation, the Office asserted that a more precise purpose exists for the first sale doctrine.<sup>369</sup>

The Copyright Office dedicated more time to the final argument that the first sale doctrine is a proxy for the right of access.<sup>370</sup> However, the Office attributed this argument to the “library associations” and characterized the argument to state that the scope of the conveyed interest should be the determinative factor for § 109.<sup>371</sup> In other words, the Office viewed the right of access argument to state that libraries should be permitted to lend copies regardless of their physical or digital form because libraries do not

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360. *See id.*

361. *See supra* notes 323–28 and accompanying text.

362. *See* U.S. COPYRIGHT OFFICE, *supra* note 263, at 87.

363. *See id.* at 87–88.

364. *See id.* at 88–91.

365. *See id.* at 88–89.

366. *See id.* at 88.

367. *See id.*

368. *See id.* at 88–89.

369. *See id.* at 89. One may be able to deduce that the “more precise purpose[]” is the right to alienate physical copies. *See id.* at 87 (“Digital transmission . . . does not implicate the aliena[ti]on of a physical artifact.”).

370. *See id.* at 89.

371. *See id.*

transfer ownership of title in the copy.<sup>372</sup> Finally, the Office concluded that the simple fact that the first sale doctrine results in positive benefits is not the same as stating those benefits represent Congress's purpose in enacting the first sale doctrine.<sup>373</sup>

*B. Can Digital Property Support an Analogue to the First Sale Doctrine?*

There are a number of proposed solutions to the problem of digital first sale doctrine. In characterizing these various solutions, it is helpful to think of them in terms of what Professor Lawrence Lessig called "modalities of regulation."<sup>374</sup> Professor Lessig identified four modes of regulation including (1) the law; (2) social norms; (3) the market; and (4) architecture.<sup>375</sup>

First, the law regulates, in one fashion, by dictating acceptable behavior and punishing those who choose to disobey.<sup>376</sup> Second, social norms function in a matter similar to the law, but social norms are decentralized.<sup>377</sup> Communities, rather than governments, dictate acceptable behavior and punish those who choose to disobey.<sup>378</sup> Third, markets regulate by price.<sup>379</sup> The more expensive it is to accomplish a desired task, the greater the limit one may encounter in completing that task.<sup>380</sup> Finally, architecture, or the way something is made, regulates as well.<sup>381</sup> The examples provided by Professor Lessig include how a highway that divides two neighborhoods can limit the amount of integration between the residents in each neighborhood.<sup>382</sup> By contrast, an easily accessible town square with diverse shops can increase integration between town residents.<sup>383</sup>

These categories are not mutually exclusive.<sup>384</sup> Instead, Professor Lessig asserts, "A policy trades off among these four regulatory tools. It selects its tool depending upon what works best."<sup>385</sup> For digital property, all four modalities are in play.<sup>386</sup> The current solutions for a digital first sale doctrine can be grouped in three of these modalities: architecture, law, and market.

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372. *See id.*

373. *See id.* at 90–91.

374. *See* Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501, 506–11 (1999). Professor Lessig later expanded upon this discussion in his book *Code*. *See generally* LAWRENCE LESSIG, *CODE* (2d ed. 2006).

375. *See* Lessig, *supra* note 374, at 507.

376. *See id.*

377. *See id.*

378. *See id.*

379. *See id.*

380. *See id.*

381. *See id.* at 507–08.

382. *See id.*

383. *See id.*

384. *See id.* at 508.

385. *See id.*

386. *See id.*

## 1. Architecture

At the time of the U.S. Copyright's DMCA-mandated report and after, scholars proposed the idea of "forward and delete" technology as an appropriate, structural, digital analogue to the first sale doctrine.<sup>387</sup> Under a forward-and-delete regime, the original purchaser of a copy would transmit her copy to another user by generating a copy on that user's computer.<sup>388</sup> However, the original purchaser's copy would be simultaneously deleted from her computer.<sup>389</sup> Thus, the net result of forward-and-delete technology is one file, despite the reality of two copies.<sup>390</sup> Arguably, such technology "is the legal equivalent of giving, lending, or selling a material copy in a fixed form."<sup>391</sup>

In 2003, Representative Zoe Lofgren of California introduced a bill entitled the Benefit Authors without Limiting Advancement or Net Consumer Expectations (BALANCE) Act of 2003.<sup>392</sup> The BALANCE Act embraced forward-and-delete technology,<sup>393</sup> but never reported out of the House Committee on the Judiciary.<sup>394</sup>

