FAULTY MATH: THE ECONOMICS OF LEGALIZING THE GREY ALBUM

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ABSTRACT

From an economic perspective, giving copyright holders the right to control production of derivative works—works that transform their expression, such as the movie version of a novel—is unjustified, even harmful. Current scholarship either defends this entitlement as economically sensible or partially reconfigures it. This Article assesses the dominant economic rationales for derivative control and finds them weak at best. Unlike other copyright scholarship, this piece argues that since the right prevents production of attractive, diverse, cheaper new expression, and blocks the promise of re-mix culture, it should be eliminated. This change would also concentrate attention on the adaptation right's role as a proxy for other copyright concerns, primarily the risk of derivatives substituting for initial works. This Article proposes re-configuring copyright law to unfetter transformative expression while safeguarding copyright's other entitlements. Finally, it concludes by suggesting that economic arguments cover more deeply held beliefs, based on personality theory or labor-desert conceptions, supporting control over adaptation.

I. INTRODUCTION

American copyright law is mainly about money. Paradoxically, this means copyright owners should not control production of derivative works based on their creations. This Article explains why.

Art can pay well. Popular novels become profitable movies; science fiction films sell action figures. Under American copyright law, creators dictate when and under what terms their art may be adapted into other forms and thereby earn revenue. Scholars view this entitlement as vital in encouraging production of new expression.

Yet this derivative works right also blocks creativity. Those who would build upon existing art must seek permission, usually at a price, to transform copyrighted expression. From an economic perspective, the right incurs costs as well as creating benefits. Nearly all analysts accept that some control over derivatives is sensible on economic grounds. This Article argues they are wrong and that eliminating the adaptation right is sensible under this calculus.

Previous scholarly work concentrates on arguments for augmenting the derivative works right, shifting from injunctive remedies to a liability rule,

^{1.} See, e.g., Michael Abramowicz, A Theory of Copyright's Derivative Right and Related Doctrines, 90 MINN. L. REV. 317 (2005); Jane C. Ginsburg, Creation and Commercial Value: Copyright Protection of Works of Information, 90 COLUM. L. REV. 1865 (1990).

^{2.} See, e.g., Dennis S. Karjala, Harry Potter, Tanya Grotter, and the Copyright Derivative Work, 38 ARIZ. ST. L.J. 17 (2006); Alex Kozinski & Christopher Newman, What's So Fair About Fair Use?, 46 J. COPYRIGHT SOC'Y U.S.A. 513 (1999).

focusing on whether the individual copyright owner has been compensated adequately,³ offering alternative rationales for copyright's protections,⁴ decreasing the right's duration,⁵ revising the definition of a derivative work,⁶ employing an expanded fair use doctrine to permit "blocking copyrights,"⁷ reducing uncertainty in adjudicating infringement,⁸ demarcating the right more clearly,⁹ and altering the right to permit "recoding" of expressive works.¹⁰ In short, current thinking either defends or reconfigures the derivative works right.

This Article takes an approach both more basic and more radical: it examines the predominant arguments justifying the right—those grounded in a utilitarian economic calculus—and finds them wanting. It proposes accordingly that the right should be eliminated, not refined or strengthened. This fundamental change to copyright law would reduce derivatives' cost and increase their diversity. Moreover, it would concentrate attention on the adaptation right's role as a proxy for other copyright concerns, primarily the risk of derivatives substituting for initial works and undermining the reproduction right. Shifting certain derivative works, such as abridgments and translations, to be covered by the reproduction right would address the substitution concern. Copyright law should protect transformative works from infringement liability with copyright while safeguarding initial authors against minor variants that merely substitute for their expression. From a coldly economic perspective, the adaptation right's costs outweigh its burdens, and it should be removed from copyright's entitlements.

Finally, this Article concludes by arguing that economic arguments cover more deeply held beliefs supporting control over adaptation. Echoing personality theory, we may confer a veto over derivatives to ensure artists guide development of their creations, preventing uses seen as shoddy or distorting. In addition, we may feel creators deserve the benefits accruing from their contributions to the expressive commonweal—an argument founded in Lockean labor-desert theory. These rationales are perfectly defensible, but they are not the ones commonly deployed. If they justify con-

^{3.} See, e.g., Amy B. Cohen, When Does a Work Infringe the Derivative Works Right of a Copyright Owner?, 17 CARDOZO ARTS & ENT. L.J. 623 (1999); Paul Goldstein, Derivative Rights and Derivative Works in Copyright, 30 J. COPYRIGHT SOC'Y U.S.A. 209 (1983).

^{4.} See, e.g., William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 18 J. LEGAL STUD. 325 (1989); Stewart E. Sterk, Rhetoric and Reality in Copyright Law, 94 MICH. L. REV. 1197 (1996).

^{5.} See, e.g., LAWRENCE LESSIG, FREE CULTURE 294–95 (2004).

^{6.} See, e.g., Lydia Pallas Loren, The Changing Nature of Derivative Works in the Face of New Technologies, 4 J. SMALL & EMERGING BUS. L. 57 (2000); Naomi Abe Voegtli, Rethinking Derivative Rights, 63 Brook. L. Rev. 1213 (1997).

^{7.} See, e.g., Mark A. Lemley, The Economics of Improvement in Intellectual Property Law, 75 Tex. L. Rev. 989 (1997).

^{8.} See, e.g., Michael Wurzer, Note, Infringement of the Exclusive Right to Prepare Derivative Works: Reducing Uncertainty, 73 MINN. L. REV. 1521 (1989).

^{9.} See, e.g., LESSIG, supra note 5, at 295.

^{10.} See, e.g., Note, "Recoding" and the Derivative Works Entitlement: Addressing the First Amendment Challenge, 119 HARV. L. REV. 1488 (2006).

tinued control over derivatives, we should advert to these grounds explicitly and evaluate the adaptation right's scope in light of their demands and limi-

Part II of this Article describes the right's cost in foregone creative expression, while Part III explores copyright's unusual economics. In Part IV, the piece describes and analyzes the four economic arguments employed to support exclusive control over derivative works. Part V proposes eliminating the right, and discusses legal changes necessary to leave copyright's other entitlements unchanged. Finally, Part VI concludes by suggesting that the right's persistence is best ascribed to other rationales, such as labordesert or personality theory, that are cloaked in the prevailing, economically-oriented mode of copyright's discourse.

II. MISSED OPPORTUNITIES

The derivative works right blocks creation of attractive, transformative expression, despite technological changes that make producing such works ever easier and cheaper.

Current copyright law lets creators dictate whether, and on what terms, their works can be adapted, transformed, or interpreted in new ways. A derivative work produced without authorization may be popular, attractive, and imaginative, but it is also unlawful. Initial creators can thus prevent new expression that uses their work as a base from reaching an audience or a market.

Intuitively, this seems unproblematic: artists should produce new offerings rather than recycling existing ones. However, most creative works adapt previous expression. Examples abound: *Rosencrantz and Guildenstern Are Dead* elaborates upon *Hamlet*. Most jazz music riffs on prior pieces. Robert Parker's private eye Spenser owes a significant debt to Raymond Chandler's gumshoe Philip Marlowe. Many computer programs incorporate significant elements of the operating system upon which they run or the software with which they interact. Martin Scorsese's Oscar-winning film *The Departed* reworks the Hong Kong police drama *Infernal Affairs*

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tations.

 $^{11.\} See$ William M. Landes & Richard A. Posner, The Economic Structure of Intellectual Property Law 108 (2003).

^{12.} See Note, Jazz Has Got Copyright Law and That Ain't Good, 118 HARV. L. REV. 1940, 1942–43 (2005).

^{13.} See Craig S. Semon, Whodunit Author Parker: What He Writes Is What You Get, WORCESTER TELEGRAM & GAZETTE, Apr. 26, 2000, at 6 (noting Parker admitted to copying Marlowe's character in his early stories).

^{14.} See Jonathan Zittrain, Normative Principles for Evaluating Free and Proprietary Software, 71 U. CHI. L. REV. 265, 265–74 (2004); Mitchell L. Stoltz, Note, The Penguin Paradox: How the Scope of Derivative Works in Copyright Affects the Effectiveness of the GNU GPL, 85 B.U. L. REV. 1439, 1450–54 (2005)

^{15.} See, e.g., Stacey D'Erasmo, Call Me Una, N.Y. TIMES BOOK REV., Oct. 3, 1999, at 12.

(*Mou gaan dou*). ¹⁶ Popular works often reveal a heritage of adaptation: *West Side Story* re-imagines *Romeo and Juliet* in the world of urban gangs while Shakespeare based his play upon a poem by Arthur Brooke. ¹⁷ Controls on derivative works thus have significant consequences for the production of new expression and may prevent it (or at least make it unlawful).

