DIGITAL EXHAUSTION

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As digital networks emerge as the dominant means of distributing copyrighted works, the first sale doctrine is increasingly marginalized. To the extent the use and alienation of copies entails their reproduction and adaptation to new platforms, the limitations first sale places on the exclusive right of distribution decrease in their legal and market impact. This fact of the modern copyright marketplace has led to calls for statutory clarification of digital first sale rights. Acknowledging the obstacles to legislative intervention, this Article argues that courts are equipped to limit copyright exclusivity, enabling copy owners to make traditionally lawful uses of their copies, including resale through secondary markets. We argue that first sale is not simply an isolated limitation on the distribution right. Instead, it is a component of a broader principle of copyright exhaustion that emerges from early case law preceding the U.S. Supreme Court's foundational decision in Bobbs-Merrill v. Straus. This context reveals a common law of copyright exhaustion that embraces a set of user privileges that include not only alienation but renewal, repair, adaptation, and preservation. Despite congressional recognition of exhaustion in sections 109 and 117 of the Copyright Act, this Article concludes that courts have amble room to apply and continue to develop common law rules that preserve the many benefits of the first sale doctrine in the digital marketplace.

INTRODUCTION				
		MARGINALIZATION OF THE FIRST SALE DOCTRINE		
•		Four Documented Benefits of First Sale		
		Two Additional Benefits: Innovation and Platform Competition		

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	C.	Digital Distribution as a Threat to First Sale	901
II.	Co	PYRIGHT'S EXHAUSTION PRINCIPLE	908
	A.	The Familiar Story of First Sale	908
	B.	The Neglected Story of Copyright Exhaustion	912
		1. Repair and Renewal	913
		2. Adaptation and Modification	916
		3. Display and Performance	
	C.	Exhaustion and Computer Programs	922
III.	RE۱	VIVING EXHAUSTION IN THE DIGITAL ECONOMY	925
	A.	Exhaustion and the Common Law of Copyright	926
	B.	The Common Law Path of Patent Exhaustion	932
	C.	Applying the Exhaustion Principle to Digital Copies	935
		1. Transfer of Digital Media	938
		2. Modification of Digital Media for Device Shifting	939
		3. Remote Access to Digital Media	941
	D.		
Conclusion			945

Introduction

In recent decades, the distribution of copyrighted works has transitioned from the delivery of tangible goods to the transmission of data over digital networks. This trend towards digital distribution includes digitally native works such as computer software as well as traditionally analog forms, such as books, movies, and music.\(^1\) With the rise of delivery-via-download, device-embedded content such as apps and e-books, and practically unlimited online media storage, digital delivery is quickly becoming the norm.

For example, Amazon now sells more e-books than hardbacks.² CD sales are dropping while music downloads are surging,³ making Apple the biggest

^{1.} We will use the term digital works to refer to works distributed by the transmission of data rather than tangible media. Although media like CDs and DVDs are used to distribute works that are, in a strict sense, digital, the key distinction for our purposes is one between delivery via objects and delivery via data transmission.

^{2.} Dylan F. Tweney, Amazon Sells More E-Books Than Hardcovers, WIRED, July 19, 2010, http://www.wired.com/epicenter/2010/07/amazon-more-e-books-than-hardcovers.

^{3.} Lisa Respers France, Is the Death of the CD Looming?, CNN.COM, July 20, 2010, http://www.cnn.com/2010/SHOWBIZ/Music/07/19/cd.digital.sales; see also Jessica E. Vascellaro & Sam Schechner, Slow Fade-Out for Video Stores, WALL ST. J., Sept. 30, 2010, http://online.wsj.com/article/SB10001424052748704082104575515933391663168.html (ascribing Blockbuster's bankruptcy and the demise of the video-rental store to Netflix, Redbox, and on-demand video products); Nick Wingfield & Merissa Marr, Apple Computer Aims to Take Over Your Living-Room TV, WALL ST. J., Sept. 13, 2006, at B1.

music retailer in the United States.⁴ Downloads dominate boxed products in online software sales.⁵ And online video game purchases now rival brick and mortar sales.⁶

This shift to a digital marketplace gives rights holders greater control not only over the pricing and availability of their works but also over the uses consumers can make with their purchases. That control constrains consumer welfare on a number of levels. It prevents consumers from acquiring or reselling works via secondary markets; it impinges on their privacy and limits their opportunities for innovation; and it threatens market efficiency and competition by increasing transaction costs and the risk of consumer lock-in. §

Historically, the doctrine primarily responsible for addressing these concerns in both copyright and patent laws has been exhaustion—the idea that when an embodiment of a work protected by some intellectual property right passes from the rights holder to a consumer, the rights holder's power over that particular embodiment is diminished. Yet in contrast to patent's expansive common law approach, most courts and commentators have confined copyright's exhaustion principle to a narrower rule, the first sale doctrine—reflected in section 109 of the Copyright Act—which only exhausts the exclusive right to distribute copies.

In the predigital era, section 109 was arguably an adequate embodiment of the exhaustion principle because distribution was the primary commercial activity of copyright holders; however, it is insufficient today. For digital works, the use or transfer of a copy implicates exclusive rights beyond distribution, exposing consumers to potential infringement liability and leading many to call

^{4.} Ed Christman, Digital Divide, BILLBOARD.BIZ, May 22, 2010, http://www.billboard.biz/bbbiz/content_display/magzine/upfront/e3i12fe2557a9382597671a522cc1cc901d.

^{5.} Jacqui Cheng, Forget the Box: Downloads Dominate Online Software Purchases, ARS TECHNICA, May 28, 2010, http://arstechnica.com/software/news/2010/05/forget-the-box-downloads-dominate-online-software-purchases.ars.

^{6.} Lance Whitney, Digital Game Downloads Beat Retail Store Sales, CNET NEWS, Sept. 20, 2010, http://news.cnet.com/8301-10797_3-20016943-235.html.

^{7.} Jonathan Zittrain, The Future of the Internet—And How to Stop It 102-03 (2008).

^{8.} Moreover, with respect to embedded and tethered copyrighted goods such as the iPhone, Kindle, and TiVo, rights holders are able to lock in user-generated data such as favorites, bookmarks, annotations, ratings, and avatars. See MDY Indus. v. Blizzard Entm't, 616 F. Supp. 2d 958, 966–67 (D. Ariz. 2009), aff'd, No. 09-15932, 2010 U.S. App. LEXIS 25424 (9th Cir. Dec. 14, 2010); Facebook, Inc. v. Power Ventures, Inc., No. C 08-5780 JF (RS), 2009 WL 1299698, at *4 (N.D. Cal. May 11, 2009); Microsoft's Datel Defense Takes Bite Out of Apple's Playbook, ANTITRUST TODAY, Feb. 8, 2010, http://www.antitrusttoday.com/2010/02/08/microsoft's-datel-defense-takes-bite-out-of-apple's-playbook.

^{9.} See Herbert Hovenkamp, Post-Sale Restraints and Competitive Harm: The First Sale Doctrine in Perspective, 66 NYU ANN. SURV. AM. L. 487 (2011).

for a legislative expansion of section 109 to recapture the traditional balance between copyright holders and copy owners. 10

This Article posits a different approach. Rather than accepting section 109 as the sole embodiment of copyright exhaustion, we argue that exhaustion is deeply rooted in a common law tradition that embraces the first sale rule and extends beyond it. After detailing first sale's practical benefits and the problem of its increasing marginalization in Part I, we trace the history of copyright's exhaustion principle in Part II. After describing first sale's traditional origin story, Part II contextualizes the first sale doctrine within the broader evolution of copyright exhaustion, considering both early judicial holdings that articulate the copy owner's rights to repair, adapt, and modify lawfully acquired copies, as well as more recent statutory developments.

Part III calls on courts to reinvigorate and enforce the judicial doctrine of copyright exhaustion. We argue that copyright exhaustion, like many principles recognized in the Copyright Act, was created by and should continue to develop through common law judicial reasoning. Just as patent exhaustion has evolved to cope with new technological developments, copyright exhaustion must move beyond the first sale doctrine. In particular, we argue that if consumers are to see their longstanding privileges survive in the digital economy, copyright exhaustion must apply not only to the distribution right but also to the rights to reproduce and prepare derivative works based on lawfully acquired copies. This would allow consumers who own digital copies to make limited uses consistent with longstanding copyright policy and established expectations. Such uses would include transferring copies to the device or platform of their choice, customizing copies for personal use, or alienating copies for purposes of gift or resale. Specifically, the basic rule courts should adopt is one that entitles the owner of a digital copy to reproduce or prepare derivative works based on that copy to the extent necessary to enable the use, preservation, or alienation of that particular copy or any lawful reproduction of it.

I. THE MARGINALIZATION OF THE FIRST SALE DOCTRINE

Copyright law strives to strike "a balance between the artist's right to control [her] work . . . and the public's need for access" It does this by granting authors exclusive rights subject to a series of exceptions and limitations. ¹² The first sale doctrine is one of those limitations.

^{10.} See infra note 200 and accompanying text.

^{11.} Stewart v. Abend, 495 U.S. 207, 228 (1990).

^{12.} Copyright law provides authors several discrete exclusive rights, among them the right to distribute copies of their works. See 17 U.S.C. § 106 (2006) (granting copyright owners the exclusive

On its face, the exclusive right to distribute—or vend, in the terminology of pre-1976 regimes¹³—applies to any exchange of a copy of a protected work.¹⁴ Unrestrained, the distribution right would allow copyright holders to dictate the terms of a variety of common transactions. Purchasing a new copy of *Geek Love* at Barnes & Noble, picking up a used copy of *The Queen Is Dead* at a local record store, Netflixing *The Dirty Dozen*, or even giving a friend a Lester Beall print as a gift could trigger liability, absent copyright holder permission.¹⁵

The first sale rule prevents restraints on the transfer of lawfully acquired copies by limiting the scope of the copyright holder's distribution right. Once a copyright holder parts with title to a copy of a work, ¹⁶ she no longer retains an exclusive right over the disposition of that particular copy. ¹⁷ As a result, the owner of that copy can sell it, rent it, lend it to friends or strangers, or give it away—all over the objections of the copyright holder. ¹⁸

But why have such a rule? Why not allow rights holders absolute control over all instances of distribution, thereby maximizing incentives for copyright owners to create? As we discuss below, the answer lies in six pragmatic benefits that result from limiting copyright holder control over lawfully acquired

rights to reproduce the work, to prepare derivative works, to distribute copies, to perform the work publicly, and to display the copyrighted work publicly). Several exceptions and limitations to those rights are found in the Copyright Act. See id. §§ 107–20.

- 13. Prior to the Copyright Act of 1970, federal copyright statutes provided copyright holders with the exclusive right to vend. See Copyright Act of 1909, ch. 320, § 1, 17 U.S.C. § 1 (1946) (amended 1947); International Copyright Act of 1891, ch. 565, § 1, 26 Stat. 1107 (amended 1909); Copyright Act of 1790, ch. 15, § 1, 1 Stat. 124 (amended 1802).
 - 14. See 17 U.S.C. § 106(3) (2006).
- 15. See John A. Rothchild, The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?, 57 RUTGERS L. REV. 1, 11 (2004) (noting "authority for the proposition that even a gift of a copy can constitute a public distribution"); see also Ford Motor Co. v. Summit Motor Prods., Inc., 930 F.2d 277, 299 (3d Cir. 1991) ("The term 'other transfer of ownership' is broad enough to encompass gifts.").
- 16. Despite its name, the first sale doctrine does not require that the copyright owner initially dispose of the copy by selling it. Giving a copy away is enough to exhaust the distribution right. See 2 PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 7.6.1 n.4 (3d ed. 2010) ("[A] gift of copies or phonorecords will qualify as a 'first sale' to the same extent as an actual sale for consideration."); 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8.12[B][1][a] (Matthew Bender rev. ed. 2010); 4 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 13:15 (2010) ("Since the principle [of the first sale doctrine] applies when copies are given away or are otherwise permanently transferred without the accourtements of a sale, 'exhaustion' is the better description.").
- 17. See, e.g., Columbia Pictures Indus. v. Redd Horne, Inc., 749 F.2d 154, 159 (3d Cir. 1984) ("The first sale doctrine prevents the copyright owner from controlling the future transfer of a particular copy once its material ownership has been transferred."); Am. Int'l Pictures, Inc. v. Foreman, 576 F.2d 661, 664 (5th Cir. 1978) ("After the first sale of a copy the copyright holder has no control over the occurrence or conditions of further sales of it The first sale thus extinguishes the copyright holder's ability to control the course of copies placed in the stream of commerce.").
- 18. But see infra note 139 and accompanying text (noting statutory limitations on the right to loan or rent computer software and sound recordings).

copies. As this Part explains, four of those benefits—access, preservation, privacy, and transactional clarity—have been well documented. We posit two additional benefits: increased innovation and platform competition. These two benefits broaden the implications of the first sale rule, highlighting its potential impact on copyright policy as a whole. Finally, as we explain at the end of this Part, despite first sale's many upsides, changes in law, technology, and the marketplace have increasingly marginalized the doctrine and threaten to diminish its benefits.

A. Four Documented Benefits of First Sale

Scholars have identified several normative rationales for the first sale doctrine, generally falling into four categories: access, preservation, privacy, and transactional clarity.¹⁹

First, in terms of access, first sale improves both the affordability and availability of copyrighted works by fostering secondary markets for lawful copies and distribution models that operate outside of copyright holder control.²⁰ Examples include everything from used bookstores, libraries, and video rental shops to online auction sites like eBay.²¹ These markets increase affordability by pressuring copyright owners to reduce their prices and promote availability by augmenting the supply and geographic distribution of copyrighted goods. Secondary markets also increase both affordability and availability of copyrighted goods by enabling rental-based business models, product sampling, and the recouping of consumer costs through resale or gifting.²²

Some suggest that the first sale rule might decrease access and availability, first, by reducing the incentives for creation and distribution of works—in

^{19.} See Joseph P. Liu, Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership, 42 WM. & MARY L. REV. 1245, 1303, 1310–11, 1320–21, 1330–33, 1336 (2001) (privacy, access, preservation, transactional clarity); R. Anthony Reese, The First Sale Doctrine in the Era of Digital Networks, 44 B.C. L. REV. 577, 584 (2003) (access, preservation, privacy); Molly Shaffer Van Houweling, The New Servitudes, 96 GEO. L.J. 885, 898–905, 914–16 (2008) (transactional clarity and salience).

^{20.} See Reese, supra note 19, at 585-94.

^{21.} See, e.g., UMG Recordings, Inc. v. Augusto, No. 08-55998, 2011 U.S. App. LEXIS 52 (9th Cir. Jan. 4, 2011) (applying the first sale rule to distribution of used promotional CDs via eBay).

^{22.} See Reese, supra note 19, at 587; see also Mike Anderiesz, Publishers Rankled by Secondhand Games Boom, GUARDIAN, Jan. 19, 2006, http://www.guardian.co.uk/technology/2006/jan/19/games. guardianweeklytechnologysection2; David D. Kirkpatrick, Online Sales of Used Books Draw Protest, N.Y. TIMES, Apr. 10, 2002, http://www.nytimes.com/2002/04/10/technology/10BOOK.html; Troy Wolverton, Video Games' Second Life, THE STREET, Dec. 2, 2005, http://www.thestreet.com/story/10255424/video-games-second-life.html; Press Release, The NPD Group, Bargain-Hunting Gamers Turning to Impulse Buying, Used Titles (Oct. 15, 2009), available at http://www.npd.com/press/releases/press_091015.html.

light of feared cannibalization of sales by secondary markets—and second, by thwarting price discrimination that promises lower prices for some subset of consumers.²³ However, the evidence suggests that secondary markets are better at price discrimination and at maximizing social welfare than copyright owners.²⁴ Moreover, as noted below, by incenting innovation among copyright owners to compete with secondary markets, first sale provides its own incentives to create and innovate.

Second, first sale enables preservation of public access to works that are no longer available from the copyright owner. These include works copyright owners have determined are no longer commercially viable, works withdrawn or suppressed by copyright owners for cultural or political reasons, and so-called orphan works whose copyright owners are either unreachable or no longer exist. Since copyrighted works constitute a substantial portion of our cultural history, such preservation benefits society broadly. Secondary markets not only keep these works in circulation but also prevent their permanent loss by encouraging redundancy via broad geographic distribution of multiple copies.

^{23.} See Douglas Lichtman, First Sale, First Principles, MEDIA INST. (Apr. 26, 2010), http://www.mediainstitute.org/new_site/IPI/2010/042610_FirstSale.php. We are skeptical about the practical benefits consumers will realize from price discrimination. See infra Part I.C.

^{24.} Reese, *supra* note 19, at 585. As some commentators have argued, first sale's flexibility and competition with the copyright owner's initial sale may also produce more efficient price discrimination than a single monopolistic approach. See Wendy Gordon, *Intellectual Property as Price Discrimination: Implications for Contract*, 73 CHI.-KENT L. REV. 1367, 1383–90 (1998) (noting that secondary markets are often much better at price discrimination than single monopolistic ones); see also Anindya Ghose, Michael D. Smith & Rahul Telang, *Internet Exchanges for Used Books: An Empirical Analysis of Product Cannibalization and Welfare Impact*, 17 INFO. SYS. RES. 3 (2006) (noting that 84 percent of used book sales from Amazon.com's secondary market came from buyers who would not have otherwise purchased a new book at the price set by the copyright owner). Even after accounting for the 0.3 percent reduction of publisher's gross profits due to Amazon's secondary market for books, that market results in net welfare gain of nearly \$88 million annually. *Id.* at 3, 5.

^{25.} See Reese, supra note 19, at 594–95, 599.

^{26.} See, e.g., id. at 598 (citing Worldwide Church of God v. Phila. Church of God, Inc., 227 F.3d 1110 (9th Cir. 2000)); U.S. REGISTER OF COPYRIGHTS, REPORT ON ORPHAN WORKS (2006), available at http://www.copyright.gov/orphan/orphan-report-full.pdf; see also Anna Vuopala, Assessment of the Orphan Works Issue and Costs for Rights Clearance (May 2010), available at http://ec.europa.eu/information_society/activities/digital_libraries/doc/reports_orphan/anna_report.pdf.

^{27.} See Brewster Kahle, THE OPEN LIBRARY, available at http://librivox.org/the-open-library-by-brewster-kahle (last visited Mar. 23, 2011); Liu, supra note 19, at 1330–31; 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 (2002). While Reese argues that these preservation purposes fall under the overall rubric of access, we think the strength of the cultural preservation argument earns it separate categorization. See Reese, supra note 19, at 603.

^{28.} The canonical example of such loss is the Library of Alexandria. See Protecting Ancient History in Iraq, NPR (Feb. 20, 2003), http://www.npr.org/templates/story/story.php?storyId=978050.