More recently, companies like ReDigi, Inc. have implemented versions of forward-and-delete technology.<sup>395</sup> Despite claiming protection under the first sale doctrine,<sup>396</sup> copyright holders have already commenced proceedings against ReDigi.<sup>397</sup> At the time of this Note, large questions

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387. See U.S. COPYRIGHT OFFICE, *supra* note 263, at x–xi; see also, e.g., Justin Graham, *Preserving the Aftermarket in Copyrighted Works: Adapting the First Sale Doctrine to the Emerging Technological Landscape*, 2002 STAN. TECH. L. REV. 1, ¶ 87; Joseph Gratz, *Digital Book Distribution: The End of the First-Sale Doctrine?*, 3 LANDSLIDE, May–June 2011, at 8, 10; Adam W. Sikich, *Buyer Beware: The Threat to the First Sale Doctrine in the Digital Age*, 14 J. INTERNET L., Jan. 2011, at 1, 22–23; Matthew J. Turchyn, *It Looks Like a Sale; It Quacks Like a Sale . . . But It's Not? An Argument for the Application of the Duck Test in Digital First Sale Doctrine* 5 J. BUS. ENTREPRENEURSHIP & L. 31, 49–56 (2011).

388. See U.S. COPYRIGHT OFFICE, *supra* note 263, at 81–82.

389. See *id.*

390. See Sikich, *supra* note 387, at 22.

391. See *id.* Other commentators have suggested architectural solutions focused on one medium. For example, Professor Dana B. Robinson suggested implementing a digitally visible watermark of personal information for digital books that would allow users to transfer copies between devices, but discourage transfer to a third party. See Dana B. Robinson, *Digital Rights Management Lite: Freeing Ebooks from Reader Devices and Software*, 17 VA. J.L. & TECH. 152, 160–70 (2012). Beyond privacy concerns resulting from physical theft or virtual hacking, Professor Robinson's solution purposely discourages third-party transfer. See *id.*

392. H.R. 1066, 108th Cong. (2003); Bill D. Herman, *A Political History of DRM and Related Copyright Debates, 1987–2012*, 14 YALE J.L. & TECH. 162, 198 (2012).

393. See Perzanowski & Schultz, *supra* note 40, at 925 n.200.

394. See *id.*

395. See, e.g., REDIGI BETA, <https://www.redigi.com/> (last visited Feb. 15, 2013) (referring to the website as "The World's First Pre-Owned Digital Marketplace").

396. See *Is ReDigi Legal? Yes!*, REDIGI BETA, <https://www.redigi.com/legal> (last visited Feb. 15, 2013).

397. See Capitol Records, L.L.C. v. ReDigi, Inc., No. 1:12-cv-00095-RJS (S.D.N.Y. filed Jan. 6, 2012).

remain over the effectiveness of forward-and-delete technology like ReDigi.<sup>398</sup>

## 2. Law

If one were to accept the feasibility of forward-and-delete technology, most commentators agree that simultaneous legislation is necessary. For example, the BALANCE Act would have amended § 109 to allow a copy owner to transmit a copy to a single recipient as long as the transferor did not retain her copy.<sup>399</sup>

Other commentators have suggested similar amendments.<sup>400</sup> Still others have sought similar access results from changes to other areas of the Copyright Act<sup>401</sup> or judicial interpretation.<sup>402</sup> For example, Representative Rick Boucher of Virginia introduced the Digital Media Consumers' Rights Act of 2003,<sup>403</sup> which would have permitted circumvention of technological measures that prevent copying as a fair use exception when the circumvention did not infringe the copyright.<sup>404</sup> However, like the BALANCE Act, this bill died in committee.<sup>405</sup> Perhaps a more extreme example—one that seeks copyright overhaul more generally—can be found

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398. See, e.g., Torie Bosch, *Court Refuses Music Company Request To Shutter Site Selling "Used MP3s"—For Now*, SLATE (Feb. 7, 2012, 5:20 PM), [http://www.slate.com/blogs/future\\_tense/2012/02/07/redigi\\_vs\\_emi\\_capitol\\_records\\_court\\_refuses\\_to\\_shutter\\_site\\_selling\\_used\\_mp3s\\_for\\_now.html](http://www.slate.com/blogs/future_tense/2012/02/07/redigi_vs_emi_capitol_records_court_refuses_to_shutter_site_selling_used_mp3s_for_now.html) (reporting through a third-party that ReDigi's Chief Executive Officer, John Ossebmacher, has said that "there's no way for ReDigi to guarantee that users who resell music through his service haven't made copies of their songs and stored them on some other hard drive").