Hip-hop music executive and mixtape artist DJ Drama felt this control sharply: he was arrested at the behest of the Recording Industry Association of America (RIAA) and charged with felony violation of Georgia's Racket-eering Influenced Corrupt Organization (RICO) law. Drama's mixtapes—unlicensed compilations of remixes, unreleased tracks, and promotional material—are a popular, vital marketing tool for hip-hop artists who not only acquiesced in his efforts but actively assisted him. The record labels who own the music's copyrights, though, view mixtapes as piracy. Although many musicians support mixtapes, which often bolster sales of authorized releases, producing a lawful mixtape is difficult. As DJ Drama learned, creating a popular but unauthorized, derivative work—even one that benefits artists—is little comfort when the police arrive.

Consider also the *Grey Album*. Brian Burton, better known as Danger Mouse, had a brilliant idea: mix music from The Beatles' *White Album* with rap lyrics from Jay-Z's *Black Album*.²² The resulting *Grey Album* is popular (downloaded over one million times in a single day), ²³ creative (*Rolling Stone* called it "ingenious . . . ahead of its time"), ²⁴ and illegal.²⁵ The record label EMI, which owns the rights to the Beatles' musical recordings, insisted Danger Mouse cease distributing the work.²⁶ EMI argued Danger

- 21. See Sanneh, supra note 18, at E1.
- 22. Beatles fans will properly note that the correct album title is *The Beatles*.
- 23. See Elizabeth Armstrong, Suppressed Album Finds Voice on the Web, Christian Sci. Monitor, Mar. 1, 2004, at 11, available at 2004 WLNR 1642753.
- 24. Lauren Gitlin, *DJ Makes Jay-Z Meet Beatles*, ROLLING STONE, Feb. 19, 2004, at 18, *available at* http://www.rollingstone.com/news/story/5937152/dj_makes_jayz_meet_beatles.
- 25. See Renee Graham, EMI Puts It in Black and White: No "Grey Album," BOSTON GLOBE, Feb. 18, 2004, at C2 (noting Burton "always understood that his recordings were 'illegal'"); Bill Werde, Defiant Downloads Rise from Underground, N.Y. TIMES, Feb. 25, 2004, at E3.
- 26. See Armstrong, supra note 23; Graham, supra note 25; Chilling Effects Clearinghouse, Takedown that Grey Album, http://www.chillingeffects.org/fairuse/notice.cgi?NoticeID=1093 (last visited Nov. 23, 2007) (reproducing redacted text of a Digital Millennium Copyright Act take-down notice to a

^{16.} Felix Chong and Siu Fai Mak (as Alan Mak), who wrote *Infernal Affairs*, received writing credits for *The Departed. See* David Stratton, *Scorsese Set for Another Killing*, WEEKEND AUSTRALIAN, Oct. 14, 2006, at 22.

^{17.} See William M. Landes & Richard A. Posner, Indefinitely Renewable Copyright, 70 U. CHI. L. REV. 471, 480 (2003); W.H. Baird Garrett, Note, Toward a Restrictive View of Copyright Protection for Nonliteral Elements of Computer Programs: Recent Developments In the Federal Courts, 79 VA. L. REV. 2091, 2120 n.199 (1993).

^{18.} See Kelefa Sanneh, With Arrest of DJ Drama, the Law Takes Aim at Mixtapes, N.Y. TIMES, Jan. 18, 2007, at E1.

^{19.} See Samantha M. Shapiro, Hip-Hop Outlaw (Industry Version), N.Y. TIMES MAG., Feb. 18, 2007, at 29, available at 2007 WLNR 3224903.

^{20.} See Recording Industry Association of America, *Identifying Unauthorized Sound Recordings*, http://www.riaa.com/ (follow "Identifying Pirated Product" hyperlink) (last visited Nov. 15, 2007) (defining "[u]nauthorized duplication of sounds sometimes advertised as DJ or Dance Mixes" as "Pirate").

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Mouse needed its permission to use and adapt the *White Album* and that he should have sought a license to do so.²⁷ This position overlooked two problems. First, requests for permission to sample the Beatles' work have always been denied.²⁸ Second, Danger Mouse would also need permission from Roc-A-Fella Records (to use the *Black Album*), and either label could have demanded more than 50% of his revenues as a licensing fee.²⁹ The *Grey Album* probably does not harm sales of either component album—in fact, remixes are often used as underground marketing to spur interest in the original recordings—yet it could not have been produced lawfully.³⁰

Or think about fan fiction. This genre consists of consumer creations—stories written by readers employing a work's setting, characters, or plot to new ends.³¹ These creations rarely, if ever, compete with the originals; few even enjoy commercial demand. Fan fiction can increase consumption of originals by reinforcing interest in them. Yet authors such as Anne Rice use copyright law to prevent even non-commercial transformations of her vampire novels.³² (Interestingly, Rice seeks not only to control her characters and settings but to prevent fan fiction from interfering with her imagination).³³ Fan fiction's benefits are largely intangible, but the pecuniary risks to its creators are real.³⁴ While a newspaper may help develop children's writing skills by asking them to produce their own denouements to the *Harry Potter* series, it may also encourage them to infringe J.K. Rowling's copyrights.³⁵ Copyright lawsuits need not succeed to dissuade derivative creation. The cost of defending even a spurious claim, along with the risk of sizeable statutory damages, can chill production of new expression.³⁶

Technological changes that lower costs of creating new works worsen the problem. Computer technology and "prosumer" media equipment make

site hosting the album).

- 27. See Werde, supra note 25.
- 28. Rob Walker, *The Grey Album*, N.Y. TIMES MAG., Mar. 21, 2004, at 32 (stating "the Beatles have not allowed any sampling of their music"); Roger Friedman, *iTunes Gets the Beatles*,

FOXNEWS.COM, July 6, 2005, http://www.foxnews.com/story/0,2933,161662,00.html (noting that "No original recordings by the Beatles . . . [are] available for downloading").

- 29. See Graham, supra note 25; Walker, supra note 28. See generally JOANNA DEMERS, STEAL THIS MUSIC: HOW INTELLECTUAL PROPERTY LAW AFFECTS MUSICAL CREATIVITY 117–18, 139–42 (2006).
- 30. See, e.g., Walker, supra note 28 (noting "unauthorized remixes can serve as promotional vehicles for the artists they sample"); cf. Sasha Frere-Jones, 1+1+1=1: The New Math of Mashups, NEW YORKER, Jan. 10, 2005, at 85 (stating the Grey Album "is processed so radically that its source is sometimes not clear" and describing the transactional complexities of obtaining rights to sample music).
 - 31. See supra notes 393–394 and accompanying text.
- 32. See, e.g., Diane Werts, Really Stranger Than Fiction, NEWSDAY, May 1, 2005, at C16.
- 33. See Linton Weeks, The Writers Related by Blood, WASH. POST, Oct. 20, 2000, at C1 (quoting Rice that if she read fan fiction, she "would block completely").
- 34. See 17 U.S.C. § 504(c)(1) (2000) (entitling a copyright owner to recover statutory damages of \$750 to \$30,000 for infringement).
- 35. See Patsy Brumfield, Area Writers Help Bring Conclusion to Rowling Book Series, NORTHEAST MISS. DAILY J., Jan. 29, 2006,

http://www.djournal.com/pages/archive.asp?ID=211530&pub=1&div=Lifestyles.

36. See 17 U.S.C. §§ 504–05 (setting statutory damages for copyright infringement and allowing recovery of costs and attorneys' fees).

producing sophisticated works increasingly easy and cheap.³⁷ A user with an inexpensive personal computer (PC) and editing software can generate artistic works that required a team of experts and millions of dollars of equipment only a few years ago.³⁸ Thus, Miami firefighter Rory Cejas could produce a sophisticated twenty-minute film based on the *Star Wars* movies using a single cheap PC, a Canon GL-1 camera, three actors, and five software programs, without the benefit of film school.³⁹ Similarly, the cost of producing sound recordings has fallen dramatically; a music studio that cost \$50,000 in 1980 is readily duplicated today by a PC and software for a few thousand dollars.⁴⁰ Television shows employ increasingly sophisticated special effects as their expense drops.⁴¹ Adding a computer-generated crocodile to an episode of *Invasion* cost \$7,500 in 2002, but only \$1,500 today.⁴² This makes creating visually rich TV programs increasingly feasible and affordable.⁴³

Reduced costs extend to distribution.⁴⁴ Professor William Fisher notes that distributing digital works over the Internet offers significant savings.⁴⁵ Innovations such as playlists,⁴⁶ recommendation systems,⁴⁷ fan sites,⁴⁸ and lawful file-sharing services⁴⁹ substitute for expensive marketing and advertising.⁵⁰