Third, first sale protects consumer privacy. Under the doctrine, consumers can transfer works without permission of the copyright holder, thereby allowing them to do so privately and anonymously. Without the doctrine, consumers would have to notify the copyright owner and seek permission for each new transfer of a work, allowing rights holders to track the movement of the work and the identity of each participant in the transaction.²⁹ Some assurance of privacy is especially important for works with controversial or stigmatized content, as requiring copyright holder consent could potentially chill access.³⁰

Fourth, first sale promotes market efficiency and transactional clarity by protecting consumers from high information and transaction costs and deceptively complex limitations on the use of low-cost copyrighted goods. For example, consider if each physical copy of the latest *Twilight* novel or Lady Gaga CD came with a slightly different set of idiosyncratic copyright permissions. Some had the right to be read or listened to at night, others during the day. Some could be resold, others could not. If such practices became widespread, consumers would have to wade through a fragmented and confusing constellation of terms and restrictions with each purchase or sale in a secondary market, instead of engaging in clear and relatively simple transactions. The costs of understanding these offers and obligations would be exorbitant not only for the initial purchaser but also any subsequent recipient, often exceeding the cost of the desired item. Consumers would be

^{29.} See Julie E. Cohen, A Right to Read Anonymously: A Closer Look at 'Copyright Management' in Cyberspace, 28 CONN. L. REV. 981 (1996). This preference for transactional privacy aligns with longstanding consumer expectations and strong professional norms in the bookstore and library communities, not to mention state and federal laws supporting consumer privacy. See Video Privacy Protection Act of 1988, Pub. L. No. 100-618, 102 Stat. 3195 (1998) (codified at 18 U.S.C. § 2710 (2006)); In re Grand Jury Subpoena to Amazon.com Dated Aug. 7, 2006, No. 07-GJ-04 (W.D. Wis. June 26, 2007) (sealed order), available at http://www.medialawlunch.com/documents/2008-01-amazon.pdf; Tattered Cover, Inc. v. City of Thornton, 44 P.3d 1044 (Colo. 2002); Associated Press, Feds Retreat on Amazon Buyers' Identities, MSNBC.COM, Nov. 27, 2007, http://www.msnbc.msn.com/id/219 97757; Stephen Labaton, Lewinsky's Lawyers to Turn Over Records of Book Purchases, N.Y. TIMES, June 23, 1998, at A13; Code of Ethics of the American Library Association, art. Ill, http://www.ala.org/ala/issuesadvocacy/proethics/codeofethics/Code%20of%20Ethics%20of%20th.pdf (last visited Mar. 23, 2011).

^{30.} See Cohen, supra note 29. It is also worth noting that personal privacy is not the only interest at stake. In situations involving product reviews, criminal investigations, or competitive reverse engineering, it is essential that access to copyrighted works be predicated on anonymity. First sale ensures that such anonymity is available from secondary markets if the rights holder does not offer it directly.

^{31.} See Van Houweling, supra note 19, at 897–98 ("The existence of unusual property rights increases the cost of processing information about all property rights. Those creating or transferring idiosyncratic property rights cannot always be expected to take these increases in measurement costs fully into account, making them a true externality." (citing Thomas W. Merrill & Henry E. Smith, Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 YALE L.J. 1, 8

left in the unenviable position of either forgoing their purchase or willfully ignoring the terms in the hopes that they meet their needs or will go unenforced.³² The first sale rule, in contrast, gives consumers a reliable baseline that simplifies these transactions.³³

B. Two Additional Benefits: Innovation and Platform Competition

In addition to these four well-documented benefits of first sale, we posit two others: increased innovation and platform competition. These effects of the first sale rule further underscore the doctrine's wisdom as a matter of copyright policy.

Innovation spurred by first sale comes in three forms: innovation by copyright owners to compete with secondary markets, innovation by secondary market providers, and user innovation. Copyright owner innovation occurs when competition from secondary markets creates incentives for right holders to differentiate their copies from used copies. For example, after a work has been circulating for several years, copyright owners frequently release new versions that include remastered material or extra content.³⁴ Technological innovations may enable new features for digital playback. In software markets, this innovation takes the form of updates and add-on features.³⁵

Innovation also occurs when the existence or even possibility of secondary market sales provides incentives for the creation of new business models and

^{(2000)));} see also Hovenkamp, supra note 9, at 24 ("In the simple story the first sale doctrine reduces downstream transaction costs."); Liu, supra note 19, at 1321; Merrill & Smith, supra, at 3 ("[T]he law will enforce as property only those interests that conform to a limited number of standard forms.").

^{32.} See Straus v. Victor Talking Mach. Co., 243 U.S. 490, 501 (1917) ("[I]t must be recognized that not one purchaser in many would read such a notice, and that not one in a much greater number, if he did read it, could understand its involved and intricate phraseology..."); Van Houweling, supra note 19, at 897–98; see also Merrill & Smith, supra note 31, at 44–45 (discussing the costs of processing notice).

^{33.} This protection from high information costs and transactional complexity stems from similar rules in real and personal property law, which have traditionally disfavored servitudes due to their tendency to provide insufficient notice, restrain alienation, limit future unforeseen usability, and impose high information costs on subsequent purchasers. See Zechariah Chafee, Jr., The Music Goes Round and Round: Equitable Servitudes and Chattels, 69 HARV. L. REV. 1250, 1261 (1956); Merrill & Smith, supra note 31, at 18; Van Houweling, supra note 19, at 897–98. While some may argue that consumers can discipline copyright owners by rejecting items sold on nonstandard terms, empirical studies suggest that consumers will not reject goods—even those with unacceptable or confusing terms—unless those terms are salient and essential to the purchase. See id. at 932–33 (noting studies on consumer transactions and salience). Therefore, market discipline is unlikely to solve this problem.

^{34.} See, e.g., OK Computer Special Collector's Edition CDs-DVD, AMAZON.COM, http://www.amazon.com/Computer-SPECIAL-COLLECTORS-CDs-DVD/dp/B001PPF130 (last visited Mar. 23, 2011).

^{35.} See, e.g., Vernor v. Autodesk Inc., No. 09-35969, 2010 WL 3516435 (9th Cir. Sept. 10, 2010).

technologies. Amazon.com, eBay, and Lala's CD swap service offer a few examples.³⁶ In addition to incentive creation, first sale supports innovation by allowing innovators to acquire multiple copies of works at low cost and enabling experimentation and innovation even when unwelcomed by rights holders. For example, Netflix and Redbox were both able to experiment, innovate, and eventually build substantial distribution businesses—mail-order envelopes and point-of-sale vending machines, respectively—in part because the first sale doctrine allowed them to acquire DVDs without the approval of movie studios.³⁷

First sale also enables user innovation, the ability of users to develop new uses for products or creatively modify them to increase their value. Users often experiment in unanticipated ways with goods they purchase, leading to new product advances and markets.³⁸ For example, one study found that mountain bike users developed or modified their bikes, clothing, and equipment to

^{36.} Mark Anderson, New CD-Swap Site Hooks Music Fans, WIRED, June 8, 2006, http://www.wired.com/culture/culturereviews/news/2006/06/71106. Other exceptions and limitations, such as fair use, also create innovation incentives. See generally Fred von Lohmann, Fair Use as Innovation Policy, 23 BERKELEY TECH. L.J. 829 (2008).

^{37.} Although both Netflix and Redbox rely primarily on distribution deals with studios to obtain discounted DVDs and Blu-Ray discs in bulk, both companies have relied on the first sale doctrine to overcome efforts by content owners to limit their ability to offer certain titles. See Dorothy Pomerantz, Red Menace, FORBES.COM (Mar. 6, 2009), http://www.forbes.com/2009/03/06/redbox-blockbuster-rentals-business-media-rebox.html (noting that when Universal demanded that Redbox wait forty-five days before offering new titles, Redbox acquired the discs from local Best Buy locations instead). When The Weinstein Company, distributor of films such as Academy Award winner VICKI CRISTINA BARCELONA (The Weinstein Company 2008), signed an exclusive distribution agreement with Blockbuster, Netflix likewise relied on retail purchases and the first sale doctrine to make those titles available to its customers. See Transcript of Netflix, Inc. Q3 2009 Earnings Call (Oct. 22, 2009) (statement of Netflix CEO Reed Hastings), available at http://seekingalpha.com/article/168407-netflix-inc-q3-2009-earnings-call-transcript (noting that because "retail is so big and diffused," studios have been unable to prevent retail acquisition and that because of "liquidity in the supply chain," the purchase of used retail copies saved Netflix money).

Perhaps more important than the benefit it offers established firms like Netflix, the first sale doctrine offers fledgling companies important benefits. First, it provides some additional incentive for content owners to negotiate licenses. Second, it places a ceiling on the price content owners can demand in those negotiations. And third, it provides a failsafe mechanism that enables an innovative firm to move forward even without copyright holder permission.

^{38.} See YOCHAI BENKLER, THE WEALTH OF NETWORKS (2006); ERIC VON HIPPEL, DEMOCRATIZING INNOVATION 2, 72–73 (2005) (noting that unrestricted access to products has resulted in important user innovations, including advances in mountain biking, wind surfing, the heart-lung machine, and farming equipment); William W. Fisher III, The Implications for Law of User Innovation, 94 MINN. L. REV. 1417 (2010); Katherine J. Strandburg, Users as Innovators: Implications for Patent Doctrine, 79 U. COLO. L. REV. 467 (2008).

create over forty new innovations in the sport.³⁹ Such user innovation occurs in both physical and informational products.⁴⁰

The first sale doctrine supports user innovation in two ways. First, without first sale, the creation and diffusion of these innovations would be far more costly and difficult. Many user innovators transform existing products into entirely different objects, such as a handbag made from a classic novel, ⁴¹ a clock made from old music CDs, ⁴² or a flashing bike light made from an old Nintendo NES video game controller. ⁴³ But for first sale, redistribution of these modified products could constitute infringement of the distribution right, ⁴⁴ potentially prohibiting users from sharing their innovations and recouping the costs of their experimentation. ⁴⁵

Second, first sale mitigates what Van Houweling and Mahoney call "the problem of the future"—restrictions on property imposed prior to its alienation that prove over time to be at odds with desirable goals that come to light at a later date. In such situations, "enforcement of servitudes undesirably limits the freedom of future generations to manage resources wisely and autonomously." This worry has particular salience in the context of user innovation and

^{39.} These innovations included protective cycling armor, enhanced carrying straps to increase storage capacity, and metal studs added to tires to increase traction. *See* VON HIPPEL, *supra* note 38, at 35–36.

^{40.} See id. at 1. For example, von Hippel's research shows a significant percentage of user innovation in a range of fields, including extreme sports, surgery, library information systems, printed circuit CAD software, and open-source web server security. *Id.* at 20 tbl.2-1.

^{41.} See, e.g., REBOUND DESIGNS, http://www.rebound-designs.com (last visited Mar. 23, 2011); see also SECRET STORAGE BOOKS, http://www.secretstoragebooks.com (last visited Mar. 23, 2011).

^{42.} See Shikha Chauhan, Explore Time With Creative CD Clocks, HOME QUOTIENT, Sept. 19, 2009, http://www.homeqn.com/entry/remodelista-explore-time-with-creative-cd-clocks.

^{43.} See Daniel Bauen, NESblinky-Nintendo Controller Bike Flasher, INSTRUCTABLES, http://www.instructables.com/id/Bike-Flasher-Made-from-NES-Controller (last visited Mar. 23, 2011); see also LED Sneakers, MAKEZINE.COM, July 14, 2010, http://blog.makezine.com/archive/2010/07/led_sneakers.html; Chauhan, supra note 42.

^{44.} This is not to say that other legal doctrines do not constrain user innovation. See Fisher, supra note 38, at 1449–50 (the derivative work right); Pamela Samuelson, The Quest for a Sound Conception of Copyright's Derivative Work Right (forthcoming); Strandburg, supra note 38 (patents). However, but for the first sale doctrine, even modifications that did not constitute derivate works would be unlawful to distribute if they incorporated the original work. In addition, as we argue below, a broad conceptualization of copyright exhaustion might well protect users in these circumstances.

^{45.} Otherwise, user innovators would be forced to find rights holders and negotiate the right to redistribute their modified goods, assuming the owners would grant such a right.

^{46.} Van Houweling, supra note 19, at 900 (citing Julia D. Mahoney, Perpetual Restrictions on Land and the Problem of the Future, 88 VA. L. REV. 739 (2002)) (noting the problem of the future in the context of environmental conservation easements in which conditions and scientific understanding of environmental impact change over time and the easements become outdated and potentially even antithetical to their original purpose).

^{47.} Id.

creativity, as these activities often focus on solving unanticipated problems.⁴⁸ First sale mitigates the problem of the future by allowing copy owners to distribute their innovations without requiring retroactive permission from rights holders.⁴⁹

Beyond its impact on innovation, first sale also promotes platform competition by reducing consumer lock-in. Lock-in occurs when the costs of switching to a new vendor or technology platform are sufficient to discourage consumers from adopting an otherwise preferable competitive offering. Because lock-in disadvantages new market entrants who introduce similar but superior products, it raises competitive concerns and inhibits incremental innovation that would otherwise serve to lure consumers to a competing platform. More porous platforms, in contrast, allow for increased competition and greater innovative incentives.

First sale reduces lock-in with respect to technology platforms in two ways. First, it enables consumers to alienate past purchases and recover much of their investment when switching platforms. A consumer who owns Microsoft's Xbox video game system has invested several hundred dollars in Microsoft hardware and software. If that consumer wishes to switch to Nintendo's Wii system, her increased enjoyment of the Wii must outweigh her investments in the Xbox platform for switching to make sense. The first sale doctrine allows her to recover a substantial portion of her investment by selling her Xbox and games on Craigslist or eBay, lowering the barriers to switching to a competing platform. Without first sale, the consumer would need Microsoft's permission to alienate her investment, which Microsoft has little incentive to give. In addition, first sale further limits lock-in by encouraging secondary markets to reduce the price of the new platform. ⁵⁰

^{48.} Van Houweling notes that "[t]he problem of the future is further compounded when a servitude arises in a context of rapid and unpredictable change, making unforeseen obsolescence especially likely." *Id.* at 901; *see also* Bilski v. Kappos, 130 S. Ct. 3218, 3227–28 (2010) (stressing the importance of patent law's policy to promote new and unforeseen inventions); VON HIPPEL, *supra* note 38, at 7 (noting that manufacturers also have insufficient incentive to provide custom solutions for small groups of users, leaving users to provide their own solutions), 46 (observing that users often see problems or innovations before original manufacturers).

^{49.} Admittedly, potential infringement of the reproduction and derivative work rights presents the most likely legal objection to many forms of user innovation. However, in those instances where the act of distribution increases exposure to liability, the first sale doctrine serves to facilitate user innovation. As described in more detail below, the broader common law exhaustion principle in copyright law addresses not only claims of unauthorized distribution but reproduction and the preparation of derivatives as well. See infra Part II.B.

^{50.} Switching costs would be reduced further if consumers were assured data portability between platforms. See Jacqui Cheng, Data Portability Finally Comes to Facebook, Plus Friend Groups, ARS TECHNICA, http://arstechnica.com/media/news/2010/10/data-portability-finally-comes-to-facebook-

Although problems of lock-in predate the digital era, the emergence of platforms defined by code increases the risk of artificial hurdles to interoperability that undermine competition. In the 1920s, for example, a consumer who wanted to switch from a Columbia to a Victor phonograph for enjoying her record collection faced minimal switching costs since those devices relied on the same underlying technology. Today, device makers and content distributors can easily introduce barriers to compatibility, even though the underlying technology is capable of accommodating media from multiple sources. As described below, shifting legal and technological landscapes, marked by the introduction of digital works and technological measures designed to restrict lawful access, have created serious concerns over lock-in.

C. Digital Distribution as a Threat to First Sale

The benefits of first sale have traditionally depended on a single trigger: ownership of a copy of a work. Yet as digital technology has evolved, the distribution of copyrighted works has increasingly moved away from physical copies,⁵² leading numerous commentators to raise concerns about the loss of first sale's benefits in the digital age.⁵³

In addition to changes in technology and the marketplace, several legal developments have undermined the doctrine's practical impact. First has been the fight over copy ownership. As copyright holders began to employ end user license agreements (EULAs) in association with digital goods, they attempted to characterize the distribution of the physical copy as a license instead of a traditional sale, arguing that because purchasers of these copies did not "own"

plus-friend-groups.ars (last visited Mar. 23, 2011). But see Jason Kincaid, Google to Facebook: You Can't Import Our User Data Without Reciprocity, TECHCRUNCH (Nov. 4, 2010), http://techcrunch.com/2010/11/04/facebook-google-contacts. If games purchased for the Xbox were playable on the Wii or could be modified to ensure interoperability, the switching costs facing consumers would be significantly lower from the outset. Because lock-in is a key component of the pricing and overall strategy in the video game market, private efforts to enable interoperability are unlikely. Other markets appear more amenable to cross-platform cooperation. See, e.g., Dave Caolo, Barnes & Noble Releases eReader App for iPad, THE UNOFFICIAL APPLE WEBLOG (May 27, 2010), http://www.tuaw.com/2010/05/27/barnes-and-noble-releases-ereader-app-for-ipad.

^{51.} Users of Edison phonographs, in contrast, faced significant switching costs because Edison utilized a unique playback technology that ensured that its records could only be played on its machines. See RANDALL STROSS, THE WIZARD OF MENLO PARK 220 (2007).

^{52.} See Liu, supra note 19, at 1249; Reese, supra note 19, at 610–12.

^{53.} See Liu, supra note 19, at 1339; Reese, supra note 19, at 581; see also U.S. COPYRIGHT OFFICE, LIBRARY OF CONG., DMCA SECTION 104 REPORT 48 (2001) [hereinafter DMCA SECTION 104 REPORT], available at http://www.copyright.gov/reports/studies/dmca/dmca_study.html.

them, the first sale rule did not apply.⁵⁴ While courts are split on whether and to what extent granting a copyright license to a work undermines the user's claim of ownership to their particular copy,⁵⁵ lawyers for copyright holders continue to engage in artful drafting of EULAs in an attempt to give consumers the appearance of ownership, while legally restricting the transfer of title to the physical copy.⁵⁶

The legal treatment of random access memory (RAM) copies has become problematic for first sale as well. In the analog era, the purchase and use of copyrighted goods did not generally implicate the exclusive rights of the copyright holder.⁵⁷ However, using a work stored in a digital format involves loading the work into a computing device's RAM.⁵⁸ Many courts have held that loading a work into RAM creates a copy that implicates the reproduction right.⁵⁹ Copyright holders have extended this argument further, claiming that transferring a digital work via a network is also an act of reproduction.⁶⁰ Thus, consumer use of works, even those purchased via secondary markets, is potentially quite limited in the digital context by the RAM copy doctrine.

Finally, section 1201 of the Digital Millennium Copyright Act (DMCA) has raised doubts about the viability of first sale. Section 1201 prohibits both the circumvention of technological measures that restrict access to and copying of copyrighted works and the creation or distribution of tools that facilitate such circumvention.⁶¹ At the time of its passage, critics of section 1201 expressed concerns that technological protection measures, more commonly

^{54.} See Brian W. Carver, Why License Agreements Do Not Control Copy Ownership: First Sales and Essential Copies, 25 BERKELEY TECH L.J. (forthcoming 2011), available at http://ssrn.com/abstract=1586580; Reese, supra note 19, at 614; Van Houweling, supra note 19, at 889–90.

^{55.} Carver, supra note 54.

^{56.} See David Nimmer et al., The Metamorphosis of Contract to Expand, 87 CALIF. L. REV. 17, 36–40 (1999); Rothchild, supra note 15, at 31–33; see also, e.g., UMG Recordings, Inc. v. Augusto, 628 F.3d 1175, 1180 (9th Cir. 2011); Van Houweling, supra note 19, at 938 (citing the Microsoft Vista EULA as an example).

^{57.} Van Houweling, *supra* note 19, at 917 ("Before the advent of inexpensive and user-friendly copying technology, for example, most of the things that consumers did with copies of copyrighted works did not implicate copyright law at all. A consumer could buy a book and read it without thinking twice.").