399. See H.R. 1066, 108th Cong. (2003); Perzanowski & Schultz, *supra* note 40, at 925 n.200.

400. See Fred H. Cate, *The Technological Transformation of Copyright Law*, 81 IOWA L. REV. 1395, 1447–49 (1996) (discussing a proposed amendment that would implement a digital first sale doctrine, limited to noncommercial use); Sikich, *supra* note 387, at 23 (proposing an amendment to 17 U.S.C. § 109(a) (2006), that would permit transfer of a digital file "so long as the technology used by that person to transmit the copy . . . deletes the work contemporaneously when transmitting the copy"); Turchyn, *supra* note 387, at 55–56 (stating that "[l]egislation could be the best way to effectuate the implementation of devices that would allow for a digital First Sale Doctrine").

401. See, e.g., Gideon Parchomovsky & Philip J. Weiser, *Beyond Fair Use*, 96 CORNELL L. REV. 91, 127–37 (2010) (suggesting a regulatory oversight regime designed to protect and expand user privileges in digital property in place of traditional fair use).

402. See, e.g., Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2272–73 (2004) (advocating a property-rule approach, rather than a tort-rule approach, to access of digital property because a tort-rule approach will encourage technical measures that are less flexible than legal measures).

403. H.R. 107, 108th Cong. (2003). Boucher introduced a similar bill in 2005 that also died in committee. See Digital Media Consumers' Rights Act of 2005, H.R. 1201, 109th Cong. (2005); *H.R. 1201 (109th): Digital Media Consumers' Rights Act of 2005*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/109/hr1201> (last visited Feb. 15, 2013); see also Herman, *supra* note 392, at 198.

404. See H.R. 107, § 5; see also Yvette Joy Liebesman, *The Wisdom of Legislating for Anticipated Technological Advancements*, 10 J. MARSHALL REV. INTELL. PROP. L. 154, 180 n.189 (2010).

405. *H.R. 107 (108th): Digital Media Consumers' Rights Act of 2003*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/108/hr107> (last visited Feb. 15, 2013).



in Professor Tom W. Bell's argument for return to the original Copyright Act of 1790.<sup>406</sup>

### 3. Market

In the DMCA-mandated report, the Copyright Office rejected expansion of the first sale doctrine for digital property because “analogy to circulation of goods in the physical realm . . . [is not] compelling for several reasons.”<sup>407</sup> Instead, it chose a “wait and see” approach.<sup>408</sup>

First, because digital copies do not degrade over time,<sup>409</sup> they are no less desirable than the original digital file.<sup>410</sup> In addition, the traditional barriers to piracy in the tangible world—“time, space, effort, and cost”—are eliminated by digital technology.<sup>411</sup> For example, in *Betamax*,<sup>412</sup> Universal Studios and Walt Disney proffered the testimony of William Griffiths to demonstrate how a consumer would use a VCR.<sup>413</sup> Griffiths testified that he intended both to time-shift, and “to build a library of cassettes.”<sup>414</sup> However, Griffiths found it too expensive to maintain a library.<sup>415</sup> He began to erase and reuse the tapes.<sup>416</sup> By contrast, digital copies can be transmitted rapidly with little effort or cost and require only sufficient computer memory to store.<sup>417</sup>

In addition to this structural difference between physical and digital property, the Office identified the difference in transfer.<sup>418</sup> The Copyright Office observed that the analogy comparing transfer of digital copies to the circulation of goods in the physical realm ultimately rested on a concept requiring forward-and-delete technology.<sup>419</sup> The Copyright Office asserted that forward-and-delete technology was unworkable as of the time of the report.<sup>420</sup>

The U.S. Copyright Office believed voluntary deletion to be an “open invitation” for users to engage in undetectable infringement.<sup>421</sup> In addition,

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406. See Virginia Postrel, *A Free-Market Fix for the Copyright Racket*, BLOOMBERG (Nov. 29, 2012, 4:54 PM), <http://www.bloomberg.com/news/2012-11-29/a-free-market-fix-for-the-copyright-racket.html>.