- 37. See Yochai Benkler, Coase's Penguin, or, Linux and The Nature of the Firm, 112 YALE L.J. 369, 377, 404–05 (2002).
- 38. See, e.g., J.D. LASICA, DARKNET: HOLLYWOOD'S WAR AGAINST THE DIGITAL GENERATION 84 (2005) (citing examples).
- 39. See Star Wars Episode I: The Jedi Saga Frequently Asked Questions, http://www.solid-roc.com/faqs.html (last visited Nov. 15, 2007). The movie is available at http://www.solid-roc.com/movie.html (last visited Nov. 15, 2007).
- 40. WILLIAM W. FISHER III, PROMISES TO KEEP 23 (2004).
- 41. See Brooks Barnes, TV's New Visual Effects, WALL ST. J., Nov. 10, 2005, at B1.
- 42. See id.
- 43. *See id.* (quoting the show's visual effects supervisor).
- 44. See, e.g., Benkler, supra note 37, at 396–97 (noting "[t]o some extent [distribution] is a nonissue on the Internet").
- 45. See FISHER, supra note 40, at 21.
- 46. *See, e.g.*, H2O Playlist Homepage, http://h2obeta.law.harvard.edu/ (last visited Nov. 23. 2007) (allowing users to create and share playlists of content).
- 47. See, e.g., Nancy Bogucki Duncan & Mark A. Fox, Computer-aided Music Distribution: The Future of Selection, Retrieval and Transmission, FIRST MONDAY, Apr. 4, 2005, http://www.firstmonday.org/issues/issue10_4/duncan/index.html (describing how retrieval and selection technologies can help consumers locate music); Martin Edlund, The Madonna Code, SLATE, July 5, 2005, http://www.slate.com/id/2121998 (describing music recommendation systems); Rob Lightner, Sum of the Parts,

http://www.amazon.de/exec/obidos/tg/feature/-/217324/ref%3Ded%5Fcp%5Fle%5F1%5F4/028-

2377104-4994961 (last visited Nov. 15, 2007) (describing Amazon.com's book recommendation system).

- 48. See, e.g., Lower Manhattan Jazz Clubs,
- http://www.bigapplejazz.com/lowermanhattanclubs.html (last visited Nov. 15, 2007); Nancies.org, http://www.nancies.org/ (last visited Nov. 15, 2007) (exchanging information about the Dave Matthews Band).
- 49. See, e.g., Weedshare, http://www.weedshare.com/ (last visited Nov. 15, 2007) (now-defunct site which allowed users to share music files lawfully with others).
- 50. See, e.g., John Anderson, Once It Was Direct to Video, Now It's Direct to the Web, N.Y. TIMES, Oct. 23, 2005, at AR27.

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Technological change empowers potential creators among the general public with the capability to produce sophisticated works. Like their predecessors, many new artists follow Apple's credo of "Rip. Mix. Burn.," re-configuring and incorporating existing creations. Consumers already practice unauthorized adaptation—witness fan fiction—and may be surprised to learn it is unlawful.

With the increasing number of producers of transformative works, society benefits from greater diversity of offerings and from enhanced satisfaction of consumers' desires. As with open source software, when "users" can tailor works to suit their needs, they benefit—particularly if those users constitute a group too small or obscure for the original author to see benefit in offering them a customized product.⁵⁴ Such adaptations may also prove desirable to others.

In contrast to the direction of technological development, the trend in copyright law augments initial creators' control over expression. Legal changes have increased the scope of protection (for example, the Copyright Act of 1976 formally conferred power over derivative works), ⁵⁵ lengthened its duration (the Sonny Bono Copyright Term Extension Act (CTEA) of 1998 increased it by twenty years), ⁵⁶ prohibited users from circumventing technical restrictions on using works (for example, the Digital Millennium Copyright Act forbids bypassing access control measures), ⁵⁷ reduced fair use's scope, ⁵⁸ increased civil and criminal penalties for infringement, ⁵⁹ and allowed license agreements to override countervailing rights and defenses such as fair use (for example, court decisions uphold license agreements banning reverse engineering even when it would be fair use). ⁶⁰

Moreover, the practical effects of increased copyright protection make it harder to obtain funding for, or to commercialize, transformative works.⁶¹ In

^{51.} See William W. Fisher III, Reconstructing the Fair Use Doctrine, 101 HARV. L. REV. 1661, 1768–69 (1988) (arguing that evaluating fair use to encourage citizens to create transformative works contributes to a worthwhile life).

^{52.} Copyright and the Law: Rip. Mix. Burn., ECONOMIST, July 2, 2005, at 56.

^{53.} See generally LESSIG, supra note 5, at 184–88 (describing harms to potential creators from the current configuration of copyright's derivative work protections).

^{54.} See The Mail Must Get Through, http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/ar01s02.html (last visited Oct. 15, 2007) (noting that "[e]very good work of software starts by scratching a developer's personal itch" and detailing the author's creation of a custom-tailored e-mail delivery system).

^{55.} See, e.g., Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified as amended at 17 U.S.C. §§ 101–1101 (2000)).

^{56.} See Sonny Bono Copyright Term Extension Act of 1998, Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified in scattered sections of 17 U.S.C.).

^{57.} See Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

^{58.} See Neil Weinstock Netanel, Copyright and a Democratic Civil Society, 106 YALE L.J. 283, 304–05 (1996).

^{59.} See Digital Theft Deterrence and Copyright Damages Improvement Act of 1999, Pub. L. No. 106-160, 113 Stat. 1774 (1999) (codified at 17 U.S.C. § 504).

^{60.} See, e.g., Bowers v. Baystate Techs., Inc., 320 F.3d 1317, 1323–28 (Fed. Cir. 2003).

^{61.} See, e.g., Marjoire Heins & Tricia Beckles, Will Fair Use Survive? Free Expression in the Age of Copyright Control 5 (2005), available at

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movies, for example, the need to obtain "errors and omissions" insurance coverage forces creators to license "every snippet of film, photographs, music, or text that is used, in addition to shots of distinctive buildings or products." Producing films like a history of American commercials becomes difficult if not impossible. These changes narrow considerably material available to creators to use as the basis for their own works.

A common response to complaints about these legal trends, and to the need for "starter material" for new works, is to direct potential creators to unprotected expression—resources in the public domain. However, recent changes to copyright law halted the flow of works out of protection and into the commons. For example, the CTEA provided twenty years of additional protection for works with expiring copyrights (including, famously, Disney's Mickey Mouse cartoon *Steamboat Willie*), ⁶⁴ thwarting creators about to gain new building blocks. ⁶⁵ Normally, copyright's limited duration operates like a conveyor belt, constantly bringing works into the public domain where artists can build upon them. ⁶⁶ The CTEA stopped this belt, making transformative access to existing, protected works even more important.

Defenders of the adaptation right also advance important non-economic arguments for this control. ⁶⁷ These rationales likely explain its presence and increasing strength better than the purported economic grounds. Such explanations draw upon labor-desert rationales ⁶⁸ (justifying control to protect the creator's effort invested in them against misappropriation) or personality theory ⁶⁹ (advocating copyright based on the author's identification with the work, both in her own mind and by others).

For example, creators identify with, and feel ownership towards, their creations. They want to control how their works are used. This may require

http://www.fepproject.org/policyreports/WillFairUseSurvive.pdf (stating that the "notion that every quotation except the most minimal must be licensed and paid for is pervasive in the commercial world of arts and culture").

- 62. *Id.*; *see* PATRICIA AUFDERHEIDE & PETER JASZI, UNTOLD STORIES: CREATIVE CONSEQUENCES OF THE RIGHTS CLEARANCE CULTURE FOR DOCUMENTARY FILMMAKERS 6–28 (Nov. 2004), *available at* http://www.centerforsocialmedia.org/files/pdf/UNTOLDSTORIES_Report.pdf.
- 63. See HEINS & BECKLES, supra note 61, at 6 (citing the experience of E&O insurance broker Dennis Reiff).
- 64. See generally Robert MacMillan, Eldred v. Ashcroft: A Primer, WASHINGTONPOST.COM, Jan. 15, 2003, http://www.washingtonpost.com/wp-srv/technology/articles/eldredprimer_100902.htm.
- 65. See, e.g., Amy Harmon, A Corporate Victory, But One That Raises Public Consciousness, N.Y. TIMES, Jan. 16, 2003, at A24; James Surowiecki, Righting Copywrongs, NEW YORKER, Jan. 21, 2002, at 27, available at http://www.newyorker.com/archive/2002/01/21/020121ta_talk_surowiecki.
- 66. See 17 U.S.C. § 302 (2000) (defining duration of protection for a work under copyright).
- 67. See, e.g., John Tehranian, Et Tu, Fair Use? The Triumph of Natural-Law Copyright, 38 U.C. DAVIS L. REV. 465, 489–91 (2005) (arguing the derivative works right is best explained by a natural law theory).
- 68. See, e.g., Brief for Recording Industry Ass'n of Am. as Amicus Curiae Supporting Respondent at 19–20, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1836673; Wendy J. Gordon, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 YALE L.J. 1533 (1993); Sterk, supra note 4, at 1197–1204, 1227–44 (reviewing the role of desert justifications in copyright history).
- 69. See, e.g., Justin Hughes, The Personality Interests of Artists and Inventors in Intellectual Property, 16 CARDOZO ARTS & ENT. L.J. 81 (1998); Margaret Jane Radin, Property and Personhood, 34 STAN. L. REV. 957 (1982).

sacrificing considerable pecuniary gain, as when cartoonist Bill Watterson refused to license characters from his *Calvin and Hobbes* strip for merchandise. Watterson's views resonate strongly with justifications for copyright that posit the fusing of the author's personality with her expression and provide controls over works to protect it. ⁷¹ European copyright law relies heavily upon this theory, but American law has adopted it only in limited areas. ⁷² However, certain features of the U.S. copyright system limiting the creator's influence over uses of her work, such as the "cover license" for recorded music ⁷³ or protection for parody under the fair use doctrine, ⁷⁴ complicate this rationale's application.