^{58.} See Aaron Perzanowski, Fixing RAM Copies, 104 NW. U. L. REV. 1067, 1068 (2010).

^{59.} MAI Sys. Corp. v. Peak Computer Inc., 991 F.2d 511 (9th Cir. 1993). *But see* Cartoon Network v. CSC Holdings, Inc., 536 F.3d 121, 130 (2d Cir. 2008) (holding temporary buffer copies are not "copies" under the Copyright Act).

^{60.} Section 117 of the Copyright Act provides some protection for consumers who purchase computer programs. 17 U.S.C. § 117 (2006). This protection also depends on the disputed issue of copy ownership. See Carver, supra note 54. Consumers who purchased digitally encoded works other than computer programs currently receive no statutory protection for their creation of copies necessary to use a work.

^{61.} Digital Millennium Copyright Act § 103, 17 U.S.C. § 1201(a)–(b).

referred to as digital rights management (DRM) technologies, would thwart first sale by preventing users from accessing and using copies acquired through secondary markets.⁶² Without the legal ability to engage in self-help to circumvent DRM, consumers would be unable to make noninfringing uses of lawfully purchased copies.⁶³

As a result of these concerns, section 104 of the DMCA directed the Copyright Office and the Department of Commerce to jointly evaluate the effect of section 1201 on the first sale doctrine and related exhaustion rules. ⁶⁴ In 2001, the Register of Copyrights concluded that while the widespread use of DRM raised some concerns, first sale was alive and well since DRM-protected works were still largely distributed on physical media such as DVDs and CDs, which could be freely transferred. ⁶⁵ However, the Register acknowledged that the emergence of copies technologically tethered to a particular device presented a looming threat that could significantly marginalize the first sale doctrine:

A plausible argument can be made that section 1201 may have a negative effect on the operation of the first sale doctrine in the context of works tethered to a particular device. In the case of tethered works, even if the work is on removable media, the content cannot be accessed on any device other than the one on which it was originally made. This process effectively prevents disposition of the work. However, the practice of tethering a copy of a work to a particular hardware device does not appear to be widespread at this time, at least outside the context of electronic books Should this practice become widespread, it could have serious consequences for the operation of the first sale doctrine, although the ultimate effect on consumers is unclear. 66

The Register's speculation has proven prescient. Since 2001, the marketplace for copyrighted goods has shifted dramatically. Physical objects are quickly losing their primacy as a distribution mechanism. ⁶⁷ Moreover, the explosion of device-embedded and cloud-delivered content has put even greater distance between physical distribution and the realities of consumer

^{62.} See Peter Moore, Steal This Disk: Copy Protection, Consumers' Rights, and the Digital Millennium Copyright Act, 97 NW. U. L. REV. 1437, 1440–42 (2003).

^{63.} See DMCA SECTION 104 REPORT, supra note 53, at 39 (noting library association concerns that DRM and section 1201 would inhibit core library functions such as interlibrary loan programs, preservation of works, and accepting donations of works).

^{64.} Id. at v (Executive Summary).

^{65.} Id. at 78.

^{66.} Id. at xvi-xvii, 75-76.

^{67.} See supra text accompanying note 1; see also Greg Sandoval, Netflix Delights Studios With Big Checks, CNET NEWS, July 29, 2010, http://news.cnet.com/8301-31001_3-20012024-261.html; Marguerite Reardon, Roku Adds Amazon Video on Demand, CNET NEWS, Mar. 3, 2009, http://news.cnet.com/8301-1023_3-10186046-93.html.

acquisition. Many of these systems are tethered not just to particular devices but also to particular services, allowing copyright holders control over postsale consumer uses by requiring access to these services for the enjoyment of the purchased good.⁶⁸

These legal and market developments have marginalized the first sale doctrine even further and diminished its benefits to consumers. First and foremost, tethered digital works threaten to reduce the access and affordability benefits of first sale. A consumer who buys books on an iPad, Kindle, or Nook cannot resell them via secondary markets without either making a potentially infringing reproduction or selling the device itself, which is burdensome and unrealistic. Without secondary markets, there is neither downward pressure on price nor an unlicensed rental market.

Copyright holders maintain that freedom from unauthorized secondary markets would empower them to engage in price discrimination that could result in lower prices for individual consumers and casual users at the expense of instructional customers and professionals. Lexis and Westlaw, for example, can offer discounted or even gratis service to some users by charging higher prices to those who place greater value on the service. Perhaps by eliminating secondary markets, copyright owners would be more likely to take the same tack when it comes to software and entertainment content.

Taking the touted benefits of price discrimination at face value, neither the first sale doctrine nor the broader exhaustion principle we describe here precludes copyright holders from bestowing those benefits on their customers. Copyright owners committed to price discrimination can avoid those doctrines by structuring transactions not as sales but as leases or subscription services. Copyright owners who exchange perpetual possession of a copy for a payment, however, remain bound by copyright's exhaustion rules.⁷² And even

^{68.} See, e.g., Pamela Samuelson, Google Book Search and the Future of Books in Cyberspace, 94 MINN. L. REV. 1308, 1348 (2010) (noting the requirement under a proposed settlement that e-book purchases from Google Book Search be kept on Google servers); see also Jacqui Cheng, "Universal DRM" Renamed UltraViolet, Beta Starts This Fall, ARS TECHNICA, July 20, 2010, http://arstechnica.com/gadgets/news/2010/07/dece-moving-forward-with-beta-tests-but-still-sans-apple.ars.

^{69.} See Reese, supra note 19, at 612; DMCA SECTION 104 REPORT, supra note 53, at xviii ("[T]he transmission of a work from one person to another over the Internet results in a reproduction on the recipient's computer, even if the sender subsequently deletes the original copy of the work. This activity therefore entails an exercise of an exclusive right that is not covered by section 109.").

^{70.} See Matthew Lasar, Connecticut AG Calls Amazon, Apple to Woodshed Over E-Book Deals, ARS TECHNICA, Aug. 2, 2010, http://arstechnica.com/apple/news/2010/08/connecticut-ag-to-amazon-apple-lets-talk-about-e-books.ars.

^{71.} Reese, supra note 19, at 625–27.

^{72.} Many copyright owners attempt to evade the first sale rule by attaching licensing terms to their works. We doubt that a license alone is sufficient to transform a transaction that is otherwise

those rights holders are free to attempt to segregate markets through contract, technological controls, or other self-help mechanisms.

More fundamentally, we question the assumption that price discrimination, in practice, consistently reduces prices for consumers more than the existing system of secondary markets. Undoubtedly, by more closely matching the price at which a copy is offered with the price a consumer is willing to pay, price discrimination can yield a surplus. But whether that surplus ultimately results in significantly lower prices for consumers who value the product less remains an open question. To the extent price discrimination leads to a windfall for copyright owners, it arguably results in a deadweight loss to the copyright system as a whole. Copyright law's purpose, after all, is not to maximize copyright holder profits but to provide just enough incentive to prompt the creation of new works. The consumers who works that the process of the consumers who works the copyright holder profits but to provide just enough incentive to prompt the creation of new works.

Even assuming price discrimination does more good than harm, concerns over availability persist. For example, in markets defined by tethered copies, geographic availability is limited to jurisdictions where the copyright owner chooses to make sales. Tethered distribution also undermines first sale's preservation benefits, offering greater power to render works unavailable. Through remote deletion, Amazon can eliminate copies stored on your Kindle.⁷⁵ And cloud-based content can disappear when host companies discontinue service.⁷⁶

indistinguishable from a sale into something else for the purposes of first sale. But that remains an open question. See infra note 293.

^{73.} See Jonathan Weinberg, Hardware-Based ID, Rights Management, and Trusted Systems, 52 STAN. L. REV. 1251, 1272–78 (2000) (concluding that while price discrimination almost certainly benefits rights holders by enabling them to more fully capture surplus value, it does not necessarily benefit consumers).

^{74.} See William W. Fisher III, Property and Contract on the Internet, 73 CHI.-KENT L. REV. 1203, 1249 (1998) (arguing copyright should "give creators enough entitlements to induce them to produce the works from which we all benefit but no more"); Glynn S. Lunney, Jr., Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution, 11 SUP. CT. ECON. REV. 1, 5 (2003) (suggesting patent protection should be conferred only to the "precise extent[] necessary to secure each individual innovation's ex ante expected profitability").

^{75.} See Brad Stone, Amazon Erases Orwell Books From Kindle, N.Y. TIMES, July 17, 2009, http://www.nytimes.com/2009/07/18/technology/companies/18amazon.html. This new level of control over consumer uses has also affected how free and open various platforms and devices can be in terms of censorship and free speech. See Rich Jaroslovsky, Apple's Real 'Death Grip' Is on Its Customers, BUS. WK., July 8, 2010, http://www.businessweek.com/news/2010-07-08/apple-s-real-death-grip-is-on-its-customers-rich-jaroslovsky.html. Contra Reese, supra note 19, at 598–99 (citing Worldwide Church of God v. Phila. Church of God, Inc., 227 F.3d 1110, 1112–23 (9th Cir. 2000)) (noting that notwithstanding plaintiff's successful copyright action against publishing new versions of religious text, already existing versions that had been lawfully distributed could continue to be shared and distributed under first sale).

^{76.} See Reese, supra note 19 at 577, 630-44; Pamela Samuelson & Jason Schultz, Should Copyright Owners Have to Give Notice of Their Use of Technical Protection Measures?, 6 J. ON

Tethered copies also diminish consumer privacy. Prior to the increasingly tethered world of digital goods, buyers and sellers of copyrighted works could transact relatively anonymously and without any notice to, let alone the need for consent from, the copyright holder. Tethering, however, requires that users connect to the vendor's server to access their content, risking disclosure of personally identifying information and viewing habits.

Tethered transactions also come with increased information and transaction costs. Almost every digital good "purchased" on a tethered device is subject to numerous legal and licensing agreements with information costs that are disproportionately high in comparison to the otherwise low-cost or free content to which they are attached.⁷⁹ This is in stark contrast to the transactional clarity that first sale offers.⁸⁰

TELECOMM. & HIGH TECH. L. 41, 58–59 (2007); Mark Hefflinger, Walmart to End Support for DRM-Wrapped Songs in October, DIGITAL MEDIA WIRE (June 1, 2009), http://www.dmwmedia.com/news/2009/06/01/walmart-end-support-drm-wrapped-songs-october; see also Letter From the Fed. Trade Comm'n to Wal-Mart Stores, Inc. (June 23, 2010), available at http://www.ftc.gov/os/closings/100623 walmartletter.pdf; Letter From the Fed. Trade Comm'n to MLB Advanced Media (Oct. 9, 2008), available at http://www.ftc.gov/os/closings/081009mlbamclosingletter.pdf; Letter From the Fed. Trade Comm'n to Microsoft (Sept. 30, 2008), available at http://www.ftc.gov/os/closings/080930msnmusicclosing letter.pdf.

- 77. See supra note 66.
- 78. See Google Book Search Settlement and Reader Privacy, ELEC. FRONTIER FOUND. (July 2009), http://www.eff.org/issues/privacy/google-book-search-settlement. In addition, vendors have developed technologies to spy on their customers. Blizzard's popular online game World of Warcraft installs a program on every player's computer called Warden to monitor user activity to detect cheating, as subjectively defined by Blizzard. Mike Schramm, Blizzard's New Warden, and Our Privacy, WOW.OOM (Nov. 15, 2007), http://www.wow.com/2007/11/15/blizzards-new-warden-and-our-privacy. See MDY Indus. v. Blizzard Entm't, 616 F. Supp. 2d 958 (D. Ariz. 2009), aff'd, No. 09-15932, 2010 U.S. App. LEXIS 25424 (9th Cir. Dec. 14, 2010); see also Paul McDougall, Apple to Patent iPhone Kill Switch, INFO. WK. (Aug. 23, 2010), http://www.informationweek.com/news/software/ hosted/showArticle.jhtml? articleID=226900049&subSection=News (reporting Apple's attempt to patent technology that monitors iPhone, iPod Touch, and iPad users who make unauthorized use of technology and disables that technology).
- 79. See Aleecia M. McDonald & Lorrie Faith Cranor, The Cost of Reading Privacy Policies, 4 I/S: J.L. & POL'Y FOR INFO. SOC'Y 543, 562–68 (2008); see also Guilbert Gates, Facebook Privacy: A Bewildering Tangle of Options, N.Y. TIMES, May 12, 2010, http://www.nytimes.com/interactive/2010/05/12/business/facebook-privacy.html. In practice, many consumers simply ignore the terms of such restrictions, leading them to make choices in the marketplace based on incomplete information.
- 80. Moreover, companies frequently modify and update their terms of service (TOS)/EULA documents, forcing users to parse the differences and new terms at an even higher cost. For example, according to the Electronic Frontier Foundation's TOS tracking website, TOSBack, Apple's iTunes Store has changed its terms and conditions twelve times between February 24, 2009, and June 24, 2010. Apple iTunes Store Terms and Conditions, TOSBACK, http://www.tosback.org/policy.php?pid=4 (last visited Mar. 23, 2011). The latest version was over four thousand words long. The time and expense to read these terms carefully even a single time often outweighs the value proposition of the content by ten, twenty, or even hundred fold. See McDonald & Cranor, supra note 79; Van Houweling, supra note 19, at 15 (noting psychological research that suggests buyers conserve effort during their decisionmaking process by focusing on a limited number of salient product features and

User innovation has also suffered. Whereas users and competitors could previously purchase multiple copyrighted works and privately modify or innovate around or on top of them, many companies now monitor the use of their programs or content to make sure that no unauthorized modifications or innovations occur.⁸¹

Consumer lock-in is also becoming more severe. In the world of tethered digital goods, one cannot simply transfer one's apps to a new phone or one's e-books to a new reader without running up against EULAs, DRM, section 1201, or the RAM copy doctrine, significantly increasing platform switching costs. Moreover, many tethered platforms do not allow user-generated data to be exported outside the device or system. For example, Amazon's Kindle and Apple's iBooks app both allow users to highlight and annotate sections of the books they purchase. However, none of these highlights or annotations can be copied or shared outside of the device—often not even with the user's other devices. ⁸²

With the switch from physical objects to digital works, consumers and competitors have lost many of the benefits of first sale. Yet the principles that motivate that doctrine remain important. As we argue below, there remains a need—and a space—for these principles, even in the era of digital distribution. In the next Part, we demonstrate that since its inception, the first sale doctrine functioned as one component of a set of broader exhaustion rules in copyright law.

may not accurately account for the costs of use restriction, especially when such restrictions are bundled with more salient features and terms, such as price).

^{81.} Consider Blizzard's response when a programmer created a code to automate rudimentary tasks in its *World of Warcraft* game. After 25,000 users purchased the unauthorized program, Blizzard relied on its TOS, EULA, and section 1201 to shut down this user innovation. *Blizzard Entm't*, 616 F. Supp. 2d 958. *See also* Davidson v. Jung, 422 F.3d 630, 642 (8th Cir. 2005) (holding that user-innovated game servers for Blizzard games violated section 1201); Ryan Lord, *Microsoft Unleashes Banhammer on Xbox* 360 *Modders*, TOM'S GUIDE (Nov. 13, 2008), http://www.tomsguide.com/us/MicrosoftBans-Xbox-360-Mods,news-2933.html.

^{82.} See Export Notes From iBooks?, APPLE DISCUSSIONS, http://discussions.apple.com/thread.jspa?messageID=11806259� (last visited Mar. 23, 2011) (noting that Apple's iBooks app specifically disallows exportations of annotations and highlights); see also Samuelson, supra note 68, at 1348 (noting restrictions on annotations in the proposed Google Book Search settlement).

^{83.} In addition, the security and safety of users and their systems has also become more of an issue due to the end-run trend around first sale. There have always been security vulnerabilities in digital goods, including off-the-shelf software. However, cloud-based products and other tethers to vendors have also increased this risk for consumers. See Deirdre K. Mulligan & Aaron K. Perzanowski, The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident, 22 BERKELEY TECH. L.J. 1157, 1231–32 (2007); see also Mark Hefflinger, AT&T Apologizes for iPad Email Breach; Blames "Hackers," DIGITAL MEDIA WIRE (June 14, 2010), http://www.dmwmedia.com/news/2010/06/14/atampt-apologizes-ipad-email-breach-blames-quothackersquot.

II. COPYRIGHT'S EXHAUSTION PRINCIPLE

The prevailing wisdom holds that the genesis of and justification for the first sale doctrine are straightforward and self-contained. This tidy origin story is not altogether incorrect, but it is incomplete. What this narrative overlooks is the first sale doctrine's contribution to a matrix of statutes, interpretations, and common law rules that together constitute a broader and more complex exhaustion principle at work in copyright law.

To more completely map the story of copyright exhaustion, this Part first recounts the established history of the first sale doctrine. Second, it contextualizes that doctrine, demonstrating that first sale is not just an isolated freestanding limitation on the distribution right but an integrated component of a coherent exhaustion principle that cuts across all of the exclusive rights of the copyright grant.

A. The Familiar Story of First Sale

First sale's typical origin story begins just over a century ago with the U.S. Supreme Court's 1908 decision in *Bobbs-Merrill Co. v. Straus.*⁸⁴ In 1904, Bobbs-Merrill published *The Castaway*, a novel by Hallie Herminie Rives. In an effort to maintain retail prices, Bobbs-Merrill printed the following notice in each copy:

The price of this book 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.

THE BOBBS-MERRILL COMPANY⁸⁵

Defendants, the proprietors of R.H. Macy & Company, sold copies of *The Castaway* for a mere eighty-nine cents. Macy's acquired the majority of its copies from wholesalers for roughly sixty cents each. Those wholesalers, in turn, purchased their copies from Bobbs-Merrill either directly or through intermediary distributors. Bobbs-Merrill either directly or through intermediary distributors.

Bobbs-Merrill sued for copyright infringement, alleging that defendants violated its "sole right and liberty of . . . vending" *The Castaway* by selling it

^{84. 210} U.S. 339 (1908).

^{85.} Id. at 341.

^{86.} Id. at 342.

^{87.} Id. at 341–42.

^{88.} Id. Ten percent of Macy's stock was purchased at retail for the full one-dollar price. Id. at 342.

^{89.} Copyright Act of 1790, ch. 15, § 1, 1 Stat. 124 (amended 1802).

below the approved retail price. Bobbs-Merrill contended that since the Copyright Act granted rights holders the "whole field of the right of exclusive sale," a publisher could exercise that right by withholding copies from the market altogether, selling them without restriction, or selling them conditionally, reserving "so much of the right as [it] pleases." Pleases.

The Court rejected the contention that a copyright holder can retain downstream control over the disposition of a copy by reciting purported conditions on its initial sale. Once Bobbs-Merrill sold copies "in quantities and at a price satisfactory to it[, it] exercised the right to vend," exhausting that right with respect to the particular copies sold.⁹² Even if contractual obligations could support restrictions on future sales, the Court made clear that copyright law could not.⁹³

Congress embraced the *Bobbs-Merrill* decision almost immediately.⁹⁴ Section 41 of the Copyright Act of 1909 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."⁹⁵ This provision reflected congressional approval of *Bobbs-Merrill*. In the century that followed, neither Congress nor the courts were inclined to alter the basic operation of the first sale doctrine articulated in *Bobbs-Merrill*.⁹⁶ As a result, the history of the first sale doctrine traces a direct and undisturbed path from the Supreme Court's 1908 decision in *Bobbs-Merrill* to the current doctrine as codified by Congress and interpreted by the courts.