407. U.S. COPYRIGHT OFFICE, *supra* note 263, at 97.

408. *See id.* at 101; Reese, *supra* note 40, at 578.

409. *See supra* notes 312–14 and accompanying text.

410. *See* U.S. COPYRIGHT OFFICE, *supra* note 263, at 82.

411. *See id.*

412. Arguably, *Betamax* is also an example of architectural regulation, insofar as televised movies differ from their movie theatre counterparts. *See supra* notes 258–62 and accompanying text.

413. *See* Sony Corp. of Am. v. Universal City Studios, Inc. (*Betamax*), 464 U.S. 417, 423–24 n.3 (1984).

414. *See id.*

415. *See id.*

416. *See id.*

417. *See* U.S. COPYRIGHT OFFICE, *supra* note 263, at 82.

418. *See id.* at 97.

419. *See id.*

420. *See id.*

421. *See id.*

the evidentiary burden of establishing simultaneous deletion would be impossible for either the copyright owner or the alleged infringer.<sup>422</sup>

Similarly, the U.S. Copyright Office claimed that automatic forward-and-delete technology is not workable for two reasons.<sup>423</sup> First, the technology did not exist at the time of the report.<sup>424</sup> Assuming the technology became available in the future, the Copyright Office explained that it could only work if it was “robust, persistent, and fairly easy to use.”<sup>425</sup> Robust, persistent, and easily employed technology is expensive—an expense borne either by the copyright owner or the consumer.<sup>426</sup> In both cases, there is little incentive to utilize such technology.<sup>427</sup> In fact, the Copyright Office observed that there exists no consumer desire for products that function under the forward-and-delete model.<sup>428</sup> In fact, peer-to-peer file sharing networks like Napster suggest that consumers “wish to retain, not destroy, the digital copy from which the work is transmitted.”<sup>429</sup>

In summarizing its distaste for either the voluntary or automatic forward-and-delete technology, the Copyright Office asserted that expansion of the first sale doctrine ultimately encourages infringement of the reproduction right through either mistaken belief or a bad faith affirmative defense.<sup>430</sup>

By contrast, the Copyright Office asserted that Congress’s past behavior demonstrates a desire to protect the reproduction right at the expense of the first sale doctrine.<sup>431</sup> In implementing the rental amendments,<sup>432</sup> the Office explained that Congress acted on anecdotal evidence of piracy combined with conditions creating the potential for widespread abuse to restrict the public’s right to alienation in favor of the copyright owner’s exclusive right to reproduction.<sup>433</sup> Here, the Copyright Office asserted that the same conditions apply.<sup>434</sup> As a result, expanding the first sale doctrine to digital copies would similarly harm the market.<sup>435</sup>

In part due to the Copyright Office’s reluctance to recommend action, the market has developed a licensing framework.<sup>436</sup> Despite the issues facing companies like Netflix, Pandora, and Spotify,<sup>437</sup> not all commentators view a licensing framework to be harmful.<sup>438</sup> Professor Reuvan Ashtar proposes

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422. *See id.* at 97–98.

423. *See id.*

424. *See id.* at 98.

425. *Id.*

426. *See id.*

427. *See id.*

428. *See id.* at 84–85.

429. *Id.* at 85.

430. *See id.* at 99.

431. *See id.*

432. *See supra* notes 241–42, 290–91 and accompanying text.

433. *See* U.S. COPYRIGHT OFFICE, *supra* note 263, at 99.

434. *See id.* at 99–100.

435. *See id.* at 100.

436. *See supra* notes 1–29 and accompanying text.

437. *See supra* notes 18–20 and accompanying text.

438. *See, e.g.*, Reuvan Ashtar, *Licensing as Digital Rights Management, From the Advent of the Web to the iPad*, 13 YALE J.L. & TECH. 141, 186–87 (2011); Jonathan C. Tobin,

that a licensing framework is workable because not all licensing agreements qualify for protection under the Copyright Act.<sup>439</sup> By distinguishing those licenses that are eligible for protection from those that are not, Professor Ashtar suggests that a licensing framework could restore the public access and control for creator incentive balance.<sup>440</sup> Similarly, others suggest that a licensing framework could restore this balance if it is applied primarily to digital goods, limited to the licensing of works protected by copyright, and if the license's terms are fully disclosed to consumers.<sup>441</sup>