While such justifications may have merit, they contrast sharply with the dominant, economically-oriented method and language of copyright analysis in the United States Exploring these theories is beyond this Article's scope. However, this paper implicitly pleads for truth in advertising. If the adaptation right depends upon labor-desert or personality grounds, we should expressly assess the right and tailor its scope, using these methodologies, rather than blending them into an economically-based theory of copyright.

In short, many new creations adapt existing works. Technological advances make generating derivative expression increasingly easy and inexpensive, offering the promise of greater creative output, more interaction by consumers with content, and enhanced diversity of artistic offerings. Legal rules that impede such production, and their underlying rationales, should be scrutinized.

III. COPYRIGHT'S UNUSUAL ECONOMICS

Economically, copyright is an anomaly. Copyright law deliberately creates a monopoly over certain creative expression, tolerating the concomitant harms (increased prices, decreased consumption, and deadweight loss) as a necessary evil. This is at odds with how American law generally organizes production: by creating market competition. This Article now examines briefly why the United States typically prefers competition to monopoly as a backdrop to analyzing how necessary copyright's evils actually are.

Economists view competition, which generates incentives to innovate and to minimize costs, as presumptively superior to monopoly based on empirical research and practical experience.⁷⁶ With multiple, competing

^{70.} See Neely Tucker, The Tiger Strikes Again, WASH. POST, Oct. 4, 2005, at C1.

^{71.} See Neil Netanel, Alienability Restrictions and the Enhancement of Author Autonomy in United States and Continental Copyright Law, 12 CARDOZO ARTS & ENT. L.J. 1, 2–24 (1994).

^{72.} See id. at 7–9; see also 17 U.S.C. § 106A (2000) (granting moral rights-like protection for certain visual art).

^{73.} See 17 U.S.C. § 115.

^{74.} See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579 (1994) (holding that "parody, like other comment or criticism, may claim fair use").

^{75.} See infra note 87.

^{76.} See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 278–83 (6th ed. 2003).

suppliers, prices fall, innovative offerings flourish, and output expands.⁷⁷ Different suppliers introduce diverse products. Competition allows entrepreneurs to discover, and provides incentives to exploit, localized knowledge about what buyers want.⁷⁸ In a competitive market, prices (in the long run) decrease to the marginal cost of production; under monopoly, prices remain higher to maximize the monopolist's revenues.⁷⁹

Copyright gives creators sole control over both their initial works and related secondary markets. Though this monopoly's power depends on whether close substitutes for a work exist⁸⁰—if I cannot read *Eragon*, I may be satisfied with *Dragonsdawn*—some copyrights do confer market power.⁸¹ The adaptation right lets one party control utilization of a work in nearly all secondary markets.⁸²

Copyright thus suffers three key economic detriments. First, it creates higher prices through monopoly rents: 83 consumers pay more than they would with competitive supply. 84 Some consumers will value a work more than its cost in a competitive market, but less than its price under monopoly. 85 Under competition, they would buy a copy; under monopoly, they would not. 86 This foregone benefit creates monopoly's deadweight loss. 87 Deadweight loss can be significant: Professor Paul Romer estimates that for the oligopolistic recorded music industry, "the welfare loss created by the excess of price over marginal cost could be comparable to total revenue for the recording industry." 88 Reduced consumption of copyrighted works can also generate negative externalities; for example, fewer customers share in common cultural experiences.

^{77.} See, e.g., Terry Calvani, What Is the Objective of Antitrust?, in ECONOMIC ANALYSIS AND ANTITRUST LAW 7, 12–13 (Terry Calvani & John Siegfried eds., 2d ed. 1988).

^{78.} See Israel M. Kirzner, Discovery and the Capitalist Process 50–53 (1985).

^{79.} See, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 87–90 (2d ed. 1989); William M. Landes & Richard A. Posner, Market Power in Antitrust Cases, in ECONOMIC ANALYSIS AND ANTITRUST LAW, supra note 77, at 88, 88–92.

^{80.} See James Boyle, Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination and Digital Intellectual Property, 53 VAND. L. REV. 2007, 2038 (2000). See generally ROBERT S. PINDYCK & DANIEL L. RUBINFIELD, MICROECONOMICS 28 (3d ed. 1995) (describing substitutes);

^{81.} See Landes & Posner, supra note 4, at 361; see also Lemley, supra note 7, at 1041 n.246 (discussing a software example of market power through copyright).

^{82.} Exceptions, such as fair use and the first sale doctrine, limit control in secondary markets such as parodies and rentals of motion picture videocassettes. *See* 17 U.S.C. §§ 107, 109(a) (2000).

^{83.} See Glynn S. Lunney, Jr., Reexamining Copyright's Incentives-Access Paradigm, 49 VAND. L. REV. 483, 556 n.282 (1996) (defining monopoly rent as "the amount by which the price for each copy of the work sold exceeds what the marginal cost would have been for the last copy that would have been sold in a perfectly competitive market").

^{84.} See, e.g., Walter Nicholson, Microeconomic Theory 548–51 (7th ed. 1998).

^{85.} See Julie E. Cohen, Copyright and the Perfect Curve, 53 VAND, L. REV. 1799, 1801 (2000).

^{86.} See POSNER, supra note 76, at 278; Fisher, supra note 51, at 1702.

^{87.} Formally, deadweight loss comprises consumer and producer surplus lost from sales not made at the higher, monopoly price that would occur at the lower, competitive market price. *See* Lunney, *supra* note 83, at 497–98, 564.

^{88.} Paul Romer, When Should We Use Intellectual Property Rights?, 92 Am. ECON. REV. 213, 214 (2002).

^{89.} See Fisher, supra note 51, at 1751–53.

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Second, competitive supply has an information advantage over monopoly. If suppliers are free to enter secondary markets, they can respond to localized demand or to scarce information about consumer preferences. Innovation is distributed: new products incorporate consumer feedback through market prices, and potential profits create incentives to produce desirable goods. With monopoly, though, a single supplier must evaluate all potential demand. One supplier is less likely to have access to relevant information about secondary markets, and to be capable of acting upon it, than in a market where anyone with information can become a supplier. Monopoly undercuts arbitrage's benefits: people with information about buyer preferences have less incentive to use it, and some demand goes unmet.

Third, monopoly may retard innovation and efficiency gains. Monopolists often have reduced incentives to cut costs and to create new products. They gain less from innovation, having already extracted most consumer surplus through pricing; since market entry is precluded by definition, firms that are more capable innovators cannot displace the monopolist. Monopolists may also be less efficient. Competition signals how effectively a firm's management reduces costs; a monopolist thus has less ability to evaluate its managers' competence, to reward effective performers, and to remove the inept. He in the surplement of the surplement of the surplement in th

Copyright law deviates from how America normally regulates production. ⁹⁷ This is a deliberate policy choice, not historical accident. ⁹⁸ Such divergence requires explanation. ⁹⁹ American copyright is primarily instrumen-

^{90.} See Benkler, supra note 37, at 406–10.

^{91.} For the classic statement of this argument, see F.A. Hayek, *The Use of Knowledge In Society*, 35 Am. ECON. REV. 519 (1945).

^{92.} See id. at 526.

^{93.} See George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213, 219–220, 224 (1961) (discussing inevitability of dispersed pricing information due to obsolete knowledge and changes in market participants and noting discovery problems similarly apply to "detection of profitable fields for investment").

^{94.} See POSNER, supra note 76, at 281.