Like the doctrine itself, the primary theoretical justifications for the first sale rule have remained intact. Two related principles underlie the first sale doctrine. The first is the distinction between the copyrighted work and the copy that embodies it. Copyright protection subsists in the work, the intangible

^{90.} Bobbs-Merrill, 210 U.S. at 349.

^{91.} Id.

^{92.} Id. at 351.

^{93.} Id. at 350–51. Tellingly, Bobbs-Merrill brought no contract claim against Macy's. Id. at 350.

^{94.} See Quality King Distrib., Inc. v. L'anza Research Int'l, Inc., 523 U.S. 135, 141–42 (1998) ("Congress subsequently codified our holding in *Bobbs-Merrill* that the exclusive right to 'vend' was limited to first sales of the work.").

^{95.} Copyright Act of 1909, ch. 320, § 1, 17 U.S.C. § 41 (1946) (amended 1947).

^{96.} The next major revision of the Copyright Act brought only minor changes to the doctrine's statutory formulation. Section 109 of the Copyright Act of 1976 offered one important clarification—the doctrine applies only to copies or phonorecords "lawfully made under this title." 17 U.S.C. § 109(a) (1976). That is, for the distribution of a copy to be privileged under the first sale doctrine, that copy must have been created under the copyright holder's authority or pursuant to a statutory license or privilege. See H.R. REP. NO. 94-1476, at 79 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5692. This statutory tweak, consistent with prior judicial interpretation, clarified that the distribution of infringing reproductions falls outside of the protection of the first sale rule. *Id.*

creation of an author.⁹⁷ Although that creation must be fixed in tangible form to qualify for copyright protection,⁹⁸ it is the work rather than the copy that is the subject of the copyright grant. As early as 1852, the Supreme Court acknowledged that the copyright was "detached from the manuscript, or any other physical existence"⁹⁹ In other words, ownership of the copy is distinct from ownership of the copyright. Although Congress recognized this principle in the 1909 Act,¹⁰⁰ some courts continued to confuse the copy and the copyright.¹⁰¹ To counter this persistent conflation, Congress reiterated the distinction more explicitly in the Copyright Act of 1976.¹⁰²

The second principle motivating the first sale doctrine, the alienability of personal property, is rooted in English common law. Ocurts have long resisted limitations on downstream use and resale of personal property on the grounds that "they offend against the ordinary and usual freedom of traffic in

- 97. The Copyright Act draws "a fundamental distinction between the 'original work' which is the product of 'authorship' and the multitude of material objects in which it can be embodied. Thus, in the sense of the [Act], a 'book' is not a work of authorship, but is a particular kind of 'copy." H.R. REP. NO. 94-1476, at 53, reprinted in 1976 U.S.C.C.A.N. at 5675; see also Matthew Bender & Co. v. W. Publ'g Co., 158 F.3d 693, 702 (2d Cir. 1998) (noting the distinction between works and the copies in which they are fixed).
- 98. "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 (2006).
- 99. Stephens v. Cady, 55 U.S. (14 How.) 528, 531 (1852) (holding that the purchase of an engraving plate did not entail the right to reproduce copies); see also Stevens v. Royal Gladding, 58 U.S. (17 How.) 447, 452 (1854) (recognizing the severability of a copyright from ownership of the material object embodying the protected work).
- 100. Copyright Act of 1909, 17 U.S.C. § 41 (1946) (amended 1947) ("[C]opyright is distinct from the property in the material object copyrighted.").
- 101. See Pushman v. N.Y. Graphic Soc., Inc., 39 N.E.2d 249 (N.Y. 1942) (holding that the copyright of an original work of art accompanied physical transfer of the work). Indeed, some courts continue this mistake today. See Carver, supra note 54 (noting the persistent confusion among courts on this point).
 - 102. Section 202 states:

Ownership of a copyright, or of any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied. Transfer of ownership of any material object, including the copy or phonorecord in which the work is first fixed, does not of itself convey any rights in the copyrighted work embodied in the object; nor, in the absence of an agreement, does transfer of ownership of a copyright or of any exclusive rights under a copyright convey any property rights in any material object.

17 U.S.C. § 202 (2006); see also H.R. REP. No. 94-1476, at 124, reprinted in 1976 U.S.C.C.A.N. at 5664 (noting Congress's intent to alter the common law rule applied in *Pushman*).

103. See Zechariah Chafee, Jr., Equitable Servitudes on Chattels, 41 HARV. L. REV. 945, 981–82 (1928); H.R. REP. NO. 98-987, at 2 (1984), reprinted in 1984 U.S.C.C.A.N. 2898, 2899; S. REP. NO. 162, at 4 (1983); see also Chafee, supra note 33, at 1261 ("Where chattels are involved and not just land or a business, the policy in favor of mobility creates even stronger cause for courts to hesitate and scrutinize carefully factors of social desirability before imposing novel burdens on property in the hands of transferees.").

chattels...."¹⁰⁴ Restraints on alienation are inconsistent with "the essential incidents of a right of general property in movables, and... obnoxious to public policy, which is best subserved by great freedom of traffic in such things as pass from hand to hand."¹⁰⁵ The first sale doctrine is understood as copyright law's reflection of this longstanding aversion to impeding the free flow of goods in the stream of commerce. ¹⁰⁶

Within the traditional first sale narrative, the alienability principle also explains why the doctrine is limited to the distribution right. Because alienability is inherently concerned with the free movement of goods in commerce, the first sale doctrine targets acts of distribution. Not surprisingly, courts have consistently held that first sale is no defense to infringement of the other exclusive rights of the copyright holder.¹⁰⁷

Taken together, the copyright/copy distinction and the alienability principle lead almost syllogistically to the first sale doctrine. With ownership of the copyright divorced from ownership of the copy when the copyright holder sells a book, she retains her copyright interest in her literary work but transfers the title to the book qua chattel to the purchaser. The alienability principle strongly suggests that ownership of the book entails the right to dispose of it free from copyright holder demands. Absent an unambiguous congressional indication to the contrary, the distribution right must conform to the alienability principle.

The prevailing account of the first sale doctrine paints a picture of a rule with well-defined origins, established justifications, and specific limits. 108

^{104.} John D. Park & Sons Co. v. Hartman, 153 F. 24, 39 (6th Cir. 1907).

^{105.} Id.

^{106.} See Sebastian Int'l, Inc. v. Consumer Contacts (PTY) Ltd., 847 F.2d 1093, 1096 (3d Cir. 1988); Burke & Van Heusen, Inc. v. Arrow Drug, Inc., 233 F. Supp. 881, 883–84 (E.D. Pa. 1964); see also DMCA SECTION 104 REPORT, supra note 53, at 86; PATRY, supra note 16, § 13:15.

^{107.} See, e.g., Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191, 197 (1931); Columbia Pictures Indus., Inc. v. Aveco, Inc., 800 F.2d 59, 63–64 (3d Cir. 1986); Columbia Pictures Indus., Inc. v. Redd Horne, Inc., 749 F.2d 154, 159–60 (3d Cir. 1984); United States v. Powell, 701 F.2d 70, 72 (8th Cir. 1983) ("Although the [copyright] holder's other rights remain intact (reprinting, copying, etc.), the vendee holds the right to distribute the transferred copy in whatever manner he chooses."); Precious Moments, Inc. v. La Infantil, Inc., 971 F. Supp. 66, 67 (D.P.R. 1997) ("The first sale doctrine, however, limits only the distribution rights of the copyright owner; it does not limit the other exclusive rights enumerated in § 106, including the right to prepare derivative works.").

^{108.} Even within this narrative, some pressing questions about the application of the first sale doctrine remain. First, how do we reliably identify the owner of a copy in an environment of increasingly prevalent licensing of consumer products? See Carver, supra note 54. Second, how does first sale interact with the copyright holder's right to control the importation of copies, particularly copies made outside the United States? Compare Quality King Distribs, Inc. v. L'anza Research Int'l, Inc., 523 U.S. 135, 152–54 (1998) (holding that the first sale doctrine precludes liability for the reimportation of works into the United States), with Omega S.A. v. Costco Wholesale Corp., 541

The doctrine that emerges from this tidy historical, theoretical, and practical context has significant implications, but implications restricted to the distribution right and with limited relevance to copyright law generally. Moreover, first sale's sphere of influence is rapidly contracting as reproduction over networks displaces the distribution of physical copies as the preferred means of transmitting copyrighted material from authors, publishers, and intermediaries to consumers. ¹⁰⁹

B. The Neglected Story of Copyright Exhaustion

Rather than understanding the first sale doctrine as an important but idiosyncratic limit on the distribution right, this Article suggests that first sale is the primary, but not solitary, illustration of a generalizable principle of copyright exhaustion. In the most general terms, the exhaustion principle holds that a fundamental set of user rights or privileges flows from lawful ownership of a copy of a work. These privileges apply to the full range of exclusive rights, not just the distribution right. Although the precise shape and scope of exhaustion privileges vary, they permit activities incidental to the use and enjoyment of copies by their owners.

Situating first sale within the broader exhaustion principle begins with a closer look at the cases that came before *Bobbs-Merrill*. Decades before the Court's recognition of the first sale rule, lower courts acknowledged exhaustion as an established limitation on the copyright grant. These early cases, in conjunction with subsequent congressional and judicial practice, reveal an exhaustion principle much broader than first sale's limitation on the distribution right. Along with alienation, exhaustion embraces rights of repair

F.3d 982, 990 (9th Cir. 2008) (holding that the first sale defense was unavailable where the defendant imported and sold watches manufactured and first sold outside of the United States).

^{109.} See supra Part I.

^{110.} The terms "first sale" and "exhaustion" are occasionally used interchangeably. See PATRY, supra note 16, § 13:15 (noting that outside of the United States, "[t]he principal exception to the distribution right" is referred to as the exhaustion doctrine); see also WIPO Performances and Phonograms Treaty arts. 8, 12, Dec. 20, 1996; WIPO Copyright Treaty art. 6, Dec. 20, 1996 (noting the exhaustion of the distribution right). We will use "first sale" to refer to the limitation of the distribution right and "exhaustion" to refer to the broader principle—which includes the first sale rule—that copyright owner interests are limited as against owners of copies.

^{111.} In *Henry Bill Publ'g Co. v. Smythe*, the court explained that "[i]nseparably with the transfer of the title in any copy of the work must go the right of alienation, so far as the peculiar protection of the copyright statutes is concerned..." 27 F. 914, 923 (C.C.S.D. Ohio 1886). The "doctrine running through all the cases" confirmed that the violation of purported conditions on the resale copies is not infringement. *Id.* The *Henry Bill* court held the first sale principle inapplicable because the defendants acquired their copies from a bailee entrusted to deliver the copies but had no title to the books. *Id.* at 926–28.

and renewal, adaptation and modification, and even display and performance. Because of its historical economic significance, the distribution right has been exhaustion's primary focus, overshadowing these other rights of copy owners. But as described below, reinvigorating this broader understanding of exhaustion is central to the preservation of the rights of copy owners in the digital marketplace.¹¹²

1. Repair and Renewal

Early cases recognized an exhaustion rule that both anticipated the holding in *Bobbs-Merrill* and transcended it. This line of cases began with *Harrison v. Maynard*, *Merrill & Co.*¹¹³ There, unbound pages embodying a copyrighted literary work were damaged in a fire.¹¹⁴ The copyright holder, Maynard, instructed its bookbinder to sell the surviving sheets as waste paper.¹¹⁵ When a secondhand book seller offered damaged copies of the work bound from the fire-damaged pages, Maynard sued for infringement.¹¹⁶ The Second Circuit sided with the book seller, explaining that "the right to restrain the sale of a particular copy of the book . . . has gone when the owner of the copyright and of that copy has parted with all his title to it."

Although decided on a theory largely coextensive with the first sale doctrine, ¹¹⁸ Maynard set the stage for a more expansive application of the exhaustion principle. In Doan v. American Book Co., ¹¹⁹ the Seventh Circuit endorsed not only the familiar notion that the sale of a copy exhausts the exclusive right to vend, but that copy ownership also implies a right to renew or repair, even if repair entails altering or copying the underlying work. ¹²⁰ American Book published children's schoolbooks. ¹²¹ Doan acquired used books in various states of disrepair. Some were defaced, others "soiled and torn," and the covers

^{112.} See infra Part III.

^{113. 61} F. 689 (2d Cir. 1894).

^{114.} Id

^{115.} *Id.* The contract of sale provided that "all paper taken out of the building is to be utilized as paper stock, and all books to be sold as paper stock only, and not placed on the market as anything else." *Id.*

^{116.} Id. at 690.

^{117.} Id. at 691.

^{118.} *ld*. ("The exclusive right to vend the particular copy no longer remains in the owner of the copyright by the copyright statutes.").

^{119. 105} F. 772, 776–77 (7th Cir. 1901).

^{120.} Id. at 773.

^{121.} Id. at 776-77.

of still others were damaged or missing.¹²² Doan repaired the books to "render [them] serviceable," then sold them.¹²³

The resale of secondhand books, of course, falls squarely within the first sale rule, and many of the steps taken to renew and repair the books did not implicate American Book's exclusive rights. But other steps endorsed by the court appear perilously close to acts of reproduction. For books with missing covers, Doan not only rebound the volumes in new covers, but attempted to replicate the original cover designs. The court concluded that the "right of repair or renewal" that passed to the owner of the copy extended to the preparation of an "exact imitation of the original" cover. Doan was entitled, as the owner of a copy, to restore the books to their original condition even if that required reproduction "in exact similitude" of copyrighted material. As the court characterized it, "[a] right of ownership in the book carries with it and includes the right to maintain the book as nearly as possible in its original condition. To deny that right would have been, in the court's estimation, "intolerable and odious."

The repair and renewal line of cases continued to develop independently from the first sale doctrine even after *Bobbs-Merrill* and its recognition in the 1909 Act. In *Bureau of National Literature v. Sells*, ¹³⁰ Sells, a former employee, "overhauled, [and] reconstructed" copies of *Messages and Papers of the Presidents*, a work published by Bureau. ¹³¹ The court held that the right of repair and renewal undermined any cause of action for copyright infringement. ¹³² Although decided in 1914, *Sells* referenced the circuit court opinion in *Bobbs-Merrill* only in passing in the context of a quote from *Doan*. ¹³³ Neither the 1909 Act nor the Supreme Court decision in *Bobbs-Merrill* is mentioned, suggesting that the right of repair stood as a distinct limit on copyright holder authority.

^{122.} Id. at 777.

^{123.} Id

^{124.} *ld.* (noting that "no legal right of the appellee was invaded by" cleaning, trimming, or rebinding the books).

^{125.} Id.

^{126.} Id. at 776-77.

^{127.} Id. at 778. The court assumed that the cover design was a protectable component of the work. Id.

^{128.} Id at 777.

^{129.} Id.

^{130. 211} F. 379, 380 (W.D. Wash. 1914).

^{131.} Id. at 381.

^{132.} Id. at 381-82.

^{133.} Id. at 382.

Of course, title to a copy cannot confer on its owner an unbounded privilege to reproduce the work. Complete exhaustion of the reproduction right would undermine the incentive structure at the heart of copyright law. The question is how much of a work the lawful owner of a copy may reproduce and under what circumstances. In Ginn & Co. v. Apollo Publishing, 134 one court struggled with that question. Ginn, like American Books, published children's schoolbooks. 135 Apollo, like Doan, was in the business of acquiring, repairing, and reselling books secondhand. 136 While Doan faithfully reproduced damaged and missing book covers, Apollo went one step further. It reproduced and replaced missing text and maps from damaged books before reselling them. 137

After noting the difficulty of drawing a line between permissible and infringing reproduction by the owner of a copy, the Ginn court adopted a rather unforgiving standard. According to the court, since Apollo was not entitled to publish a new edition of the book, it could not "reprint any material part of it."138 Any material reproduction, even for the purposes of repair, constituted infringement. The court's approach, rather than directly confronting the challenging task of careful line drawing, treated exhaustion as an all-or-nothing proposition. At some point, repair slips into infringement. A copy owner who supplements a single chapter from a tattered copy with a dozen reproduced chapters is an infringer, not a repairer. But allowing Apollo to make limited reproductions of a few pages while repairing copies appears to be the sort of reproduction sanctioned by Doan. But both Ginn and Doan recognize the tension between the reproduction right and the full enjoyment of copy ownership. And both cases underscore the need for flexible but tailored exhaustion rules that strike an appropriate balance between the interests of copyright holders and copy owners. 139

^{134. 215} F. 772 (E.D. Pa. 1914).

^{135.} Id. at 775.

^{136.} Id.

^{137.} Id.

^{138.} Id. at 779.

^{139.} Occasionally, this balance is achieved legislatively. The Copyright Act entitles libraries, for example, to copy works in their collections to preserve against loss and deterioration. See 17 U.S.C. § 108 (2006). Congress has restricted copy owners' rights when doing so was deemed necessary to preserve incentives for creativity. See Computer Software Rental Amendments Act of 1990, Pub. L. No. 101-650, §§ 801–05, 104 Stat. 5134 (1990) (codified at 17 U.S.C. § 109(b)) (restricting copy owners' rights to rent, lease, or lend computer programs for commercial purposes, but providing exceptions for video games and nonprofit libraries); Record Rental Amendment Act of 1984, Pub. L. No. 98-450, 98 Stat. 1727 (1984) (codified at 17 U.S.C. § 109(b)) (restricting copy owners' rights to rent, lease, or lend phonorecords for commercial purposes but providing an exception for nonprofit libraries).

2. Adaptation and Modification

In addition to distribution and reproduction, courts have applied the exhaustion principle to allow owners of copies to adapt or modify those copies. In one early case, *Kipling v. G.P. Putnam's Sons*, ¹⁴⁰ Rudyard Kipling sued a publisher that purchased unbound pages of his copyrighted works from his licensee. Putnam's Sons bound those pages in a multivolume set, along with Kipling's copyrighted collection of poems *The Seven Seas*, ¹⁴¹ several uncopyrighted Kipling poems, a biography of Kipling by author Will Clemens, and an index. ¹⁴² The distribution of the lawfully acquired copies was privileged by the first sale rule, but what sets the Kipling case apart is the creation of a new work incorporating preexisting copies of Kipling's writing. Nonetheless, the Second Circuit held that Putnam's Sons, as the owner of copies of Kipling's works, was entitled to create and distribute its new collection and arrangement of those copies.

Kipling was decided long before any explicit recognition of a general derivative work right, ¹⁴³ but the copyright law of the day did provide an exclusive adaptation right that courts enforced under similar circumstances. Indeed, one court enforced that right against the lawful owner of copies. *National Geographic Society v. Classified Geographic, Inc.* ¹⁴⁴ held that the adaptation right was infringed when the defendant purchased copies of National Geographic Magazine, cut out individual articles, and reassembled them in bound volumes organized by subject matter. ¹⁴⁵ The court attempted to distinguish *Kipling* by suggesting that G.P. Putnam's Sons received permission to collect and arrange Kipling's works, a conjecture at odds with the *Kipling* decision. ¹⁴⁶

To the extent Kipling and National Geographic are reconcilable, a more workable distinction would consider the size of the component parts that make up each new work. Putnam's Sons left Kipling's copyrighted collections of poems intact when it combined them with other works. Classified Geographic, on the other hand, used individual articles from issues of National Geographic as the building blocks it rearranged into new works. Another case decided just a few years after National Geographic lends some support to this distinction.