*C. A Possible Response: Fighting New Technology with  
Newer Technology*

On November 17, 2011, IBM filed an application to patent an "Aging File System."<sup>442</sup> This patent application described "[a] method, programmed medium and system . . . that provides for the aging of information and files stored thereon. Digital data stored on the aging file systems ages appropriately as would normal paper or photographs without the need for an external application."<sup>443</sup> IBM's aging file system uses various parameters including, for example, "ambient temperature, rate of aging, [and] simulated type of paper" that are input at the time of configuration.<sup>444</sup> IBM's patent application lists among the purposes of the aging file system to automatically and selectively age files for time-limited record retention purposes.<sup>445</sup>

IBM's patent application describes its method as working on either a single personal computer or a series of computers connected through a network to a server.<sup>446</sup> In either case, the aging file system employs a code to receive original digital copies, determine their file type, create an aged file according to the file type and preset aging parameters, and replace the stored file and associated file metadata.<sup>447</sup> Essentially, IBM's patent application appears to describe a process that would automatically replace

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*Licensing As a Means of Providing Affordability and Accessibility in Digital Markets: Alternatives to a Digital First Sale Doctrine*, 93 J. PAT. & TRADEMARK OFF. SOC'Y 167, 187 (2011).

439. See Ashtar, *supra* note 438, at 186–87.

440. See *id.*

441. See, e.g., I. Neel Chatterjee, *Imperishable Intellectual Creations: The Limits of the First Sale Doctrine*, 5 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 383, 419–25 (1995) (suggesting the use of compulsory commercial blanket licensing); Tobin, *supra* note 438, at 184–87 (proposing a licensing framework that "follows the principle that such licenses must be crafted to maximize accessibility, privacy and transactional clarity").

442. Aging File System, U.S. Patent No. 20110282838 (filed Nov. 17, 2011), available at <http://appft1.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fmetahtml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PG01&s1=20110282838.PGNR.&OS=DN/20110282838RS=DN/20110282838>.

443. *Id.*

444. *Id.*

445. See *id.*

446. See *id.*

447. See *id.*

files with their aged versions.<sup>448</sup> The degree of aging would be based upon predetermined variables.<sup>449</sup>

IBM's aging file system may immediately serve those who want to preserve files for a certain period of time but wish to retain storage space by destroying these files once this period expires.<sup>450</sup> Additionally, IBM's aging file system may help introduce to digital property a characteristic that made the first sale doctrine successful in physical property: degradation.<sup>451</sup>

### III. AN ARCHITECTURAL SOLUTION: INTRODUCING DEGRADATION INTO THE DIGITAL FILE

In its report, the Copyright Office asserted that the tangible nature of the copy is not a "mere relic," but rather a "defining element" of the first sale doctrine.<sup>452</sup> This assertion is difficult to deny. The *Bobbs-Merrill Co.* Court set forth the first sale doctrine in a post-*Cady* and *Gladding* world.<sup>453</sup> Under the *Cady* and *Gladding* precedent, the incorporeal copyright and tangible property right are separate.<sup>454</sup> However, in the world of the *Bobbs-Merrill Co.* Court, a copyright holder could only realize the value of her copyright by using tangible property.<sup>455</sup>

#### A. Harmonizing the Copyright Office's Interpretation of the First Sale Doctrine with the Doctrine's Historical Place in Copyright Law Generally

For these reasons, the Copyright Office's report is correct to focus on the material nature of the copy at issue in *Bobbs-Merrill Co.* and discussed in the legislative history of the 1909 Copyright Act.<sup>456</sup> Nevertheless, limiting one's interpretation of the policies supporting the first sale doctrine in this manner ignores not just the policies promoted by the first sale doctrine since its inception,<sup>457</sup> but the more than three hundred years of history preceding it.<sup>458</sup>

Given the ease of digital copying, an unbounded digital first sale doctrine "would be saying . . . that the exclusive right to make any given work of art necessarily belonged to the person who happened to become the owner of"

448. *See id.*

449. *See id.*

450. *See id.*; *see also, e.g.*, Michele C.S. Lange, *Electronic Evidence & The Sarbanes-Oxley Act of 2002*, in RECORD RETENTION AND DESTRUCTION CURRENT BEST PRACTICES 31, 31 (Am. Bar Ass'n ed., 2003) ("[T]he reality is that outdated email, antiquated files, and archival data stored on backup tapes or disks are often kept for months or years past their useful life. Case law reveals that unwieldy preservation of all electronic data and email created in the course of business can come back to haunt a corporation when litigation ensues.").