^{95.} See id. at 282. But cf. Eric W. Bond & Larry Samuelson, Durable Goods, Market Structure and the Incentives to Innovate, 54 ECONOMICA 57, 57–58, 65 (1987) (noting a monopolist may overinvest in innovation when producing a durable good due to residual demand that can increase profits); Luca Lambertini & Raimondello Orsini, Network Externalities and the Overprovision of Quality by a Monopolist, 67 S. ECON. J. 969, 969–71 (2001).

^{96.} See POSNER, supra note 76, at 282 (citing empirical studies supporting this contention); cf. Karl Aiginger & Michael Pfaffermayr, Looking At The Cost Side of "Monopoly," 45 J. INDUS. ECON. 245 (1997) (analyzing inefficiency from oligopolistic market structures in the pulp/paper and cement industries in the European Union).

^{97.} See, e.g., James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 L. & CONTEMP. PROBS. 33, 53–55 (2003) (citing skepticism towards intellectual property on free trade principles by scholars such as Thomas Jefferson, Adam Smith, and Thomas Babington Macaulay).

^{98.} See, e.g., Michael O'Hare, Copyright: When Is Monopoly Efficient?, 4 J. POL'Y ANALYSIS & MGMT. 407, 407 (1985).

^{99.} See Boyle, supra note 97, at 43 (stating that "given the known static and dynamic costs of monopolies, and the constitutional injunction to encourage the progress of science and the useful arts, the burden of proof should be on those requesting new rights to prove their necessity" (footnote omitted)).

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tal: it confers rights to obtain public benefits, such as enhanced production and distribution of creative works. This paper next assesses how well our instrument works.

IV. ECONOMIC THEORIES SUPPORTING THE DERIVATIVE WORKS RIGHT

Economic analysis of the adaptation right begins by recognizing three unusual characteristics of works eligible for copyright. First, they are non-rivalrous and can be enjoyed by many people simultaneously without interference. Second, once consumers have access to a work, it is difficult to prevent copying or unauthorized use—known as non-excludibility. Third, many creative works are inexpensive to copy, particularly compared to the investment needed to produce the initial version.

The consequence is that most copyrighted works are cheaply and easily copied. ¹⁰⁴ It may have taken J.K. Rowling a year to write *Harry Potter and the Half-Blood Prince*; but it took only twelve hours after its release for fans to scan the book into digital form and distribute it on the Internet. ¹⁰⁵ As William Landes and Richard Posner note, this makes a creator's financial prospects bleak. ¹⁰⁶ Without legal protections such as copyright, unscrupulous people can wait for Rowling to incur the costs of creating her novel, then capitalize on demand by purchasing a single copy, reproducing it, and selling for a lower price. ¹⁰⁷ Game theory predicts creators will anticipate this tactic and decide not to produce works in the first place. ¹⁰⁸ Without copyright, creative works may be underproduced.

Against this background, economic justifications for the derivative works right can be grouped into four categories. They defend the derivative works right as vital in reducing transaction costs, enabling price discrimination, exploiting secondary markets efficiently, and generating incentives to create initial works. The following Subparts outline each rationale, then analyze arguments and data supporting it.

^{100.} See, e.g., Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417, 429 (1984) (stating copyright "is intended to motivate the creative activity of authors and inventors by the provision of a special reward"); Fisher, supra note 51; Wendy J. Gordon, An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory, 41 STAN. L. REV. 1343, 1437 (1989).

^{101.} See Lydia Pallas Loren, Redefining the Market Failure Approach To Fair Use In An Era of Copyright Permission Systems, 5 J. INTELL. PROP. L. 1, 22–23 (1997).

^{102.} See Ian E. Novos & Michael Waldman, The Effect of Increased Copyright Protection: An Analytic Approach, 92 J. Pol. Econ. 236, 237 n.1 (1984).

^{103.} See Loren, supra note 101, at 23.

^{104.} See Landes & Posner, supra note 4, at 326.

^{105.} Reuters, Online Pirates Pounce on New Harry Potter Book, FOXNEWS.COM, July 21, 2005, http://www.foxnews.com/story/0,2933,163229,00.html.

^{106.} See Landes & Posner, supra note 4, at 330–31.

^{107.} See LANDES & POSNER, supra note 11, at 40.

^{108.} See Wendy J. Gordon, Render Copyright unto Caesar: On Taking Incentives Seriously, 71 U. CHI. L. REV. 75, 81 (2004).

A. Reducing Transaction Costs

1. Theory: Copyright as Clearinghouse

The first economic argument contends that exclusive control over derivative works reduces transaction costs. ¹⁰⁹ By vesting all rights to a work in one entity (initially, the creator), copyright reduces discovery and bargaining costs for someone seeking to use that work. ¹¹⁰ Obtaining a license for any of copyright's entitlements involves negotiations with just one party. This justification could be especially important for creators who want to transform a work that is itself a derivative. Authorization from the derivative work's copyright holder immunizes against infringement suits by both the derivative and original rights owners. ¹¹¹ If instead derivative authors could copyright their works (rather than original creators holding that right), someone seeking to alter a derivative work would need to negotiate with both authors, increasing costs. ¹¹²

To illustrate, Landes and Posner offer the example of an author who wants to produce a new version of a foreign work's English translation—say, Orhan Pamuk's *Snow*.¹¹³ If rights to both the original and the (derivative) translation did not vest in one party, the prospective author must negotiate with both Pamuk and the first translation's copyright holder, since a new version would infringe both copyrights if unauthorized. Copyright's unified control, though, lets the new creator bargain with only one party: whoever holds rights to the English translation.¹¹⁴

This consolidation also prevents the problem of multiple holdouts: if an author needs permission from more than one party, each party with veto power has an incentive to hold out for virtually all of the new work's expected profits. Since the new creator cannot satisfy all of these demands, none of the rights holders will consent. If only one entity must consent, the prospective author should be able to negotiate a license, even if at a high price.

^{109.} See, e.g., LANDES & POSNER, supra note 11, at 110–11. Landes and Posner view this rationale as "[t]he most compelling reason for vesting the original author with control over derivative works "

Id. at 110.

^{110.} Id. at 110-11

^{111.} This assumes the derivative author is authorized to license further derivatives; if not, the transaction cost rationale is weakened.

^{112.} LANDES & POSNER, *supra* note 11, at 110–11.

^{113.} See Landes & Posner, supra note 4, at 355 (using example of an English translation of one of Fyodor Dostoyevsky's works).

^{114.} LANDES & POSNER, *supra* note 11, at 111.

^{115.} See, e.g., POLINSKY, supra note 79, at 18–20 (discussing strategic behaviour); Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCI. 698, 700 (1998) (stating that, under an anticommons scenario, "the lack of substitutes for certain biomedical discoveries . . . may increase the leverage of some patent holders, thereby aggravating holden typoblems"); Michael A. Heller, The Tragedy of the Anticommons: Property in the Transition from Marx to Markets, 111 HARV. L. REV. 621, 640–41, 667–77 (1998) (describing the "[t]ragedy of the [a]nticommons" and providing as an example the problem of holdouts by multiple rights owners in Moscow stores after privatization).

Encouraging derivative licensing by reducing associated costs is generally efficient. A novelist usually lacks the skills to create action figures based on her characters, but she can contract with a toy company specializing in it. Allowing a copyright holder to divide inexpensively her entitlement to prepare different adaptations, such as translations into other languages and movie screenplays for a novel, makes these transactions easier and promotes them. ¹¹⁶ Enforcement costs are also reduced. If the initial author can enforce copyright in a derivative, she can more cheaply police infringement by other derivative works since she need show substantial similarity only to her derivative and not to the original. ¹¹⁷

Finally, a variant of this rationale contends that vesting all rights in one entity, even if those rights are alienable, reduces the costs of discovering who holds them. Some derivatives may be quite dissimilar from the initial work—for example, bedsheets decorated with characters from a movie based on a novel. If an entrepreneur wanted to produce shower curtains based on the sheets, she might have trouble discovering who owned their copyright. Since the right to produce the sheets stems from the book author's copyright, though, she can contact the author to verify the assignment of rights. The author is the source from whom all rights flow; when in doubt, aspiring licensees can contact her to learn how to obtain permission to create derivatives.

This rationale thus envisions the copyright holder as a rights clearing-house to reduce transaction costs.

2. Analysis: Second-Best at Cutting Costs

If vesting derivative rights in one holder cuts transaction costs, removing these rights altogether reduces them even further. Without the adaptation right, creators can transform an existing work without incurring *any* negotiation or licensing costs. Without the right, the only potential risk of increased costs occurs when a derivative might infringe the right to reproduce the initial work. For example, a novel's translation would necessarily include points of plot and character development protected under the reproduction right. This is an important consideration, and this Article proposes reforms to address it in Part V. Absent this concern, though, there are no transaction cost benefits from forcing negotiation with a rights holder rather than allowing anyone to transform a work. Description of the support of the proposed in the

^{116.} See LANDES & POSNER, supra note 11, at 112.