^{140. 120} F. 631 (2d Cir. 1903).

^{141.} Putnam's Sons purchased its copies from D. Appleton & Co., presumably another Kipling licensee. Id.

^{142.} Id.

^{143.} Congress did not recognize a derivative work right until the 1976 Act. See 1–3 NIMMER & NIMMER, supra note 16 (noting the occasional difficulty of distinguishing derivative and collective works).

^{144. 27} F. Supp. 655, 660 (D. Mass. 1939).

^{145.} Id.

^{146.} ld.

Fawcett Publications made and sold comic books, including *Wow Comics*, *No.* 2. Hours Elliott Publishing purchased copies of *Wow Comics*, *No.* 2, bound them together with comic books published by Fawcett's competitors, and sold the rebound titles under the name *Double Comics*. The court held that Elliott did not infringe. Hours Ho

Whether National Geographic is ultimately consistent with Kipling and Fawcett remains an open question. But just as a line must be drawn between reproductions permitted by exhaustion and those that infringe, a viable exhaustion rule for the derivative work right needs to identify the subset of adaptations that a copy owner is entitled to prepare. Adaptations of an owner's copy fall into three broad categories. At one end of the spectrum, the copy owner may rearrange the elements of a copy in a way that borrows no expression from the original work. If an artist, for example, repurposes individual words from National Geographic or small clusters of Benday dots from a comic book to create a new work, no infringement has occurred because no protectable subject matter has been exploited. At the other end of the spectrum, exhaustion protects copy owners who repackage their copies or combine them with other lawfully acquired copies or public domain works. Because these copies remain intact, with their purpose and expressive content unchanged, their reuse and modification is within the bundle of rights in the copy transferred from the copyright owner to the copy owner.

Somewhere in between these two poles, the adapter repurposes enough of the copy to borrow original expression but not enough to leave the expressive content of the original work unchanged. If the original work is sufficiently transformed through the manipulation of the copy, the resulting adaptation might be a fair use. But the exhaustion principle would not privilege such a use. The purpose of exhaustion is to allow copy owners to use their copies for their intended purposes. In this sense, the uses of copies endorsed by exhaustion are inherently consumptive. Exhaustion enables copy owners to preserve and transfer the value of their copies, but not to transform it. 153

^{147.} Fawcett Publ'ns, Inc. v. Elliot Publ'g Co., 46 F. Supp. 717, 717 (S.D.N.Y. 1942).

^{148.} Id. at 717-18.

^{149.} Id. at 718.

^{150.} See WILLIAM S. BURROUGHS & BRION GYSIN, THE THIRD MIND 29–33 (1978) (describing the cut-up method of composition).

^{151.} Benday dots are an inexpensive method for printing color and shading, named for printer Benjamin Day. See JOHN UPDIKE, MORE MATTER: ESSAYS AND CRITICISM 727 (1999).

^{152.} See Blanch v. Koons, 467 F.3d 244 (2d Cir. 2006).

^{153.} Lantern Press, Inc. v. Am. Publishers Co., 419 F. Supp. 1267 (E.D.N.Y. 1976). In *Lantern Press*, the court endorsed prebinding, the practice of purchasing paperback books, binding them in hardcovers, and then reselling them. The goal of prebinding is not to repair or restore a damaged copy, but to "extend the service life of the book and protect the text from destruction in use." *Id.* at 1270;

Recognizing the role of exhaustion in resolving disputes over adaptations could help avoid some of the messy definitional quandaries surrounding the derivative work right. The Ninth and Seventh Circuits, for example, reached very different conclusions when they considered claims of infringement against A.R.T., a company that transferred copies of protected images onto more durable media. A.R.T. would purchase books and prints of copyrighted images and affix them to ceramic tiles, allegedly creating derivative works.

The Seventh Circuit rejected the infringement claim brought by artist Annie Lee, concluding that mounting an image on a tile was insufficient to create a derivative work.¹⁵⁴ Surely, the court argued, mounting a painting in a frame would not trigger the derivative work right.¹⁵⁵ Affixing an image to a tile no more "recast[s], adapt[s], or transform[s]" it than does framing it.¹⁵⁶ Equally importantly, the court acknowledged that "[a]n alteration that includes (or consumes) a complete copy of the original lacks economic significance." Since A.R.T. did not create a derivative work and its distribution of the copies was protected by the first sale doctrine, it did not infringe.¹⁵⁸

The Ninth Circuit, in contrast, agreed with plaintiff Mirage Editions that when A.R.T. affixed copyrighted images to ceramic tiles, A.R.T. prepared a derivative work.¹⁵⁹ With little explanation, the court concluded that removing copies of images from a book and affixing them to tiles was enough to "recast, transform[], or adapt[]" the work.¹⁶⁰ Like the Seventh Circuit, the Ninth Circuit recognized that the first sale doctrine did not extend beyond the distribution right to embrace the preparation of derivative works.¹⁶¹

Although the Seventh Circuit's approach is better reasoned, the A.R.T. cases serve as useful illustrations of the difficulty courts face in applying the 1976 Copyright Act's notoriously vague definition of derivative works. An exhaustion principle that goes beyond the distribution right could give courts a tool for resolving similar disputes without resorting to instinctual

see also Ginn & Co. v. Apollo Publ'g Co., 215 F. 772, 778 (E.D. Pa. 1914) (identifying the copy owner's right to preserve and renovate his copy).

^{154.} Lee v. A.R.T. Co.,125 F.3d 580 (7th Cir. 1997).

^{155.} Id. at 581.

^{156. 17} U.S.C. § 101 (2006).

^{157.} Lee, 125 F.3d at 581.

^{158.} *Id.* at 581–82; *see also* C.M. Paula Co. v. Logan, 355 F. Supp. 189 (N.D. Tex. 1973) (holding that the transfer of copyrighted images from lawfully obtained greeting cards to ceramic plaques did not constitute a reproduction or an adaptation of the images).

^{159.} Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341, 1343 (9th Cir. 1988).

^{160.} Id. at 1344.

^{161.} Id.

classifications.¹⁶² Even if the tiles created by A.R.T. are in a strict definitional sense derivative works, *Kipling* strongly suggests that their lawful preparation is a natural and lawful extension of copy ownership.

3. Display and Performance

Congress first granted copyright holders an exclusive right to display their works in 1976. A work is displayed when one shows a copy of it, either directly or indirectly through the use of some technology. Concerned over the risk of interference with the public's use and enjoyment of copyrighted works, Congress limited this new display right in two important respects. First, the scope of the right was limited to public displays of a work, leaving displays within a typical social circle beyond the reach of copyright holder control. Second, even for displays that qualify as public, Congress ensured that

answers to all derivative work questions. ClearPlay developed DVD players capable of programmatically skipping or muting offensive content during playback. Copyright holders alleged that even though the performances were private and no permanent copy of the altered film was created, the performance constituted a derivative work. See generally Alison R. Watkins, Surgical Safe Harbors: The Family Movie Act and the Future of Fair Use Legislation, 21 BERKELEY TECH. L.J. 241 (2006). Anticipating litigation, ClearPlay and others sought a declaratory judgment of noninfringement. Id. at 245. Before the court could decide whether such displays violate the derivative work right, Congress enacted the Family Movie Act, which permits automatic content skipping so long as no permanent copy is created. Id. at 251–54; see also Family Movie Act of 2005, Pub. L. No. 109-9, 119 Stat. 223 (2005) (codified in 17 U.S.C. § 110(11) (2006)). This legislative fix could be seen as an extension of the exhaustion principle that applies to both copy owners and authorized viewers of performances. Id.

^{163.} See 17 U.S.C. § 106(5) (providing copyright holders with the exclusive right "in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly").

^{164.} Id. § 101 ("[T]o 'display' a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.").

^{165.} *Id.* § 106(5). A public display is one that occurs in a place open to either the public generally or a group of people exceeding a "normal circle of a family and its social acquaintances." *Id.* § 101. A public display also occurs when the display is transmitted to a place open to the public or a group outside a typical social circle "whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times." *Id.*

^{166.} Categorizing displays as public or private is not always an easy task. Compare Columbia Pictures Indus. v. Aveco, Inc., 800 F.2d 59 (3d Cir. 1986) (holding that the rental of rooms to members of the public for the purposes of viewing performances of video cassettes violated the public performance right), with Columbia Pictures Indus. v. Prof1 Real Estate Investors, 866 F.2d 278 (9th Cir. 1989) (holding that performances of motion pictures to renters of hotel rooms were not public); see also Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008) (holding that the playback of recorded television programs at the request of cable subscribers was not a performance "to the public").

exhaustion allows owners of copies to show those copies. Section 109(c) permits the owner of a lawfully made copy to publicly display that copy at the place where it is located, either directly or with the aid of technology, regardless of copyright holder consent. As a result, museums, galleries, and other copy owners are not required to license public display rights for onpremises displays of works in their collections. If they own a copy, they are entitled to display it. 168

While anyone can make a private display of a protected work, only the copy owner has the privilege of making an otherwise infringing public display. Congress created the public display right and the copy owners' privilege simultaneously, suggesting legislative recognition of the importance of the parallel development of the exhaustion principle and copyright owner exclusivity.

The exhaustion of the public display right also suggests that the justifications for privileging copy owners go beyond alienability. The privilege of displaying a lawful copy of a work does not clear the way for resale of the copy. Instead, it allows copy owners to make a customary use inherent in the notion of copy ownership, the sort of use copy owners bargain for when they purchase copies. Section 109(c) recognizes the right to display a copy, like the right to alienate it, as a natural incident of copy ownership. ¹⁶⁹

But the display rights of copy owners are not without limits. In light of emerging technologies, Congress worried that displays of copies to large dispersed audiences could interfere with the copyright holders' ability to exploit their works through the more traditional means of reproduction and distribution.¹⁷⁰ So Congress limited the public display privilege of copy owners to the physical location of the copy, preserving the balance between copyright owners and copy owners.

In contrast to the public display right, the right of public performance does not feature a corresponding general-purpose exhaustion rule. Congress created the first performance right in 1856, granting authors of dramatic works the exclusive right "to act, perform, or represent the same . . . on any stage or

^{167. 17} U.S.C. § 109(c).

^{168.} This privilege right also applies to anyone authorized by the owner of a copy. Even if work is on loan from a private collection, a museum is entitled to display it publicly. *Id.*

^{169.} See H.R. REP. NO. 94-1476, at 79–80 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5693 ("[T]he general principle that the lawful owner of a copy of a work should be able to put his copy on public display without the consent of the copyright owner . . . [is a] . . . traditional privilege of the owner of a copy."). For a detailed account of the legislative history of this provision, see 5 PATRY, *supra* note 16, § 15:10.

^{170.} See H.R. REP. NO. 94-1476, at 80, reprinted in 1976 U.S.C.C.A.N. at 5693 ("[T]he committee's intention is to preserve the traditional privilege of the owner of a copy to display it directly, but to place reasonable restrictions on the ability to display it indirectly in such a way that the copyright owner's market for reproduction and distribution of copies would be affected.").

public place."¹⁷¹ Over time, musical works,¹⁷² lectures,¹⁷³ sermons,¹⁷⁴ and other literary works¹⁷⁵ were protected against unauthorized for-profit public performances. Motion pictures, omitted from the 1909 Act altogether,¹⁷⁶ eventually received protection under the 1976 Act.¹⁷⁷

The owner of a copy of a work—a script, for example—is entitled to publicly display, but not to perform, that copy. Both the narrow scope of early performance rights¹⁷⁸ and the contribution of new expression inherent in performance¹⁷⁹ partially explain this discrepancy. But the best explanation for the differing treatment of the display and performance rights focuses on patterns of commercial exploitation. If the goal of the copyright system is to balance incentives to create new works with the public's ability to use and enjoy them, the exhaustion principle should be sensitive to variations in the ways copyright holders commercialize their works. Copyright holders sometimes profit by selling copies. A painter might sell a single copy of her work at a high price, or she might sell mass-produced prints at a lower price. In either case, she profits from the sale of copies. Contrast that strategy with that of the

^{171.} Act of Aug. 18, 1856, ch. 169, 11 Stat. 138, 139 (1856).

^{172.} Act of Jan. 6, 1897, ch. 4, 29 Stat. 481, 481–82 (1897).

^{173.} Act of Mar. 4, 1909, ch. 320, 35 Stat. 1075, 1075 (1909).

^{174.}

^{175.} Act of July 17, 1952, ch. 923, 66 Stat. 752, 752 (1952).

^{176.} Motion pictures were recognized as protectable subject matter in 1912. See Act of Aug. 24, 1912, ch. 356, 37 Stat. 488, 488 (1912).

^{177.} See 17 U.S.C. § 106(4) (2006) (listing "literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works" as works for which copyright owners enjoy the exclusive right of public performance). To perform a work is "to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible." *Id.* § 101. The performance and display rights share a common definition of "public." *Id.* More recently, Congress provided a limited digital public performance right for sound recordings. *Id.* § 106(6).

^{178.} Prior to the 1976 Act, public performance rights in lectures, sermons, addresses, musical works, and nondramatic literary works extended only to for-profit public performances. Therefore, copy owners were arguably given sufficient latitude to exploit their copies, rendering exhaustion largely unnecessary. Under the 1909 regime, however, the public performance of dramatic works infringed regardless of the defendant's profit motive. See Act of Mar. 4, 1909. Likewise, current law does not condition infringement of the public performance right on commercial activity. 17 U.S.C. § 106(4).

^{179.} Unlike the act of display, which generally entails little more than presenting an unaltered and unmediated copy of the author's work to an audience, performance typically involves an element of interpretation, fusing the author's expression with some original contribution by the performer. While a display is an exploitation of a copy, a performance is perhaps better understood as an exploitation of the underlying work. But not all performances add original expression. The projectionist at your local theater does not interpret the films she exhibits. See 17 U.S.C. § 101 (defining the performance of a motion picture as "show[ing] its images in any sequence").

playwright or the early motion picture producer. Those authors did not exploit their works primarily by selling copies, but by public performances or exhibitions. If the value of a work is extracted through performance rather than the sale of copies, performances privileged by exhaustion could interfere with copyright's incentive structure in a way that public displays do not. As a result, with very limited exceptions, copyright law has avoided applying the exhaustion principle to public performances. ¹⁸¹

C. Exhaustion and Computer Programs

Outside of section 109, the Copyright Act's most explicit recognition of the exhaustion principle is its treatment of computer programs. Section 117 of the Act guarantees owners of lawfully made copies of programs the right to reproduce, adapt, and redistribute them. ¹⁸² In section 117, the Copyright Act acknowledges that copy owners require more than the freedom of alienation to make use of the copies they own. In that sense, section 117 echoes the pre–Bobbs-Merrill exhaustion case law.

The current section 117 grew out of initial congressional indecision about the scope of copyright protection for computer programs. Although the Copyright Office accepted registrations for programs under its "rule of doubt" as early as 1964, ¹⁸³ the 1976 Act failed to fully clarify lingering questions about their copyrightability and scope of protection. Instead, Congress did two

^{180.} The choice between these strategies is informed by both consumer preferences and the available technology. Most audiences would rather watch a performance of *Krapp's Last Tape* than read a copy of the play. Until the advent of the VCR, there was simply no consumer market for copies of motion pictures. Over time, these practices can change. Hollywood, for example, makes more money each year on home video purchases, rentals, and television licensing than it does at the box office. See Edward Jay Epstein, *Hollywood's Profits, Demystified*, SLATE, Aug. 8, 2005, http://www.slate.com/id/2124078. But longstanding practices can become embedded in both consumer expectations and copyright doctrine.

^{181.} Congress has applied the exhaustion principle to address transactions that intertwine copy ownership and public performance. After the Fourth Circuit held that video arcades violated the public performance right when they allowed customers to play lawfully purchased games in public, Congress intervened. See Red Baron-Franklin Park, Inc. v. Taito Corp., 883 F.2d 275 (4th Cir. 1989). Since enabling public use was the only common and obvious reason to purchase an expensive coin-operated arcade game, Congress created a limited exception that exhausted the public display right in such games. See 17 U.S.C. § 109(e). This provision lapsed in 1994. Act of Dec. 1, 1990, Pub. L. No. 101-650, § 804, 104 Stat. 5136 (1990); see also 4 PATRY, supra note 16, § 14:32. It is difficult to divine any clear legislative policy from Congress's experimentation with exhaustion of the performance right, given its limited nature. But its decision to limit the public performance right, even temporarily, suggests some sensitivity to the interests of copy owners in the customary use and enjoyment of lawfully acquired copies.

^{182. 17} U.S.C. § 117.

^{183.} See Pamela Samuelson, CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form, 1984 DUKE L.J. 663, 692–94.

things. First, it enacted the original version of section 117, which effectively preserved the status quo. ¹⁸⁴ Second, it established the National Commission on New Technological Uses of Copyrighted Works (CONTU), a panel of experts charged with studying the relationship between new technologies and copyright protection and recommending changes to existing law. ¹⁸⁵

Among its recommendations, CONTU offered a definition of computer programs and called on Congress to explicitly endorse them as works protected by copyright. CONTU also recommended that section 117, as enacted in the 1976 Act, be replaced with new statutory language designed to establish the right of lawful possessors of copies of computer programs to reproduce and adapt those copies in the course of their use. 187

CONTU proposed four distinct rights that would flow from ownership or rightful possession of a copy. First, copy owners should be permitted to create exact copies of programs to the extent necessary to run those programs. Storage of a program on a hard disk, or arguably in RAM, creates a copy. ¹⁸⁸ CONTU understood that unless copy owners were entitled to create "essential step" copies, mere use of their copies could trigger liability. ¹⁸⁹ Second, because digitally encoded works like computer programs are subject to accidental deletion and medium instability, CONTU suggested a right for copy owners to create archival copies of programs. ¹⁹⁰ Third, CONTU noted that because of a lack of standardization in computer hardware, operating systems, and programming languages, programs written for one device may not run on

^{184.} As originally enacted, section 117 provided in relevant part:

[[]T]his title does not afford to the owner of copyright in a work any greater or lesser rights with respect to the use of the work in conjunction with automatic systems capable of storing, processing, retrieving, or transferring information, or in conjunction with any similar device, machine, or process, than those afforded to works under the law, whether title 17 or the common law or statutes of a State.

Act of Oct. 19, 1976, Pub. L. No. 94-553, 90 Stat. 2541, 2565 (1976). The House Report noted that section 117 was "intended neither to cut off any rights that may now exist, nor to create new rights that might be denied under the Act of 1909 or under common law principles currently applicable." And "[w]ith respect to the copyright-ability of computer programs, the ownership of copyrights in them, the term of protection, and the formal requirements of the remainder of the bill, the new statute would apply." H.R. REP. NO. 94-1476, at 116 (1976), reprinted in 1978 U.S.C.C.A.N. 5659, 5731.

^{185.} Pub. L. No. 93-573, 88 Stat. 1873 (1974).

^{186.} See NAT'L COMM'N ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REP. 12 (1979) [hereinafter CONTU]. This definition was codified in 17 U.S.C. § 101. See infra Part III.

^{187.} CONTU, supra note 186, at 13.

^{188.} The notion that temporary instantiations of a work stored in memory are copies for the purposes of the Copyright Act is a controversial one. See Perzanowski, supra note 58.