451. *See supra* note 263 and accompanying text.

452. *See supra* notes 353–54 and accompanying text.

453. *See supra* notes 207–25 and accompanying text.

454. *See supra* notes 189–206 and accompanying text.

455. *See supra* Part II.A.1.

456. *See supra* notes 353–59 and accompanying text.

457. *See supra* notes 41–116 and accompanying text.

458. *See supra* notes 121–206 and accompanying text.

a computer.<sup>459</sup> But failing to expand it disserves the primary goal of copyright law—deriving general benefits for the public from the effort of creators<sup>460</sup>—by limiting public access.

Viewing the first sale doctrine in its historical context<sup>461</sup> demonstrates that it is, in fact, a statement involved in the calculation of incentives to create.<sup>462</sup> While this is in contrast to the Copyright Office's report,<sup>463</sup> it is true because the first sale doctrine promotes public access and thus limits creators' control just like the limited monopoly created by England's Statute of Anne<sup>464</sup> and adopted in the United States.<sup>465</sup>

Insofar as Congressional amendments to the first sale doctrine have narrowed its scope,<sup>466</sup> these amendments should be viewed in context. With the Record Rental and Computer Software Rental Amendments, Congress responded to the threat of widespread piracy through the use of preexisting technology.<sup>467</sup> By contrast, when given the opportunity to respond in a less-restrictive manner, Congress has done so. The AHRA represents congressional action at the inception of new technology that did not infringe upon the first sale doctrine.<sup>468</sup> Similarly, albeit implicitly, when the product has built-in piracy deterrents like recording broadcast television by VCR at issue in *Betamax*, Congress has not acted at all.<sup>469</sup>

Perhaps at the time of the U.S. Copyright Office's report, a "wait and see" approach was appropriate. But now that more than a decade has brought with it new technology, it is time to reconsider whether expanding the first sale doctrine to digital property is possible.

*B. Using Digital Property's Characteristic Differences from  
Physical Property To Restore the Balance Between  
Public Access and Creator Incentive*

Under Professor Lessig's classification system, the physical first sale doctrine is a legal solution that benefits from its architecture.<sup>470</sup> The composition of physical property helps the physical first sale doctrine work. First, physical property degrades over time.<sup>471</sup> This means that a purchaser who repeatedly alienates her copy may find it less valuable over time. The

459. *Stephens v. Cady*, 55 U.S. (14 How.) 528, 530 (1852); *see supra* note 201 and accompanying text.

460. *Betamax*, 464 U.S. 417, 432 (1984) ("[T]he primary object in conferring the [limited copyright] monopoly [is] . . . the general benefits derived by the public from the labors of authors." (internal quotation marks omitted)); *see supra* note 262 and accompanying text.

461. *See supra* notes 121–206 and accompanying text.

462. *See supra* notes 366–67 and accompanying text.

463. *See supra* notes 351–56 and accompanying text.

464. *See supra* notes 140–44 and accompanying text.

465. *See supra* notes 167–87 and accompanying text.

466. *See supra* notes 231–42, 290–91, 431–33 and accompanying text.

467. *See supra* notes 231–42, 290–91, 431–33 and accompanying text.

468. *See supra* notes 243–47 and accompanying text.

469. *See supra* notes 256–62 and accompanying text.

470. *See supra* notes 374–86 and accompanying text.

471. *See supra* note 263 and accompanying text.

physical degradation may cause the purchaser to stop alienating her copy, or even further, replace her copy. Second, due to issues of time, space, effort, and cost, physical property is harder to duplicate.<sup>472</sup> As a result, the financial cost, time, space, and effort of making physical copies dissuades potential pirates.<sup>473</sup>

Solutions offered for expanding the first sale doctrine to digital property have focused exclusively on replicating the second aspect of the first sale doctrine.<sup>474</sup> Forward-and-delete technology seeks to remedy the harm to the copyright holder caused by copying by looking to the net result.<sup>475</sup> Statutory amendments seek to redefine and narrow what sort of copying the government considers harmful to the copyright holder.<sup>476</sup> A market solution purports to allow the parties to define what type of copying is harmful.<sup>477</sup>

Absent a cheap, robust, persistent, and user-friendly technology—the characteristics the U.S. Copyright Office identified as necessary for implementing forward-and-delete technology<sup>478</sup>—digital copies are easy to duplicate.<sup>479</sup> Fighting this characteristic may be futile.<sup>480</sup> Perhaps the better solution focuses on the other architectural characteristic that permits the physical first sale doctrine to function effectively: degradation.<sup>481</sup> IBM's aging file system technology allows for automatic aging of digital property based upon various parameters.<sup>482</sup> Using the ease of digital copying as an element in this aging system may prove to be the most effective balance of public access and control for creative incentive in digital property currently available.