^{117.} See id. at 111.

^{118.} See Lunney, supra note 83, at 513.

^{119.} See Voegtli, supra note 6, at 1246.

^{120.} See generally Lemley, supra note 7, at 1053–55 (discussing the transaction costs incident in copyright licensing and stating that licensing costs can absorb up to 20% of a transaction's value).

^{121.} See 17 U.S.C. § 106(1) (2000).

^{122.} See Sterk, supra note 4, at 1217; Voegtli, supra note 6, at 1246–47. Landes and Posner assume any derivative work infringes both the reproduction and adaptation rights; thus, a derivative author must negotiate with the initial author anyway and vesting all rights in that creator is efficient. See Landes &

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Moreover, eliminating the derivative right decreases discovery costs. Copyright owners need not register or display a © symbol to protect their works—this lack of formalities (required under international treaties such as the Berne Convention)¹²³ often makes learning who holds a copyright difficult, necessitating investigation expenses. This cost is eliminated if permission is not needed for adaptation.

The reduced transaction costs achieved by eliminating the derivative works right could be important. For some derivatives, administrative or bargaining costs involved in production will exceed their expected value, leading to the inefficient result that an otherwise socially beneficial work will not be created. Fan fiction and mixtapes appear particularly vulnerable here.

The transaction costs justification also fails to describe how copyright generally operates in practice. Most copyright holders for successful works disaggregate their entitlements—they sublicense or transfer portions of their rights. This challenges parties who later want to utilize works. Distributing older films in a motion picture studio's "library," for example, is often impossible due to the movies' complicated assignment of rights. Similarly, magazine publishers seeking to distribute back issues on DVD must often resort to technical work-arounds, such as including images of pages rather than reproducing their text, to overcome the transaction costs of finding and bargaining with the many authors involved. A creator seeking to transform a derivative work might need to negotiate with, or at least identify and contact, both the derivative and initial authors, since it might not be clear what authority the derivative creator possessed to authorize further adaptation. Thus, even if vesting rights in a single entity were initially more efficient, these rights' alienability could quickly erase any advantage.

Finally, a system without the derivative right reduces costs at infringement's margin: some new works inevitably have similarities to previous, copyrighted ones because they operate in the same genre or share a common public domain heritage. The boundary demarcating infringement of the adaptation right is not clearly marked. Authors of works close to that boundary may seek a license, avoiding risk of a lawsuit, even when permis-

Posner, supra note 4, at 353-57.

^{123.} Berne Convention for the Protection of Literary and Artistic Works art. 5(2), Sept. 9, 1886, 25 U.S.T. 1341, 828 U.N.T.S. 221 (revised July 24, 1971), available at

http://www.wipo.int/export/sites/www/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf.

^{124.} *See* Lunney, *supra* note 83, at 496–97.

^{125.} See, e.g., Lydia Pallas Loren, Untangling the Web of Music Copyrights, 53 CASE W. RES. L. REV. 673, 698 (2003) (noting difficulties caused by disaggregated rights in music).

^{126.} See HAROLD L. VOGEL, ENTERTAINMENT INDUSTRY ECONOMICS 66–67 (5th ed. 2001).

^{127.} See Jessica Mintz, New Yorker on DVD Is Readers' Delight, Surfers' Frustration, WALL ST. J., Nov. 10, 2005, at B1; see also N.Y. Times Co. v. Tasini, 533 U.S. 483, 488 (2001) (holding reproduction of freelance authors' articles in database format violated their copyrights).

^{128.} See Ginsburg, supra note 1, at 1910 n.172.

^{129.} See, e.g., Heim v. Universal Pictures Co., 154 F.2d 480, 487–88 (2d Cir. 1946).

sion is not clearly necessary; this transaction cost evaporates if there is no derivative right. 130

Because transaction costs are lower under a copyright system without the derivative works right than in one that includes it, this rationale offers no support for the right's existence.

B. Enabling Price Discrimination

1. Theory: Broadening Access, Boosting Returns

The second economic argument justifies the derivative works right as necessary to enable price discrimination by copyright holders. Price discrimination occurs when a supplier charges different prices to different buyers for the same product. ¹³¹ It lets producers tailor prices more closely to consumers' willingness to pay. Under perfect price discrimination, a supplier charges each customer her reservation price—the most she will pay for the good. ¹³²

Copyright price discrimination offers two potential benefits. First, it can enhance access. Creators can charge consumers less to acquire a copy (for example, buying a novel) and more to employ it to create derivatives that earn revenue (for example, creating a film version). Conversely, without price discrimination, access may diminish. Creators might increase prices to capture some revenue earned by consumers who transform their copies. This would reduce access for those who only want to use their copy normally—reading the novel rather than writing a screenplay—and whose reservation prices are close to the prevailing price under discrimination. Price discrimination can thus make it cheaper for consumers to acquire copies.

Second, price discrimination bolsters revenues by allowing creators to capture more consumer surplus, spurring production.¹³⁴ Price discrimination can also attract additional customers since prices are lower than in a system without this capability.¹³⁵ Many commentators accordingly view price discrimination as a benefit of copyright law.¹³⁶ Professor Wendy Gordon describes all of copyright's entitlements as geared to sustaining this prac-

^{130.} See Lunney, supra note 83, at 495–96. This is particularly true if creators are risk-averse.

^{131.} NICHOLSON, supra note 84, at 560.

^{132.} *Id.* at 561; POSNER, *supra* note 76, at 283.

^{133.} See, e.g., William W. Fisher III, Property and Contract on the Internet, 73 Chi.-Kent L. Rev. 1203, 1239–40 (1998).

^{134.} See LANDES & POSNER, supra note 11, at 39; NICHOLSON, supra note 84, at 560.

^{135.} See Michael J. Meurer, Copyright Law and Price Discrimination, 23 CARDOZO L. REV. 55, 99 (2001).

^{136.} See, e.g., MICHAEL A. EINHORN, MEDIA, TECHNOLOGY AND COPYRIGHT: INTEGRATING LAW AND ECONOMICS 55 (2004) (arguing "price discrimination and versioning are particularly defensible in industries with high fixed costs of production"); STAN LIEBOWITZ, RE-THINKING THE NETWORK ECONOMY 89–91 (2002); Fisher, supra note 51, at 1742; Hal R. Varian, Differential Pricing and Efficiency, First Monday, Aug. 5, 1996,

http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/473/829; see also Boyle, supra note 80, at 2027–28.

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tice. 137 Professor William Fisher argues price discrimination is advantageous because "it enables the copyright owner to reap greater rewards per unit of efficiency loss than he would if he charged a flat fee." Without the adaptation right, creators might have insufficient incentives to produce or to provide adequate quality. Professor Glynn Lunney contends that without the ability to charge differential prices, potential creators will turn to other products amenable to price discrimination and with higher returns; accordingly, expressive works may be underproduced. Thus, price discrimination can increase output by boosting revenues.

Price discrimination is difficult and expensive. To implement it, suppliers need information about consumers' willingness to pay, market power, and the ability to prevent arbitrage. They must acquire and use information about customers' reservation prices to set properly their own prices and must not face competition that undercuts them. A supplier must also prevent secondary sales from low reservation price customers to high-price ones (arbitrage), or high-price consumers will buy in secondary markets instead. It is a secondary markets instead.

Given these challenges, economists define three types of price discrimination. Historian price discrimination can occur when the seller knows each consumer's willingness to pay. He Second-degree price discrimination uses consumer decisions—such as when to see a movie—as an imperfect proxy for reservation price. Third-degree price discrimination employs observable characteristics, such as age, as an even less precise index. Available information determines how closely a seller can match price to willingness to pay.

The derivative works right enables second-degree price discrimination. The Copyright owners can charge different prices for the same copies (though with different use rights). For example, record labels can charge less to a customer who only listens to a song, and more to one who uses it in a television commercial. Deciding to buy an ordinary copy, or one with a license to adapt it, separates consumers into higher-value and lower-value users. This solves price discrimination's information challenge by forcing higher-value consumers to identify themselves. The right functions like a contractual restriction on using a work (known as product differentiation). Description of the same copies of the same copies and the same copies of the same copies

^{137.} See Wendy J. Gordon, Intellectual Property As Price Discrimination: Implications for Contract,

⁷³ Chi.-Kent L. Rev. 1367, 1375–78 (1998).

^{138.} Fisher, *supra* note 51, at 1742.

^{139.} See Meurer, supra note 135, at 94.

^{140.} See Lunney, supra note 83, at 639–40.

^{141.} See Meurer, supra note 135, at 59.