^{189.} CONTU, *supra* note 186, at 13 ("[O]ne who rightfully possesses a copy of a program...should be provided with a legal right to copy it to that extent which will permit its use by that possessor.").

^{190.} Id.

another.¹⁹¹ To ensure some measure of portability between systems, CONTU recommended granting copy owners the "right to make those changes necessary to enable the use for which it was both sold and purchased."¹⁹² These sanctioned adaptation copies included both conversions from one language to another to facilitate device shifting as well as alterations that added new features to an existing program.¹⁹³ Finally, CONTU endorsed a right of distribution that extended not only to the original purchased copy but also to any exact copies made pursuant to the archival and essential-step privileges. So long as all such copies were transferred together, along with the copy from which they were made, the copy owner was entitled to sell, lease, or otherwise transfer ownership of them.¹⁹⁴

In 1980, Congress adopted CONTU's proposed changes to section 117. Enacted as part of the Government Patent Policy Act of 1980, the revisions to section 117 prompted no substantive discussion in the legislative history. Given the absence of any meaningful record of debate in Congress, the rationales put forth by CONTU stand as the only testament to section 117's purpose. Congress made a single change to the language drafted by CONTU, substituting the word "owner" for CONTU's preferred formulation, "rightful possessor." However, this minor alteration of CONTU's proposed statutory text does not undermine the notion that section 117 was intended to clarify the application of exhaustion to computer programs. Although it may have limited the class of users who benefit from section 117, this change is fully consistent with the exhaustion principle.

^{191.} Id.

^{192.} Id.

^{193.} Id.

^{194.} *Id.* at 12–13. Without this limitation, section 117 could enable the sale of putative backup copies in direct competition with the copyright holder. *See* 4 PATRY, *supra* note 16, § 11:43. The copy owner's right to redistribute copies under section 117 does not extend to adaptations. Since such copies are "lawfully made" under Title 17, section 117 functions in part as an implicit limitation on section 109.

^{195.} See generally H.R. REP. NO. 96-1307 (1980), reprinted in 1980 U.S.C.C.A.N. 6460.

^{196.} Although the CONTU report is frequently cited by courts and commentators, its authoritative weight is far from clear. However, to the extent Congress acted on CONTU's recommendations without any additional legislative history, as it did with respect to section 117, the CONTU report is the best indication of Congress's intent, by virtue of being the only evidence available. See 4 PATRY, supra note 16, § 11:30.

^{197.} Compare CONTU, supra note 186, at 13, with 17 U.S.C. § 117 (2006).

^{198.} This change excluded those, like bailees, who rightfully possessed copies but had no ownership interest in them. See Quality King Distribs., Inc., v. L'Anza Research Int'l, Inc., 523 U.S. 135, 146–47 (1998) (noting that the use of the term "owner" in section 109 excludes bailees). Some have argued that it excludes mere licensees from taking advantage of the privileges outlined in section 117. See id. But treating consumers who acquire copies through transactions that look like

As enacted in 1980, section 117 established a set of copy owner rights that extended the pre–Bobbs-Merrill exhaustion tradition into the digital age. Copy owners are entitled to reproduce their copies for preservation and renewal; they can adapt and modify works to add new features or ensure compatibility, thereby creating derivative works; and they can distribute exact copies of a program in conjunction with transfer of their original copy. The rights established in section 117—along with the first sale doctrine, the public display privilege, and the exhaustion rules found throughout the early cases—serve the same basic purpose. They all allow copy owners to make uses otherwise within the literal scope of copyright holder exclusivity. Despite their similar goals and rationales, the statutory tweaks to the law of copyright exhaustion present an apparent tension with the common law approach favored by early courts. As discussed in the next Part, however, the common law process continues to play an important role in copyright law generally and in exhaustion policy in particular.

III. REVIVING EXHAUSTION IN THE DIGITAL ECONOMY

Understanding the first sale doctrine as a component of a larger exhaustion principle offers a promising solution to the threat of obsolescence the doctrine currently faces. Although a statutory solution could offer timely clarification of the scope of exhaustion in the digital economy, legislative efforts in the copyright arena, particularly those aimed at shifting the balance of exclusivity in favor of users, have an inconsistent track record at best. Moreover, in the long term, detailed statutory schemes exacerbate the risk that today's law will be outpaced by tomorrow's technological and market developments. Instead, our proposal embraces the exhaustion principle's tradition of judicial development and its promise of greater flexibility and responsiveness to copy owners' interests.

purchases as mere licensees of physical objects is difficult to square with reason or sound policy. See Carver, supra note 54.

^{199.} See 17 U.S.C. § 117(a)–(b). In response to the Ninth Circuit's decision in MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993), the Digital Millennium Copyright Act added a new subsection clarifying that the creation of copies of a program in the course of maintenance or repair of a computer does not infringe. See 17 U.S.C. § 117(c).

^{200.} The Benefit Authors Without Limiting Advancement or Net Consumer Expectations (BALANCE) Act, for example, would have amended section 109 to allow copy owners to transmit work to a single recipient so long as the transferor did not retain a copy. See BALANCE Act, H.R. 1066, 108th Cong. (2003). The BALANCE Act was never reported out of the House Committee on the Judiciary. Scholars have advocated statutory fixes to sections 109 and 117 for well over a decade. See, e.g., Fred H. Cate, The Technological Transformation of Copyright Law, 81 IOWA L. REV. 1395, 1447–51 (1996).

This Part begins by describing the central role common law adjudication has played and continues to play in copyright law, notwithstanding the increasingly regulatory tone of recent amendments to the Copyright Act. It argues that the exhaustion principle, like many central doctrines in copyright law, remains essentially a common law rule despite the statutory recognition of the first sale doctrine and the creation of section 117. Next, this Part draws on the common law development of patent law's exhaustion rules to further support such an approach in copyright law. Finally, it concludes by outlining a set of principles intended to help courts apply the exhaustion principle to digitally distributed works.

A. Exhaustion and the Common Law of Copyright

The notion that copyright is a creature of statutory law has attained something approaching axiomatic status. With its 1834 decision in *Wheaton v. Peters*, ²⁰¹ the Supreme Court held that federal copyright protection for published works could be created solely by legislative grant. ²⁰² Although state common law and statutory protection for unpublished works persisted, those rights were largely extinguished by the Copyright Act of 1976. ²⁰³ Today, copyright interests arise exclusively under the Copyright Act.

Common law copyright may be a thing of the past, but the common law of copyright is alive and well. Many of copyright's central rules are deeply rooted in common law tradition. Core concepts and doctrines—among them, originality, authorship, substantial similarity, and secondary

^{201. 33} U.S. 591 (1834).

^{202.} *Id.*; see also Donaldson v. Beckett, (1774) 1 Eng. Rep. 837 (H.L.), 2 Brown's Parl. Cases 129 (rejecting perpetual common law copyright in favor of an exclusively statutory regime).

^{203.} Unlike its predecessors, the 1976 Act protected both published and unpublished works, bringing an end to the bifurcated system of state and federal protections. See Ralph S. Brown, Jr., Unification: A Cheerful Requiem for Common Law Copyright, 24 UCLA L. REV. 1070, 1070 (1977) (noting that under the 1976 Act, the "dual system that has persisted since the beginning of the republic gives way to a unified national copyright"). The 1976 Act continues to countenance state law protection for sound recordings created prior to 1972. 17 U.S.C. § 301(c).

^{204.} See Liu, supra note 19, at 1299-1300.

^{205.} The 1976 Act limits protection to "original works of authorship." 17 U.S.C. § 102(a). But Congress left originality "purposely... undefined... to incorporate without change the standard of originality established by the courts under the present [1909] copyright statute." H.R. REP. NO. 94-1476, at 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5664; S. REP. NO. 94-473, at 50 (1975).

^{206.} In the context of joint authorship, for example, courts have held that an author must contribute expression to a protected work. See, e.g., Childress v. Taylor, 945 F.2d 500, 507 (2d Cir. 1991). Childress rejected Nimmer's contention that the contribution of unprotectable elements, such as ideas, is sufficient to establish joint authorship. See NIMMER, supra note 16, § 6.07.

^{207.} The 1976 Act offers no definition of infringement. Instead, section 501 deems one who violates any of the exclusive rights defined in section 106 an infringer. See 17 U.S.C. § 501.

liability²⁰⁸—spring from centuries of judicial adjudication and are almost entirely absent from the text of the Copyright Act. Other components of copyright law, such as the definition of works made for hire, are spelled out in the statute²⁰⁹ but rely on embedded common law rules.²¹⁰ Whether or not the Copyright Act enshrines existing common law or new legislative policy, Congress typically leaves the heavy lifting of interpretation and application to the courts.²¹¹

But this history of delegation to the courts has not been an unbroken one. Recent additions to the Copyright Act display a level of regulatory detail more commonly seen in agency rulemakings or private industry agreements. Despite the ink spilled in these remote corners of Title 17, courts continue to answer the fundamental questions—the establishment of exclusive rights, their ownership, scope, infringement, exceptions, and limitations—through the common law process.

The common law development of two particular limitations on the exclusive rights of copyright holders—misuse and fair use—shed some light

Nor does the Act instruct courts as to the amount or type of copying that violates the reproduction right. Indeed, "[n]o copyright statute, going back to the 1710 English Statute of Anne, has ever defined the degree or type of reproduction that will give rise to infringement." 3 PATRY, *supra* note 16, § 9:64. The substantial similarity standard, the most prevalent formulation of the test for infringement, developed entirely through common law evolution.

- Aside from the exceedingly thin reed offered by the phrase "to authorize," the Copyright Act lacks any explicit recognition of secondary liability for infringement. See 17 U.S.C. § 106 (providing copyright holders with "exclusive rights to do and to authorize" the enumerated acts). Despite this statutory silence, the common law of copyright has developed powerful and nuanced doctrines of secondary liability. Vicarious liability, an outgrowth of respondeat superior, applies when a defendant "has the right and ability to supervise the infringing activity and also has a direct financial interest in such activities." A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1022 (9th Cir. 2001) (quoting Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259, 262 (9th Cir. 1996)). Contributory liability "originates in tort law and stems from the notion that one who directly contributes to another's infringement should be held accountable." Fonovisa, 76 F.3d at 264. In Sony, the U.S. Supreme Court established the staple article doctrine, which limits contributory liability when a product is capable of substantial noninfringing use. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 442 (1984). Most recently, the Court limited the practical effect of Sony by reinvigorating secondary liability premised on intentional inducement of infringement. See Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 914 (2005).
 - 209. 17 U.S.C. § 101 (defining "work made for hire").
- 210. Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730, 740–41 (1989) (holding that "employee" and "scope of employment" as used in the "work made for hire" definition "should be understood in light of the general common law of agency").
- 211. See Shyamkrishna Balganesh, Debunking Blackstonian Copyright, 118 YALE L.J. 1126, 1167-68 (2009).
- 212. See, e.g., 17 U.S.C. §§ 114–15. Indeed, these and other key provisions of the Copyright Act are effectively private agreements. See JESSICA LITMAN, DIGITAL COPYRIGHT 36–39 (2001); 1 PATRY, supra note 16, § 2:1 (describing the post-1995 amendments to the Copyright Act as "in form if not content[,] private industry standards agreements dressed up in legislative garb").

on the viability of a nonstatutory exhaustion defense. The copyright misuse doctrine is found nowhere in the Copyright Act. It emerged from a series of cases that first limited the rights of patent holders and, later, copyright holders who attempted to enlarge the scope of their statutory exclusivity in conflict with the underlying principles of the patent and copyright laws.²¹³ If misuse is established, the rights holder is prevented from asserting its rights until it has purged itself of its misuse.²¹⁴

The misuse doctrine has expanded and evolved over time. While some early cases appeared to limit misuse to behavior that violated antitrust law, the modern doctrine embraces a much broader range of activities. This evolution occurred absent either guidance or recognition from Congress, demonstrating that statutory exceptions and limitations are only a subset of the available defenses to infringement.

Unlike misuse, exhaustion is not entirely absent from the Copyright Act. Both sections 109 and 117 are examples of exhaustion at work in the statute. Yet there is no doubt that common law defenses to infringement can thrive in the shadow of the Copyright Act; for evidence, one only need look to the fair use defense that continues to evolve despite its statutory recognition.

Fair use, arguably the single most recognized limitation on copyright exclusivity, began its life as a purely common law doctrine. Although its ancestry stretches back much further, the doctrine began to take its modern shape with Justice Story's decision in *Folsom v. Marsh.*²¹⁷ In the centuries that followed, fair use has evolved into a doctrine flexible enough to decide cases dealing with scholarly quotation, parodies of popular music, and technologies that facilitate new uses of works by consumers.²¹⁸

^{213.} United States v. Loew's, Inc., 371 U.S. 38 (1962) (affirming lower court decision that block-booking violated section 1 of the Sherman Act); United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948) (holding that block-booking, the conditioning of the sale or license of one copyrighted work on the sale or license of another work, unlawfully enlarged the scope of individual copyrights); Morton Salt Co. v. G.S. Suppiger Co., 314 U.S. 488, 493 (1942) (holding that the use of a patent to restrain competition with the sale of an unpatented product constitutes misuse); Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970 (4th Cir. 1990) (recognizing misuse as a defense to copyright infringement).

^{214.} Lasercomb, 911 F.2d at 979 n.22. The defense applies even if the defendant was not itself subject to plaintiff's misuse. *Id.* at 979.

^{215.} See, e.g., qad. Inc. v. ALN Assocs., Inc., 770 F. Supp. 1261, 1267 (N.D. Ill. 1991) (holding that the failure to disclose a work as a derivative constituted misuse), aff d, 974 F.2d 834 (7th Cir. 1992).

^{216.} For a thorough history of the development of the misuse doctrine, see Brett Frischmann & Dan Moylan, *The Evolving Common Law Doctrine of Copyright Misuse: A Unified Theory and Its Application to Software*, 15 BERKELEY TECH. L.J. 865 (2000).

^{217. 9} F. Cas. 342, 348 (C.C.D. Mass. 1841) (stating an early formulation of the fair use standard).

^{218.} See Pamela Samuelson, Unbundling Fair Uses, 77 FORDHAM L. REV. 2537 (2009).

After well over a century of common law development, Congress included fair use in the 1976 Act. Section 107 lays out several illustrative examples of potentially fair uses and a nonexclusive four factor test. These factors, derived from the doctrine's common law history, led many to conclude that Congress codified fair use, synthesizing the constantly evolving common law accretion into a clearer, more manageable statutory bundle. However, Congress intended the four factor test in section 107 to "restate the present judicial doctrine of fair use, not to change, narrow, or enlarge it in any way." As others have noted, the effect of section 107 is not codification in any strict sense but statutory recognition of an evolving common law doctrine.

Much like fair use, the first sale doctrine and the exhaustion principle it embodies are rooted in judicial, rather than legislative, decisionmaking.²²³ The conceptual antecedent of first sale, the rule favoring alienability of personal property, grew out of centuries of common law.²²⁴ Despite the Court's claim that it acted merely as a faithful interpreter of the terms of the Copyright Act, Bobbs-Merrill reveals a Court engaged in judicial weighing of competing interests and policies that parallels the fair use inquiry.²²⁵ The Copyright Act of the day provided rights holders the sole liberty to vend copies of their

^{219.} See 17 U.S.C. § 107 (2006).

^{220.} See, e.g., Harper & Row Publishers v. Nation Enters., 471 U.S. 539, 547 (1985) (describing section 107 as "codiffying] the traditional privilege of other authors to make 'fair use' of an earlier writer's work"); Ty, Inc. v. Publ'ns Int'l Ltd., 292 F.3d 512, 517 (7th Cir. 2002) ("The defense of fair use, originally judge-made, now codified, plays an essential role in copyright law."); Suntrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1264 (11th Cir. 2001) ("Until codification of the fair-use doctrine in the 1976 Act, fair use was a judge-made right."). But see Triangle Publ'ns v. Knight-Ridder Newspapers, 626 F.2d 1171, 1174 (5th Cir. 1980) ("In codifying the concept of fair use, Congress made clear that it in no way intended to depart from Court-created principles or to short-circuit further judicial development.").

^{221.} H.R. REP. NO. 94-1476, at 66 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5680. Congress insisted that "the courts must be free to adapt the doctrine to particular situations on a case-by-case basis." *Id.*

^{222.} See 4 PATRY, supra note 16, § 10:8 (noting that "Congress was merely recognizing, not codifying, a common-law doctrine" in section 107).

^{223.} See United States v. Atherton, 561 F.2d 747, 750 (9th Cir. 1977) (noting that the first sale doctrine "has been judicially read into the statute from a judicial gloss drawn on 17 U.S.C. § 27").

^{224.} See Chafee, supra note 103, at 981-82.

^{225.} Bobbs-Merrill Co. v. Straus, 210 U.S. 339, 350 (1908) (describing the Court's task as "purely a question of statutory construction"). The line separating the development of common law rules and statutory interpretation is not a clear one. See Louise Weinberg, Federal Common Law, 83 NW. U. L. REV. 805, 807 (1989) ("[T]here is no useful theoretical dividing line that would let us say with confidence, 'On this side we have the common law, and on that we have statutory interpretation."); Craig Green, Repressing Erie's Myth, 96 CALIF. L. REV. 595, 619 (2008) ("[O]ne could stare oneself blind trying to separate common law from statutory or constitutional interpretation, remedial law, and other 'non-common-law' judicial decision-making.").

works, but it said nothing of alienability, exhaustion, or first sale. The Bobbs-Merrill Court did not discover the first sale doctrine nestled between the lines of the Act. It applied a common law defense to infringement previously recognized by other courts that, while not inconsistent with the text of the Act, was nowhere to be found within it.

Similarly, the early cases that embraced the rights of renewal, repair, adaptation, and modification relied on the same common law approach utilized in *Bobbs-Merrill*.²²⁷ These courts looked to the basic purposes of copyright protection, the necessity of balancing the interests of rights holders and the public, and the specific facts presented to address gaps in the statutory scheme and ease copyright's core tension between incentives for creation and the accessibility and enjoyment of creative works. This flexible fact-sensitive approach closely mirrors the basic operation of the fair use doctrine, a methodology largely responsible for its power and longevity.²²⁸ We suggest that courts can employ a similarly flexible approach to exhaustion to rebalance the interests of rights holders and copy owners in our reordered information economy.²²⁹

To the extent Congress intended the Copyright Act to serve as the exclusive statement of copyright's exhaustion doctrine, there are arguably no statutory gaps left for courts to fill. But the available evidence does not support the inference that Congress meant to foreclose future development of the

^{226.} Copyright Act of 1891, § 4952, 26 Stat. 1107 (1891).

^{227.} See supra Part II.B.

^{228.} See Harper & Row Publishers v. Nation Enters., 471 U.S. 539, 595 n.19 (1985) (Brennan, J., dissenting) ("The broad language adopting the common-law approach to fair use is best understood as an endorsement of the essential fact-specificity and case-by-case methodology of the common law of fair use.").

^{229.} This common law approach can still be seen today as courts struggle to apply section 109. See Quality King Distribs. v. L'anza Research Int'l, 523 U.S. 135, 152 (1998) ("An ordinary interpretation of the statement that a person is entitled 'to sell or otherwise dispose of the possession' of an item surely includes the right to ship it to another person in another country."); Parfums Givenchy, Inc. v. Drug Emporium, Inc., 38 F.3d 477, 482 n.8 (9th Cir. 1994) (recognizing a judicially created exception to the Ninth Circuit's limitation of the first sale doctrine to works made in the United States if an authorized first sale occurs in the United States).