For example, a regulatory regime that implemented an aging file system for digital property could use the number of times a file is copied as a parameter to accelerate file aging. Because the aging file system identifies and replaces metadata as well, it could conceivably identify an original copy and all of its duplicative progeny. As a result, the purchaser would be able to make a certain number of copies before perceiving degradation throughout all these copies. However, the more copies created, the faster the digital copy would degrade. Just like a physical copy that is loaned out a number of times, a digital copy duplicated frequently would degrade quickly across all copies.

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472. *See supra* notes 411–16 and accompanying text.

473. *See supra* notes 411–16 and accompanying text.

474. *See supra* notes 387–441 and accompanying text.

475. *See supra* notes 387–98 and accompanying text.

476. *See supra* notes 399–405 and accompanying text.

477. *See supra* notes 407–41 and accompanying text.

478. *See supra* notes 425–29 and accompanying text.

479. *See supra* notes 410–11 and accompanying text.

480. *See supra* notes 397–98 and accompanying text.

481. *See supra* note 263 and accompanying text.

482. *See supra* notes 443–44 and accompanying text.

The proposed solution is not without its pitfalls. First, determining a reasonable number of copies before degradation would likely require market research and, possibly, congressional hearings.

Second, because digital copies are created as part of an essential step in accessing the copy on a computer,<sup>483</sup> consideration must be paid to determining whether these copies would factor in the aging parameters. One argument for including these copies is that private use of physical copies still factors into a physical copy's degradation. Book spines are bent, DVDs are scratched, and CDs are misplaced without ever changing hands. One argument against including these copies is that pausing a DVD, putting a book down, or rewinding a CD generally does not factor in this degradation.

Perhaps, a compromise would be that copies of a certain file size would be considered in the aging parameters. In other words, copies of digital files that are the size of a normal buffer file when streaming media online would not count in aging parameters, but those exceeding this size would count.<sup>484</sup> In addition, copies made to RAM would not count, but those made to other discs or from storage discs to hard drives would count.<sup>485</sup>

Third, users may seek to evade the aging file system by implementing firewalls or disconnecting from the internet. Other provisions already contained in the DMCA may possibly address anti-aging file system firewalls.<sup>486</sup> Simply disconnecting from the internet would lead users to revert to physical transfer through portable drives or storage discs. These transactions would likely involve the same discouraging financial cost, time, space, and effort of physical copying.<sup>487</sup>

Certainly, there may be other pitfalls. For example, like forward-and-delete technology, the cost of implementing such a system is uncertain. Additionally, a statutory amendment defining a digital copy<sup>488</sup> and including it in the first sale doctrine, if not necessary, would certainly be desirable.<sup>489</sup> However, an aging file system better aligns digital files with their physical counterparts. Even further, an aging file system uses copying—digital property's strength—as a deterrent to better balance public access and control for creator incentive. If Congress adopted a regime employing an aging file system, online streaming media companies would have the option of purchasing copies from private consumers or other

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483. See *supra* notes 325–31 and accompanying text.

484. See *supra* note 331 and accompanying text.

485. See *supra* notes 329–30 and accompanying text.

486. See *supra* note 321 (discussing 17 U.S.C. § 1201 (2006), the DMCA's anticircumvention provision).

487. See *supra* notes 411–16 and accompanying text.

488. This Note proposes that adopting the AHRA's definition would likely suffice. See *supra* notes 243–47 and accompanying text.

489. This Note proposes that simply amending the current text of 17 U.S.C. § 109(a) (2006) as follows is likely sufficient: “[T]he owner of a particular copy[,] . . . phonorecord[, or digital copy] 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[,] . . . phonorecord[, or digital copy].”

digital marketplaces. In addition, these companies would be able to generate revenue beyond subscription fees and advertisements by alienating digital copies that may generate demand, but not justify the cost of perpetual storage on their servers, reminiscent of the neighborhood record or video store's bargain bin.