^{142.} POSNER, *supra* note 76, at 283–84; Meurer, *supra* note 135, at 59.

^{143.} See Meurer, supra note 135, at 67–75.

^{144.} Id. at 68.

^{145.} See FISHER, supra note 40, at 68–69.

^{146.} See Meurer, supra note 135, at 67, 69–71.

^{147.} See id. at 75.

^{148.} See id. at 75, 110-12.

^{149.} See id. at 72.

However, the ability to charge more for derivative rights is limited by the "sorting constraint"—if the license's additional cost is too great, some derivative authors will forgo creation. The sorting constraint is important because it reduces total surplus that consumers and producers enjoy from copyrighted works. Use restrictions decrease surplus for people who place a low value on a work (below that necessary to justify purchasing an adaptation license), but for whom the limit prevents valuable use. 152

The right can also fine-tune price discrimination by linking primary and derivative markets. The Warner Brothers motion picture studio, for example, controls merchandising rights for its popular movies based on the *Harry Potter* novels. ¹⁵³ By selling action figures, the studio obtains surplus from higher-value moviegoers with greater interest and can reduce (or avoid increasing) ticket prices to capture lower-value *Potter* movie consumers. ¹⁵⁴ With the adaptation right, the studio controls both markets and can tune prices in each to maximize profit.

Copyright law effectively implements price discrimination by limiting arbitrage. Let unlawfully transform copies are checked by the copyright holder's ability to prosecute violations and by fears, even if overblown, of legal liability. The right is likely more efficient and less costly than alternative means of implementing price discrimination that copyright owners might employ in its absence. Let unlawfully transform copies are checked by the copyright owners might employ in its absence.

The price discrimination rationale has two facets. First, the right improves access. Without price discrimination, authors will price copies above what some ordinary consumers will pay to capture surplus value from derivative creators, reducing access. This creates deadweight loss. Second, price discrimination spurs production or, at least, prevents underproduction. Creators may need to capture additional value from consumers who adapt their works, or they will produce less content than is socially desirable. Thus, the adaptation right may be necessary to set pricing properly, enabling consumers to obtain copies and authors to earn sufficient revenue.

^{150.} See id. at 73 ("The profitability of second-degree price discrimination is limited because the sorting condition limits the mark-up that can be levied against the high valuation buyers.").

^{151.} See id. at 77–79.

^{152.} See id. at 102.

^{153.} See David D. Kirkpatrick, A New Sign on Harry's Forehead: For Sale, N.Y. TIMES, June 16, 2003, at C1.

^{154.} See Meurer, supra note 135, at 89 (describing this possibility). But cf. id. at 125–129 (disapproving of extending the derivatives right to merchandise since it increases the merchandise's cost, leading to underconsumption, and likely increases income inequality).

^{155.} See Gordon, supra note 137, at 1372 (noting that for the reproduction right, copyright law prevents arbitrage).

^{156.} See Meurer, supra note 135, at 76 ("Obviously, a buyer can violate contract or copyright restrictions on the use of a product. If the violation is not checked, then the buyer gets the benefit of a low price and unrestricted use.").

^{157.} See id. at 111–13 (describing likely responses by the movie and music industries if the public performance right, which permits price discrimination, were eliminated).

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2. Analysis: Movie Rentals and Other Weaknesses

Justifying the derivative works right as necessary to enable price discrimination finds, at best, weak support in available data. Ultimately, this rationale's power is an empirical question. As Professor Yochai Benkler notes, "whether price discrimination increases overall social welfare will depend on whether the gains from enhanced consumer access to the excludable aspects of the work will outweigh the social losses caused by elimination or reduction in free access to the previously nonexcludable aspects of the work." This Article next considers data on each facet: access and production incentives.

a. Access

While price discrimination's theoretical effects on access are uncertain, available data suggest it actually reduces access. In practice, sellers cannot match perfectly price to consumers' willingness to pay and must divide the market into tranches by price. Market segments facing higher prices will have fewer customers and lower demand as some consumers are priced out of the market and others cut back consumption. ¹⁵⁹ Since arbitrage is not lawful (the adaptation right is generally assigned to a specific party and may not be re-assigned), customers cannot freely exchange copies in a way that is Pareto-efficient, reducing access. ¹⁶⁰ Price discrimination could thus diminish rather than expand access.

Empirical data on access in a system without the derivative works right is scarce because copyright law has included this entitlement statutorily since 1976¹⁶¹ and via court decisions (to varying degrees) since much earlier. However, data on access is available from an analogous right that confers power to price-discriminate: the rental right for movies. ¹⁶²

In the United States, copyright's "first sale" doctrine allows lawful purchasers of copies, such as tapes or DVDs of motion pictures, to re-sell or rent them without permission from or payment to the copyright holder. ¹⁶³ This creates a lawful, profitable third-party rental market. ¹⁶⁴ It also produces two groups of purchasers: ordinary consumers, who only watch the film,

^{158.} Yochai Benkler, An Unhurried View of Private Ordering in Information Transactions, 53 VAND. L. REV. 2063, 2079 (2000); see Jonathan Weinberg, Hardware-Based ID, Rights Management, and Trusted Systems, 52 STAN. L. REV. 1251, 1275–77 (2000).

^{159.} See Meurer, supra note 135, at 100.

^{160.} See id.

^{161.} See Copyright Act of 1976 § 103, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified at 17 U.S.C. § 103 (2000)).

^{162.} See 17 U.S.C. § 106(3).

^{163.} See id. § 109(a). But see id. § 109(b)(1)(A) (exempting computer software and music recordings from the right to dispose of a copy by rental or lease).

^{164.} See, e.g., Janet Rae-Dupree, Blockbuster: Movie Business Remains a Moving Target, CIO INSIGHT, Aug. 10, 2005, http://www.cioinsight.com/print_article2/0,1217,a=157500,00.asp (describing the mechanics of second-order price discrimination in the motion picture business and noting Blockbuster has 40% market share in a \$6.8 billion market).

and rental outlets, who lend it to produce revenue.¹⁶⁵ The income stream from rentals makes outlets willing to pay a higher price for a copy.¹⁶⁶ When selling tapes or DVDs, movie studios face a choice: price for higher-value consumers (rental outlets such as Blockbuster Video) or lower-value consumers (individual viewers and families). Alternatively, they might attempt second-order price discrimination by shifting prices over time: higher initially to capture value from rental outlets, lower later to sell to ordinary consumers. (Note this strategy's access cost for ordinary consumers: they must pay a higher purchase price, wait until the price drops, or content themselves with renting the film.)¹⁶⁷

The studios generally employ a mixed strategy. For VHS videocassettes, studios bifurcate the market into movies likely to be purchased by ordinary consumers and those aimed at rental stores. Movie distributors adopted this model in the 1990s, selling videos targeted at the rental market for eighty to ninety dollars retail and those aimed at consumers for twenty dollars or less. Titles are divided by genre: children's movies, classic films, and blockbusters targeted at teenagers are primarily consumer sales items and constitute roughly 10% of films; all other recent movies are primarily rentals, making up 90% of titles. The differentiating factor is whether consumers are likely to want to watch a film more than once; if so, they are more likely to purchase it. This pattern continues today, although market leader Blockbuster Video has moved to a revenue-sharing model for the rental market, paying roughly eight dollars per video and sharing thirty to 45% of rental income with the studios.

In the rental market, the studios practice second-order, temporal price discrimination: after five months, the period when a movie is most attractive to renters, retail prices drop to twenty to twenty-five dollars. (Consumer demand for these films is highest in months just after their release.) Thus, tape purchasers willing to wait five months can buy rental market films at roughly the same price as consumer market ones. Overall, studios use second-order price discrimination for most films distributed.

^{165.} See id.

^{166.} See id.

^{167.} See id.

^{168.} See Richard Roehl & Hal R. Varian, Circulating Libraries and Video Rental Stores, FIRST MONDAY, May 7, 2001, http://www.firstmonday.org/issues/issue6_5/roehl/.

^{169.} Id.

^{170.} See id.; Julie Holland Mortimer, Price Discrimination, Copyright Law, and Technological Innovation: Evidence from the Introduction of DVDs, 122 Q.J. ECON. 1307, 1308–09, 1313 tbl.1 (2007) (listing genres targeted at ordinary consumers versus those targeted at rental outlets).

^{171.} See, e.g., Hal R. Varian, Buying, Sharing and Renting Information Goods, 48 J. INDUS. ECON. 473, 483 (2000) (recognizing that since children are known for viewing the same thing again and again, the largest class of videos priced for purchase are children's videos).

^{172.} Gérard P. Cachon & Martin A. Lariviere, Supply Chain Coordination with Revenue-Sharing Contracts: Strengths and Limitations, 51 MGMT. SCI. 30, 30 (2005).