^{230.} See Jay Dratler, Jr., Common-Sense (Federal) Common Law Adrift in a Statutory Sea, or Why Grokster Was a Unanimous Decision, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 413, 419 (2006) ("When Congress is mute or unintelligible on an important point in an otherwise comprehensive statutory scheme, it is up to the courts to fill in the gaps. Doing so is neither judicial legislation nor judicial activism. Rather, it is an exercise in developing federal common law, within the interstices of federal statutes, universally recognized as legitimate, notwithstanding Erie."); Peter Westen & Jeffrey S. Lehman, Is There Life for Erie After the Death of Diversity?, 78 MICH. L. REV. 311, 331–32 (1980) ("When a court in this country acts in a common law capacity, it performs precisely the same function as when it interprets a statute: It legislates 'interstitially' by 'filling in the gaps left by the legislature,' fully recognizing that the legislature 'can by the ordinary legislative process correct results if it does not approve." (footnotes omitted) (quoting John Hart Ely, The Supreme Court, 1977 Term—Foreword: On Discovering Fundamental Values, 92 HARV. L. REV. 5, 50 (1978))).

exhaustion principle. Congress appears to have merely highlighted some particularly important exhaustion scenarios while leaving courts free to develop and apply the common law of copyright exhaustion.

When Congress first recognized the first sale doctrine in 1909, it did "not intend[] to change in any way existing law" and attempted "to make it clear that there is no intention to enlarge in any way the construction to be given to the word 'vend," a construction developed by the courts and largely defined by the first sale rule.²³¹ This legislative intent, combined with the continued judicial development of exhaustion rules after the 1909 Act, 232 confirms that the statutory recognition of first sale did not close the door on the common law of copyright exhaustion. This state of affairs continued under the 1976 Act regime. There, Congress affirmed its intent to "restate[] and confirm[]" the first sale rule "established by court decisions." As the Supreme Court has explained, "[t]here is no reason to assume that Congress intended either [section] 109(a) or the earlier codifications of the doctrine to limit its broad scope."234 Nor is there any indication that, by recognizing some common and pressing exhaustion scenarios in the statute, Congress intended to deny courts the ability to continue to adapt and apply the common law of exhaustion that gave rise to the first sale doctrine, a process Congress was quick to praise and loathe to disturb.

Moreover, Congress had good reasons for highlighting the particular exhaustion rules it did in 1976. As discussed above, the distribution right historically has been the most economically significant of the copyright holder's exclusive rights. Congress's decision to outline the limitations on that right in the statute, therefore, is not surprising. And since Congress created the public display right in the 1976 Act, it was able to enact statutory limitations and had no need to rely on common law exhaustion limitations. Similarly, when Congress explicitly extended copyright protection to computer programs, it felt the need to clarify how longstanding exhaustion principles applied to that new class of works in section 117. Congress's choice to remain silent about

^{231.} H.R. REP. NO. 60-2222, at 19 (1909), reprinted in E. FULTON BRYLAWSKI & ABE GOLDMAN, 6 LEGISLATIVE HISTORY OF THE 1909 COPYRIGHT ACT (1976).

^{232.} See supra notes 130–133.

^{233.} H.R. REP. No. 94-1476, at 79 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5693; see also id. at 81 (noting that section 109(b), now section 109(c), was intended to "preserve the traditional privilege of the owner of a copy to display it directly"); Quality King, 523 U.S. at 152 ("There is no reason to assume that Congress intended either § 109(a) or the earlier codifications of the doctrine to limit its broad scope."). When Congress enacted section 117, applying the exhaustion principle to computer programs, it did so without any statement of its legislative intent. See H.R. REP. No. 96-1307 (1980), reprinted in 1980 U.S.C.C.A.N. 6460.

^{234.} Quality King, 523 U.S. at 152.

exhaustion more generally, however, reveals little about the viability of common law rules favoring copy owners.

Whether understood as codifications of specific rules or statutory recognitions of a broader common law trend, sections 109 and 117 appear consistent with continued judicial extension and application of copyright's exhaustion principle. To treat sections 109 and 117 as foreclosing such common law evolution, particularly when Congress's only statements on the subject evince its effort to recognize and preserve common law rules, would be to read far too much from legislative silence. Congress has not explicitly embraced the full scope of the exhaustion doctrine at work in the case law. But it has not rejected it either. So long as the rules applied by courts do not conflict with the terms of the Copyright Act, there appears to be no barrier to the parallel development of purely judicial exhaustion doctrines.²³⁵ As discussed below, the history of patent exhaustion offers a strong case for the virtues of judicial evolution of exhaustion rules.

B. The Common Law Path of Patent Exhaustion

While copyright law has focused largely on the statutory embodiment of the first sale rule, patent law has always fully embraced an exhaustion regime firmly rooted in judicial decisionmaking. The common law origins and application of patent exhaustion demonstrate the power and flexibility of such an approach and help inform how courts deciding copyright cases could reincorporate a similar methodology.

Much like copyright exhaustion, patent exhaustion began as a common law method for ensuring the purchaser's alienability of goods and freedom of use by limiting the patent owner's exclusive rights. In its first patent exhaustion case, the Supreme Court held that the extension of a patent term could not interfere with the rights of purchasers who bought the item for use "in the ordinary pursuits of life." Later, the Court held that, notwithstanding an explicit postsale restriction, a purchase "carrie[s] with it the right to the use of that

^{235.} Whether Congress or the courts are better suited institutionally for addressing the issue of digital exhaustion is also a point of consideration. While a full discussion is beyond the scope of this Article, it is worth noting that there have been no major revisions to Title 17 since 1998, with copyright legislation becoming increasingly difficult to pass. Thus, in addition to the benefit of flexibility offered by an evolutionary case-by-case approach, courts offer the advantages of deciding fair use issues only in the factual context of an actual case or controversy and doing so in a comparatively timely manner. This has been the case for most of modern fair use law as well. See Samuelson, supra note 218.

^{236.} Bloomer v. McQuewan, 55 U.S. (14 How.) 539, 549 (1852).

machine so long as it [is] capable of use."²³⁷ The Court also used the exhaustion doctrine to hold territorial restrictions on resale unenforceable.²³⁸ Hence, patent law's exhaustion rule emerged not from statutory language but normative policies, such as the idea that patent owners should not control postsale consumer uses of patented goods, restrain the growth of secondary markets,²³⁹ or interfere with competition.²⁴⁰

Patent exhaustion's flexibility to distinguish cases in light of competing policy objectives and to readjust to changes in economic conditions has also served it well. For example, after the Supreme Court upheld a patent license price-fixing provision in *Henry v. A.B. Dick*, Co., ²⁴¹ many patent holders began limiting the use of their products and securing control of related, unpatented items. ²⁴² Recognizing the broader implications of such conduct, the Court reversed the rule just one year later. ²⁴³ Unconstrained by rigid statutory language, the Court relied on first principles—the constitutional purpose of patents—to determine that postsale control of the item and related goods was beyond the scope of patent protection. ²⁴⁴

Patent exhaustion's common law approach also cabined the doctrine when necessary to prevent it from undermining incentives for innovation and protecting patent holder profits from initial sales. ²⁴⁵ For example, the Supreme Court used exhaustion to strike down postsale price restrictions in *Dr. Miles Medical Co. v. John D. Park & Sons Co.* ²⁴⁶ and *Motion Picture*

^{237.} Adams v. Burke, 84 U.S. (17 Wall.) 453, 455 (1873); see HOVENKAMP ET AL., IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW 33–20 (2d ed. 2010) (identifying *Adams* as the source of the "first sale' or exhaustion doctrine").

^{238.} See Adams, 84 U.S. (17 Wall.) at 456.

^{239.} See Keeler v. Standard Folding-Bed Co., 157 U.S. 659, 666 (1895) ("[O]ne who buys patented articles of manufacture from one authorized to sell them becomes possessed of an absolute property in such articles, unrestricted in time or place.").

^{240.} See Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 518 (1917) (rejecting a patent infringement claim premised on the patent owner's requirement that unpatented products used with the patented equipment be leased solely from the patent owner).

^{241. 224} U.S. 1, 19, 24–25 (1912).

^{242.} See Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617, 626 (2008) (citing Motion Picture Patents, 243 U.S. at 518).

^{243.} Id.

^{244.} See Van Houweling, supra note 19, at 913–14 (noting that just one year after A.B. Dick, the Court distinguished it and reaffirmed Adams v. Burke, 84 U.S. (17 Wall.) 453 (1873), and its progeny as the proper line of reasoning for exhaustion cases and later confirmed the rule in Straus v. Victor Talking Machine Co., 243 U.S. 490 (1917), and Motion Picture Patents, 243 U.S. 502).

^{245.} Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1465 (2004) ("Following *Adams*, the Court regularly repeated the [patent exhaustion] rule but with no useful elaboration of the principle underlying it beyond the simple assertion that the patentee is deemed to have received his full patent reward from the sale price of the patented good.").

^{246. 220} U.S. 373, 404-05 (1911).

Patents, ²⁴⁷ as those cases involved anticompetitive efforts to "double dip" into downstream profits and yet upheld similar restrictions in *United States v. General Electric Co.*, ²⁴⁸ a case involving a directly competing manufacturer. ²⁴⁹

The flexibility of the common law approach has also helped courts deal with new technologies and changing markets. In its most recent patent exhaustion case, *Quanta v. LG Electronics*, *Inc.*,²⁵⁰ the Supreme Court addressed complications in the semiconductor chip market where numerous patents exist on both the products and the methods of using them.²⁵¹ The question in *Quanta* was whether method patents were exhausted by the sale of a product that "substantially embodied" the method. The Court held that they were, based on the "longstanding principle that, when a patented item is 'once lawfully made and sold, there is no restriction on [its] *use* to be implied for the benefit of the patentee.""²⁵²

The patent holder argued that exhaustion could not apply to method claims because they were processes and therefore not linked to a tangible article and incapable of being sold. However, the Court—unconstrained by any statutory language—rejected this argument, recognizing that allowing patent owners to control through method patents what they could not control through product patents would thwart the purposes of exhaustion and allow an end run around the doctrine. Had the Court been bound by an outdated and shortsighted statute, it would have lacked the power to adjust exhaustion rules to keep pace in this new technological context.

Patent law's experience with flexible judicially administered exhaustion rules highlights the virtues of a doctrine unossified by statutory fealty. In reinvigorating copyright law's exhaustion doctrine, courts would benefit from taking a similar approach.

^{247. 243} U.S. at 517.

^{248. 272} U.S. 476, 489–90 (1926).

^{249.} Van Houweling, supra note 19, at 919–20.

^{250. 553} U.S. 617 (2008).

^{251.} Id

^{252.} Id. at 630 (quoting Adams v. Burke, 84 U.S. (17 Wall.) 453, 457 (1873)).

^{253.} Id

^{254.} Quanta also addressed concerns over skillful lawyers using artful drafting to end run around exhaustion. *Id.* ("By characterizing their claims as method instead of apparatus claims, or including a method claim for the machine's patented method of performing its task, a patent drafter could shield practically any patented item from exhaustion."). Since *Quanta*, at least one court has followed the Supreme Court's lead and held that postsale conditions, famously upheld by the Federal Circuit Court of Appeals in *Mallinckrodt*, *Inc.*, *v. Medipart*, *Inc.*, 976 F.2d 700 (Fed. Cir. 1992), are now exhausted as well. See Static Control Components v. Lexmark Int'l, Inc., 615 F. Supp. 2d 575, 585–86 (E.D. Ky. 2009) (holding that *Quanta* overruled *Mallinckrodt* sub silentio).

C. Applying the Exhaustion Principle to Digital Copies

The evolution of patent exhaustion reflects an overarching goal to allow owners of goods embodying patented inventions to use and redistribute them without patent holder permission. That same fundamental concern with the rights to use and redistribute has driven the common law and statutory development of copyright's exhaustion rules as well.

The pre–Bobbs-Merrill cases vindicated both of these interests. They permitted copy owners to renew, repair, preserve, and adapt their copies, sometimes in the name of enabling continued use and enjoyment and other times to facilitate resale. Likewise, the Copyright Act's statutory recognition of the exhaustion principle promotes the freedom to use and redistribute lawfully acquired copies. The first sale rule acknowledged in section 109(a) focuses on clearing the way for redistribution, and section 109(c) clarifies limits on the public display right that allow copy owners to make expected uses of visual works. The first sale rule acknowledged in section 109(c) clarifies limits on the public display right that allow copy owners to make expected uses

Most recently, Congress enacted section 117 to ensure the right of copy owners to use and redistribute copies of computer programs, a new class of works that introduced considerable complications. Since the use of computer programs typically entails some degree of reproduction, copy owners needed an unambiguous right to make copies essential to a program's operation. Likewise, since computer programs must interact with other hardware and software components to run, copy owners needed the ability to adapt programs for use in new computing environments. Section 117 also clarified that copy owners remained free to alienate their copies, so long as they did not exploit the archival and essential-step privileges by retaining some copies while alienating others. In short, section 117 applied the same goals and principles that motivated nineteenth-century exhaustion jurisprudence to the emerging market for computer programs.

Yet the same rationales that motivated Congress to clarify the application of the exhaustion principle to computer programs apply to all digitally encoded works.²⁶² Consumers of digital media benefit just as much from the

^{255.} See supra Part II.B.

^{256.} See 17 U.S.C. § 109(a) (2006).

^{257.} See id. § 109(c).

^{258.} See id. § 117.

^{259.} Section 117 also provides copy owners with the right to create archival copies since programs are susceptible to loss. CONTU, *supra* note 186, at 13.

^{260.} Id

^{261.} See 17 U.S.C. § 117(b).

^{262.} See Cate, supra note 200, at 1449-50.

use and resale of their purchases as the owners of copies of computer programs, and those copies are no less susceptible to accidental deletion or medium deterioration. To the extent that courts continue to treat RAM instantiations as copies, reading an e-book or listening to an MP3 necessarily entails reproduction, just like running a computer program. Similarly, digital works often require modification or adaptation to enable playback across devices and software, sometimes forcing copy owners to alter their copies for use on new or competing platforms. Perhaps most importantly, the alienability of digitally distributed works is just as deeply intertwined with reproduction as the resale of computer programs.

These similarities suggest that the exhaustion principle should be applied consistently to both computer programs and other digitally distributed works. The Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." But of course, the experience of a consumer of digital content owes just as much to instructions contained in the data file as it does to instructions supplied by software. Indeed, any rigid distinction between computer programs and digitally encoded data is something of an oversimplification. Such evolving understandings of technology offer yet another reason to prefer the flexibility of the common law to statutory rigidity. ²⁶⁷

With this in mind, we argue that courts are already empowered and should be encouraged to apply the full measure of exhaustion limitations to nonsoftware digital works. Informed by exhaustion's traditional focus on use and alienability, the basic rule courts should adopt is one that entitles

^{263.} The unthinking classification of RAM instantiations as copies, however, remains a flawed analytical step. See Perzanowski, supra note 58, at 1075–80.

^{264.} DMCA SECTION 104 REPORT, supra note 53, at xviii, xix; STAFF OF H. COMM. ON THE JUDICIARY, 105TH CONG., SECTION-BY-SECTION ANALYSIS OF H.R. 2281 AS PASSED BY H.R. ON AUG. 4, 1998, at 24 (Comm. Print 1998).

^{265. 17} U.S.C. § 101.

^{266.} See MARTIN DAVIS, THE UNIVERSAL COMPUTER: THE ROAD FROM LEIBNIZ TO TURING 164–65 (2000) (describing the distinction between program and data as an illusion); Allen Newell, *The Models Are Broken*, *The Models Are Broken!*, 47 U. PITT. L. REV. 1023, 1033 (1986) ("[T]he boundary between data and program—that is, what is data and what is procedure—is very fluid.").

^{267.} The best explanation for copyright law's differing treatment of digital media and computer programs is one rooted in historical accident and the institutional limitations of the legislative process. When CONTU drafted section 117 and Congress enacted it, both bodies were focused on the newly clarified status of computer programs as protectable subject matter. In the late 1970s, few anticipated the pervasiveness of digital media that defines today's copyright marketplace. Neither CONTU nor Congress rejected the notion of robust exhaustion rules for digital media; they simply did not consider it.

^{268.} Courts have less room to develop common law exhaustion rules for computer programs since section 117 addresses them explicitly and in great detail. While common law exhaustion rules can supplement statutory rules, they cannot be inconsistent with the terms of the Copyright Act.

copy owners to reproduce or prepare derivative works based on that copy to the extent necessary to enable the use, preservation, or alienation of that copy or any lawful reproduction of it. This rule, in conjunction with the existing first sale doctrine, would give copy owners a set of privileges for digital works functionally equivalent to the privileges they have traditionally enjoyed in the analog context. Moreover, it would preserve the traditional benefits of first sale in the digital context, allowing for increased access, preservation, privacy, transactional clarity, user innovation, and platform competition.

However, consistent with the common law of exhaustion, courts should not permit these privileges of copy ownership to be transformed into an unbridled license to make and distribute reproductions of a work. So while exhaustion would permit a copy owner to create reproductions under limited circumstances, it should not allow copy owners to alienate some copies of a given work while keeping others. Nor should it allow a copy owner to redistribute reproductions made from a single lawful copy to more than one party. By treating the original copy acquired from the copyright holder and all second generation copies made from it as a single unit for the purposes of exhaustion, courts would retain the balance between copyright holder and copy owner interests that has served copyright well for over a century.

In implementing this approach, courts should also look to the six benefits that we have outlined above as guideposts. Increasing access, enabling preservation and privacy, promoting transactional clarity, spurring innovation, and encouraging platform competition are all appropriate considerations that can provide courts with helpful criteria in balancing the equities between copy owners and copyright holders in particular cases.

Having articulated a digital exhaustion rule and the reasons favoring it, we now turn to its application. Below, we consider three hypotheticals that help illustrate how exhaustion would facilitate the benefits of first sale in a digital world without significantly undermining copyright owner incentives.

^{269.} As noted in the Section 104 Report, there is great fear among copyright owners that a digital first sale rule would lead to massive infringement of their works because there would be no easy method of distinguishing between legal first sale copies and illegal infringing copies. See DCMA SECTION 104 REPORT, supra note 53. Our approach attempts to provide some balance to this concern by framing the issue of digital exhaustion as an equitable one in which courts could, based on the facts of a particular case, determine how to balance the interests of both copy and copyright owners. Moreover, given the continued extension of copyright's term, the elimination of copyright formalities, and a myriad of low-cost, revenue-generating opportunities that digital distribution affords copyright owners, it would seem only fair to provide an equally robust expansion of exhaustion to maintain copyright's balance in this arena.

1. Transfer of Digital Media

First, consider a consumer who acquires a digital media file, an MP3 from Amazon's online music store, for example. This transaction is styled as a sale and is marked by all of the traditional indicia of a purchase. Can the consumer transfer ownership to another through resale or gift? If she acquired a traditional tangible copy, she certainly could. But the first sale doctrine alone offers our consumer little help when it comes to digitally distributed goods. While it may permit her to transfer ownership of the particular copy she downloaded by selling her laptop or its hard drive, first sale's limited focus on distribution practically prevents her from alienating her digital music.

The common law exhaustion rule outlined above solves this problem by looking beyond the distribution right and allowing courts greater flexibility to balance the competing interests in cases like this one. Once the court addresses the threshold issue of ownership, it should ask two questions. First, do the acts of reproduction—here, copying the file to some transferable medium or attaching it to an email—facilitate transfer of the consumer's limited ownership interest? And if so, did the consumer retain any copies of the file after that transfer? If not, this exchange should be sanctioned by the exhaustion principle. Ignoring the mechanics of the transfer, this transaction is indistinguishable from the sale of a 45 or compact disc at a used record store. Both begin with a single copy owned by one party and end with a single copy owned by another. The only difference is that additional temporary copies were created to facilitate the transaction.

When such "forward and delete" proposals have been offered before, copyright holders have expressed concern that the power to alienate digitally distributed copies will lead to consumers gaming the system by keeping a copy after purporting to alienate their interest in it.²⁷³ Others have tried to address these concerns by proposing technological solutions to reduce the temptation to retain digital copies.²⁷⁴ More recently, vendors of digital copies have taken tentative steps to port traditional notions of alienability to

^{270.} See Carver, supra note 54, at 29-30.

^{271.} See Reese, supra note 19, at 612.

^{272.} A similar approach could also assist libraries to cleanly enable the lending of digital media.

^{273.} See DMCA SECTION 104 REPORT, supra note 53, at 47–48. Note that this worry is nothing new, as consumers have always been able to copy their LPs, cassettes, or CDs before reselling them on the secondary market.

^{274.} See id. at 46; see also Master's Program Final Project Abstract, Univ. of Cal. Berkeley Sch. of Info., Trifecta: Creating P2P Software That Enables Fair Use (2004), http://www.ischool.berkeley.edu/programs/masters/projects/2004/trifecta.

electronic copies.²⁷⁵ However, exhaustion provides a balanced and technology-neutral solution to this problem. First, as an affirmative defense to infringement, the burden to show exhaustion will fall squarely on the shoulders of the reseller, forcing him to prove that all remaining copies were deleted after resale, just as would be the case under section 117 when a copy owner resold software they had previously adapted or backed up. Second, just as in the postsale restriction patent cases, courts can look to the characteristics of the copier, such as whether they are a downstream consumer or a major competitor for initial sales, and use those fact-specific realities to reach the right decision in a particular situation. With such flexibility in hand, courts can enable redistribution of digital works without sacrificing the incentives that copyright provides to create them.

2. Modification of Digital Media for Device Shifting

Next, consider a consumer who purchases an e-book that is incompatible with her device or platform of choice. In the analog world, book owners enjoy considerable freedom to read their books in the manner they see fit. They can bind paperbacks in hard covers or remove excerpts from lengthy tomes for the sake of convenience. The exhaustion principle extends similar freedoms to digital books, privileging acts of reproduction or modification necessary, for example, to read a book purchased on a Sony Reader on a Nook instead. Aside from encouraging competition and innovation among platform developers, such a rule would ensure that hardware or software compatibility does not constrain the uses consumers can make of lawfully purchased copies.

Exhaustion would not, however, privilege all copy owner adaptations or modifications. Modifications that transform an existing work by adding new expression rather than enabling new uses are not the focus of copyright exhaustion. Courts should continue to analyze such user modifications through the lens of fair use.

For example, in *Clean Flicks of Colorado v. Soderbergh*, ²⁷⁸ a company bought DVDs with potentially offensive scenes. It then copied the content of the DVDs onto a computer, removed the questionable scenes, and burned

^{275.} See Announcement, Coming Soon for Kindle, AMAZON.COM KINDLE CMTY. FORUM (Oct. 22, 2010, 8:33 AM), http://www.amazon.com/tag/kindle/forum/ref=cm_cd_cg_ef_tft_tp?_encoding=UTF8&cdForum=Fx1D7SY3BVSESG&cdThread=Tx1G2UIO9PJO50V&displayType=tagsDetail (noting that Amazon plans to add the ability to loan e-books purchased on a Kindle to other Kindle users). 276. See supra Part II.B.

^{277.} In the e-book market, private efforts have attempted to ensure some measure of interoperability. See Caolo, supra note 50.

^{278. 433} F. Supp. 2d 1236 (D. Colo. 2006).

new edited versions that it sold, packaged with the original purchased copies, to consumers who desired family-friendly entertainment.²⁷⁹ Several directors and studios sued, arguing that this process violated their reproduction, derivative work, and distribution rights.²⁸⁰

In analyzing the case, the court held that the edits were insufficient to constitute a derivative work; nonetheless, it found that a prima facie case of reproduction and distribution had been made. The defendants asserted both first sale and fair use defenses. The court denied the fair use defense after a lengthy analysis, noting the lack of transformation of the original films. The court went on to quickly dispose of the first sale defense noting that the doctrine "does not permit the making of additional copies."

While the court's conclusion was correct as a matter of the statutory first sale doctrine, a more plausible defense could be raised under the common law of copyright exhaustion. Consider that all of CleanFlicks's reproductions and distributions were based on a lawfully purchased copy and furthered the use and enjoyment of the underlying work. Moreover, once CleanFlicks created the edited version, it transferred ownership of both the original copy and edited copies together, tracking the approach sanctioned in both *Doan* and even section 117(b). Under such circumstances, common law exhaustion presents a much closer case than a first sale defense strictly limited to the distribution right.²⁸⁴

Another close question arises when a copy owner who has lawfully modified a copy to ensure interoperability wants to sell that modified copy on the secondary market. When Congress enacted section 117, it decided to require copy owners to obtain copyright holder permission before selling adaptation copies. Since section 117 permits the creation of adaptations not only for compatibility purposes but also to add new features or functions to an existing program, this restriction on alienation makes some sense. Adaptations that incorporate new features or functions could compete directly with the copyright holder's own updates and improvements in ways that could

^{279.} Id. at 1238.

^{280.} Id. at 1239.

^{281.} Id. at 1239, 1242.

^{282.} Id. at 1241-42.

^{283.} Id. at 1242.

^{284.} One could also imagine exhaustion helping to establish other innovative businesses and services, such as shops that would offer to load all of one's CD collection onto a digital stereo component. See Stephen H. Wildstrom, Bring Your CDs Into the iPod Age, BUS. WK., May 23, 2005, http://www.businessweek.com/magazine/content/05_21/b3934036_mz006.htm.

^{285. 17} U.S.C. § 117(b) (2006).

^{286.} See id. § 117(a); CONTU, supra note 186, at 13.

undermine incentives for follow-on creativity. However, because the adaptation privilege for nonprogrammatic works is limited to enabling use of the existing work, this threat would be less pressing. As a result, copy owners should be permitted to transfer adaptations as a component of their transfer of all rights to copies of a work.

3. Remote Access to Digital Media

Third, consider a consumer who purchases a digital movie on her home computer to watch it later over the internet via remote computers or a mobile device. Here, ownership of a copy would exhaust the right of reproduction when necessary to facilitate such space shifting to enable viewing of the copy. 288

Note that the degree to which exhaustion sanctions remote viewing turns in part on whether the transmission is public. A copy owner who streams a motion picture to a group of viewers beyond "a normal circle of a family and its social acquaintances" would likely violate the exclusive right of public performance, a right beyond the scope of exhaustion's traditional protections. Downloading a copy of a film from an authorized online retailer would not give the copy owner the right to offer a Netflix-style streaming service any more than a DVD or VHS copy would entitle its owner to exhibit a film to the public. But if the remote display is a private rather than public use of the copy, exhaustion should insulate the copy owner from liability for incidental reproductions.

More broadly, exhaustion could provide a defense to any incidental reproduction to enable device, time, and format shifting. Every day, thousands of consumers transfer lawfully acquired digital albums to their iPods, sync digital content between work and home computers, and backup digitally purchased files to local hard drives or remote servers. Despite the prevalence and widespread acceptance of these activities, copyright law lacks a clear explanation for their lawfulness. Some point to fair use, while others turn to

^{287.} The Slingbox, Vulkano, and Orb are three examples.

^{288.} Note that some courts have strongly hinted that space shifting should be considered a fair use under section 107. See In re Aimster Copyright Litig., 334 F.3d 643, 652–53 (7th Cir. 2003). While we are not against such a finding, we feel it might be more appropriate to approach such limitations under exhaustion, especially when the tie to copy ownership is so clear. Cf. Robin A. Moore, Note, Fair Use and Innovation Policy, 82 N.Y.U. L. REV. 944, 968 (2007); von Lohmann, supra note 36.

^{289. 17} U.S.C. § 101. But see Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008) (holding that the playback of recorded television programs at the request of cable subscribers was not a performance "to the public").

implied or express license.²⁹⁰ We suggest that exhaustion provides a firmer doctrinal footing for a broad personal use and copying exception.²⁹¹

Copy ownership offers a much more intuitive basis for embracing incidental copying by consumers than either the fickle permission of copyright holders or the four fair use factors. The exhaustion principle teaches that the ability to make personal use of a copy is implicit in its purchase. For digital works, use and copying are deeply intertwined. Owners of lawful copies are best positioned to assert a privilege to reproduce copies in the course of personal use. But copy ownership is not part of the traditional fair use analysis. Nor does it guarantee copyright holder permission. That is not to say that only copy owners can lawfully make personal use copies. As *Sony* demonstrates, even consumers who are not copy owners may be entitled to make reproductions for personal use. But when copy ownership is established, exhaustion could provide a clearer, simpler, and cheaper safe harbor. While we do not argue that a broad personal use exemption flows directly from *Doan* and its progeny, to the extent that courts reembrace the common law development of exhaustion, we expect such an exemption would emerge over time.

D. Exhaustion and Circumvention

In addition to the complications of digital distribution, the exhaustion principle also addresses the troubles raised by section 1201. Even if copying and adaptation to enable use and redistribution of copyrighted material are privileged by copyright exhaustion, consumers must still contend with technological protection measures and potential liability for their circumvention. ²⁹⁴

^{290.} See Jessica Litman, Lawful Personal Use, 85 Tex. L. Rev. 1871 (2007); von Lohmann, supra note 36.

^{291.} See Liu, supra note 19, at 1268–71 (noting the limitations of fair use and implied and express license defenses for digital copying).

^{292.} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984) (holding that the recording of over-the-air television broadcasts for time-shifting purposes is a fair use).

^{293.} Importantly, the exhaustion principle we describe does not directly contribute to the resolution of the license-versus-sale debate. See supra Part I.C. Exhaustion, like first sale, is triggered by the sale or other disposition of copy ownership. The exhaustion principle broadens the user privileges that flow from a sale, but it does not, in itself, inform the pressing question of what sorts of transactions are properly classified as sales. Courts have demonstrated deep division and more than occasional confusion over this question. See Carver, supra note 54. The Ninth Circuit's recent decision in Vernor v. Autodesk has done little to clarify the extent to which copyright holders can attach restrictions on use to transactions that to the average consumer appear to be nothing more than standard sales of off-the-shelf products. See Vernor v. Autodesk, Inc., 621 F.3d 1102 (9th Cir. 2010).

^{294.} Although Apple famously stripped DRM from music sold over its iTunes store, it continues to wrap movies, e-books, and applications in DRM, as do most other online retailers. While ostensibly intended to limit infringement, DRM technology suppresses competition between technology platforms by facilitating the sort of consumer lock-in that the first sale doctrine has

As described above, section 1201 of the DMCA prohibits the circumvention of technological measures that restrict access to or copying of copyrighted works. It also prohibits the creation or distribution of tools that facilitate circumvention.

If DRM ties a copy of a work to a particular device or user account, copy owners who wish to exercise their use or alienation privileges will often be forced to circumvent technological protection measures. Such an obvious tension between privileges copyright law extends to users and the apparent thrust of section 1201 might seem difficult to reconcile, but this sort of tension is nothing new in the debate over the proper interpretation of the DMCA. From the provision's enactment, scholars, litigants, and courts have disagreed over the extent to which copyright defenses shield consumers from liability for violating the anticircumvention provisions. ²⁹⁵

Congressional intent on this point is less than clear. Congress created statutory exemptions to section 1201, some that track existing copyright limitations and exceptions. Moreover, Congress created a triennial rulemaking proceeding to act as a safeguard against unanticipated restrictions on noninfringing uses of copyrighted works. Most directly, and perhaps most cryptically, Congress insisted "[n]othing in [section 1201] shall affect rights,

traditionally helped us avoid. See Aaron K. Perzanowski, Rethinking Anticircumvention's Interoperability Policy, 42 U.C. DAVIS L. REV. 1549, 1613 (2009).

^{295.} Compare Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000) (rejecting the possibility of a fair use defense to a claim of circumvention), with Chamberlain Group, Inc. v. Skylink Techs. Inc., 381 F.3d 1178 (Fed. Cir. 2004) (requiring a causal nexus between circumvention and infringement). Scholarly opinion has likewise been divided on this point. Some have argued that the text of section 1201 embraces the fair use defense. See Jane C. Ginsburg, Copyright Use and Excuse on the Internet, 24 COLUM.-VLA J.L. & ARTS 1, 8–9 (2000); Pamela Samuelson, Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised, 14 BERKELEY TECH. L.J. 519, 538–40 (1999). Others maintain that fair use offers no statutory defense under section 1201. See David Nimmer, Appreciating Legislative History: The Sweet and Sour Spots of the DMCA's Commentary, 23 CARDOZO L. REV. 909, 979 (2002) ("Section 1201... leaves no room within the statutory orbit for a general Congressionally-sanctioned fair use defense.").

^{296.} In some sense, this rulemaking proceeding functions as a quasicommon law adjudication. Given limited statutory guidance, the Copyright Office is left to devise its own standards for defining and evaluating classes of works and whether the uses of those works are noninfringing. Those standards have evolved considerably over time. See Aaron K. Perzanowski, Evolving Standards and the Future of the DMCA Anticircumvention Rulemaking, J. INTERNET L., Apr. 2007, at 1. The most recent of these rulemakings was particularly focused on issues of exhaustion and platform competition, adopting exemptions that allow owners of mobile phones to unlock and jailbreak their devices. U.S. COPYRIGHT OFFICE, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS IN RM 2008-8 (2010), available at http://www.copyright.gov/1201/2010/initialed-registers-recommendation-june-11-2010.pdf.

remedies, limitations, or defenses to copyright infringement, including fair use, under this title."²⁹⁷

While some argued that this provision anticipated the application of existing copyright defenses to the new anticircumvention rules, early courts interpreted section 1201 as creating an entirely new statutory cause of action, the only defenses to which are found in section 1201 itself. Fair use and other copyright exceptions and limitations simply did not apply. ²⁹⁸

But once faced with anticompetitive attempts to abuse the anticircumvention rules, courts cabined the sweeping interpretation of section 1201 developed in early cases. In Chamberlain Inc. v. Skylink Technologies, Inc., ²⁹⁹ the Federal Circuit confronted an effort by the plaintiff, a garage door opener manufacturer, to limit competition for replacement remote controls by restricting access to the computer code that operated the openers. ³⁰⁰ The court held that section 1201 requires a plaintiff to establish not only that an effective technological protection measure restricts access to a copyrighted work, but also that the circumvention of that measure bears some "reasonable relationship to the protections that the Copyright Act otherwise affords." Because the court found that consumers were entitled to access the software in their garage door openers, Chamberlain was unable to prove "the critical nexus between" the access facilitated by Skylink's remote and the protection of a legitimate copyright interest. ³⁰²

The Federal Circuit subsequently held that a successful defense under section 117 is sufficient to undermine the nexus between circumvention and infringement. More recently, the Fifth Circuit—relying on the Chamberlain rationale—rejected an "interpretation [that] would permit liability under section 1201(a) for accessing a work simply to view it or to use it within the purview of 'fair use' permitted under the Copyright Act." To the extent that

^{297. 17} U.S.C. § 1201(c) (2006).

^{298.} Universal City Studios, Inc. v. Reimerdes, 82 F. Supp. 2d 211, 219 (S.D.N.Y. 2000) ("If Congress had meant the fair use defense to apply to [section 1201] actions, it would have said so.").

^{299. 381} F.3d 1178.

^{300.} Id.

^{301.} Id. at 1202.

^{302.} Id. at 1204.

^{303.} Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc., 421 F.3d 1307, 1319 (Fed. Cir. 2005). There, the court applied the exception permitting the creation of copies of computer programs for the purposes of maintenance and repair of computer equipment. See 17 U.S.C. § 117(c) (2006).

^{304.} MGE UPS Sys. Inc. v. GE Consumer & Indus., 612 F.3d 760 (5th Cir. 2010). The Fifth Circuit subsequently withdrew its opinion in MGE, relying instead on two grounds: (1) that no GE employee engaged in an act of circumvention and (2) that the mere use of a work—after a third party circumvents its technological protection measures (TPM)—does not violate section 1201. MGE UPS Sys. Inc. v. GE Consumer & Indus., 622 F.3d 361 (5th Cir. 2010).

other circuits adopt a similarly restrained reading of section 1201,³⁰⁵ defenses rooted in the common law of exhaustion could also serve to further define the boundaries of the required nexus with infringement just as easily as section 117 or fair use. Therefore, if transferring a copy of a work on the secondary market or using a copy on an unsupported device require bypassing or removing technological protection measures, those acts of circumvention would not give rise to section 1201 liability so long as they did not otherwise establish a nexus with infringement. As a result, our more robust understanding of copyright exhaustion can overcome technological protection measures and their legal enforcement to the extent those measures interfere with otherwise lawful uses of copies. Admittedly, such a limitation on the scope of section 1201 would substantially depart from the reading of the statute favored by copyright holders and platform developers. But our more limited reading is in keeping with Congress's intent and, we believe, sound copyright policy.³⁰⁶

CONCLUSION

The traditional first sale narrative is almost too simple to resist. Through overreliance on this story, we risk forgetting the richer but more complicated history of copyright exhaustion and, as a result, imperil the longstanding benefits of the first sale doctrine as we transition to a digital copyright economy. In particular, if we wish to preserve the benefits of access, preservation, privacy, transactional clarity, user innovation, and platform competition, we must find a way to reinvigorate exhaustion in the face of digital distribution and technological protection measures.

The common law approach to exhaustion that culminated in *Bobbs-Merrill* offers courts an opportunity to preserve the traditional balance between the rights of copyright holders and those of copy owners despite technological change. As evidenced by the Supreme Court's decision in *Quanta*, common law approaches to exhaustion not only give courts flexibility to adapt to new

Despite the court's decision to focus its holding on a narrow factual issue, its extension of the Chamberlain/Storage Technology rationale remains persuasive.

^{305.} The Sixth Circuit has also interpreted section 1201 narrowly. See Lexmark Int'l v. Static Control Components, 387 F.3d 522 (6th Cir. 2004) (refusing to apply section 1201 when a protection measure restricted one means of accessing a work but left others available).

^{306.} Congress did not intend section 1201 to enable copyright holders to limit postsale access to or use of lawfully acquired copies of works. H.R. REP. NO. 105-551, pt. 1, at 18 (1998) ("Paragraph (a)(1) does not apply to the subsequent actions of a person once he or she has obtained authorized access to a copy of a work . . . even if such actions involve circumvention"). Nevertheless, copyright holders and TPM providers continue to rely on persistent access controls to restrict postsale use. And courts have enforced those restrictions despite the legislative history and continued criticism from commentators. See Perzanowski, supra note 294, at 1613.

technologies, but also to balance the rewards rightfully guaranteed to intellectual property holders with the rights of consumers and the public more broadly. We maintain that, rather than confining exhaustion within the statutory constraints of sections 109 and 117, courts should embrace their power to develop common law rules and apply the full measure of exhaustion limitations to digital works.