^{173.} Mortimer, supra note 170, at 1308.

^{174.} See id. at 12–13 (noting the absence of "second-run" video stores in the market due to satisfaction of rental customer demand immediately following release); Roehl & Varian, *supra* note 168.

^{175.} Mortimer, *supra* note 170, at 1308.

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Price discrimination in videocassette sales reduces access (as defined by purchase) to titles in the rental sale market but not in the consumer sale market. For rental market titles, consumers must either wait five months to obtain a lower price (incurring the cost of delayed consumption) or pay the higher price. ¹⁷⁶ Price discrimination lets studios target higher-value consumers, such as Blockbuster, but imposes the cost of delay or greater prices on ordinary consumers. This reduced access results from imperfect information: studios use time of purchase to sort higher-value from lower-value purchasers.

In contrast, consumer market titles have a near-constant purchase price.¹⁷⁷ This price is roughly equal to what studios charge for rental market titles after the initial five-month period.¹⁷⁸ This suggests that studios view this price as what ordinary consumers will pay and that they do not increase prices in the consumer title market to extract surplus from higher-value individual consumers. In short, studios engage in price discrimination for rental market titles, but not consumer market ones.

For DVDs, studios make no effort at price discrimination. They price copies for ordinary consumers, even though rental outlets have more DVD rentals than VHS ones.¹⁷⁹ The difference in strategies leads to the bizarre result that studios initially release the same movie at wildly different prices by format. Professor Julie Mortimer notes, for example, that *The Green Mile* had a VHS release price of \$107.95 and a DVD price of \$24.95.¹⁸⁰ Rental outlets do not pass on cost savings to consumers: DVD rentals are slightly more expensive than VHS ones, and there is no difference in rental fee within categories based on acquisition cost.¹⁸¹ Mortimer suggests this DVD strategy may be transient; her economic modeling indicates that as more consumers adopt DVD technology (by replacing VHS players), studios can increase both profits and consumer surplus by pricing copies as rental market titles.¹⁸² She argues consumers would also benefit from third-degree price discrimination in the DVD market.¹⁸³ However, the studios have not yet heeded her call.

Imperfect price discrimination is possible for sales of movie DVDs and VHS tapes. Where implemented, it reduces access, at least temporarily, for ordinary consumers seeking to *purchase* copies. However, the access question is complicated by the rental option. If "access" refers to *viewing*, rather than owning, a movie, then access cost is unchanged over time and across

^{176.} See id.

^{177.} See id. at 20 (noting only small reductions in price over time for tapes and DVDs in the consumer sales ("sell-through") market).

^{178.} See id

^{179.} See id. at 2–3; Anna Bakalis, It's Unreel: DVD's Overtake Videocassettes, WASH. TIMES, June 21, 2003, at A1, available at 2003 WLNR 12446788; see also EDWARD JAY EPSTEIN, THE BIG PICTURE 213–14 (2005) (noting economies of scale in DVD production help drive this choice).

^{180.} Mortimer, *supra* note 170, at 1309.

^{181.} Id. at 1318.

^{182.} See id. at 1342.

^{183.} See id. at 1342-43.

genres. A movie's *rental* price does not vary by category or date of release. The first sale doctrine, and the arbitrage it enables, effectively prevents studios from raising rental prices to capture higher-value consumers, and competition among video stores prevents rental outlets from doing so. Even with temporal price discrimination in videocassette sales, access costs via rental remain constant. This may reflect cross-subsidization between genres: rental stores charge a single price for videos rather than a lower price for cheaper, consumer market titles and a higher price for more expensive, rental market ones. If so, renters face slightly reduced access to consumer market titles in exchange for greater access to rental market titles. On net, this tradeoff likely benefits customers as there are far more movies in the latter category. Thus, some consumers may settle for renting a movie rather than owning it, or renting it initially followed by a purchase once the price drops, reducing price discrimination's disadvantages.

Movie studios' pricing decisions offer minimal support for the argument that price discrimination through copyright is needed to maintain or augment access. For DVDs, and VHS tapes targeted at ordinary consumers, studios charge a single purchase price, implying consumers do not face reduced access through pricing targeted at high-value purchasers. This conclusion is reinforced by the discounting strategy in the VHS market for rental titles: when studios shift to targeting ordinary consumers after five months, they lower prices to roughly the same level as initial prices in the consumer title segment. Thus, it is unlikely they charge a hidden premium for consumer titles.

Moreover, when studios practice price discrimination in the VHS tape market, ordinary consumers who want to purchase copies face reduced access based on increased price or the time delay before prices fall. In short, these results run counter to the rationale's predictions: where studios choose not to charge different prices, consumers do not suffer reduced access; where they do, consumer access decreases. While the rental right is not precisely analogous to the adaptation right, and hence this analysis is not definitive, it is highly suggestive. Data from sales of motion pictures in video-cassette and DVD formats undermines the contention that enabling price discrimination is necessary to prevent reduced consumer access.

b. Production

The second facet of the price discrimination rationale is that it prevents under-production by increasing revenue, and thus incentives, from creative works. ¹⁸⁷ This contention faces two objections. First, price discrimination

^{184.} *See id.* at 1318 (noting the absence of price variation but suggesting that some Blockbuster and Hollywood video stores were experimenting with reduced rental fees for children's films, which cost less to procure).

^{185.} See Roehl & Varian, supra note 168.

^{186.} See Mortimer, supra note 170, at 1308.

^{187.} See Lunney, supra note 83, at 640. Lunney also worries that copyright may skew incentives in

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does not necessarily raise output; it may simply increase the seller's profits. While price discrimination can bolster output in goods markets—where additional production creates marginal cost—this is not true for information goods such as copyrighted works. Second, this rationale converts price discrimination into a method of increasing incentives. Hence, this Article folds this part of analyzing the price discrimination rationale into Subpart IV.D. on incentive-based justifications.

c. Shortcomings

Implementing price discrimination via the derivative works right generates four additional problems: timing, uncertain consumer surplus effects, distorted output, and transaction costs.

First, timing challenges may mitigate access concerns by preventing creators from pricing copies to target consumers who will produce derivatives, rather than simply using copies normally. Most works with valuable derivative markets have been successful in their primary ones. Star Wars characters become desirable action figures because of the large customer base that saw the movies. 190 Music artists sample Eminem, and movie producers use his songs, because listeners recognize the lyrics and delivery from his songs, not just because his compositions are attractive. ¹⁹¹ Pricing copies for ordinary consumers, rather than derivative producers, is likely vital initially—without success among ordinary consumers, there will be no derivative markets. Accordingly, most creators have strong incentives not to price for high-value consumers, thereby reducing access, if they seek to develop secondary markets downstream. Even without the adaptation right, creators are unlikely to raise prices to capture surplus from future adaptors since doing so may harm their works' chances for the popularity that drives derivative consumption.

Second, access may be the wrong benchmark to measure price discrimination's effects. Consumer surplus may be more important. The impact of differential pricing on total consumer surplus is ambiguous. The outcome depends upon whether consumers who lose surplus in the shift to differentiated pricing lose more than customers who can now purchase the work due to decreased price gain. Price discrimination could reduce wealth inequality, if benefited consumers are poor and harmed ones rich, or increase it

the other direction, leading to overproduction of creative works at the expense of other goods. *See id.* at 647–48.

^{188.} POSNER, *supra* note 76, at 283–84.

^{189.} Absent price discrimination, consumers can simply make free (though unlawful) copies of information goods. I thank Mark Lemley for this point.

^{190.} See TOM SHONE, BLOCKBUSTER 289 (2004) (describing action figure sales as "a sure thing" due to Star Wars' popularity).

^{191.} See generally Zandile Blay, Monstermash: Cut-and-Paste Collaborations Have Created A Beast In the Music Industry, THE RECORD, Dec. 13, 2004, at F1.

^{192.} See Meurer, supra note 135, at 90-94.

under the opposite circumstances.¹⁹³ Professor Julie Cohen argues it may be important to protect consumer surplus for high-valuation users since some obtain surplus from "transformative reuses that create additional social welfare benefits"—simply put, they generate positive externalities.¹⁹⁴ Thus, even perfect price discrimination that increases access may be undesirable since surplus converted to monopoly profits is less than social welfare lost.¹⁹⁵ Measuring access to a work, rather than value derived from it, may mislead.

Third, price discrimination may alter the works produced. For example, it may push movie directors to craft films amenable to merchandising, or for authors to simplify novels' plots, easing screenplay adaptation. ¹⁹⁶ It may be tempting to shape *Batman* movies to sell toy Batmobiles rather than to attract theatergoers. Analogously, Professor Michael Meurer attacks geographic price discrimination for movies, believing that motion picture studios' attempts to gain "international revenue [have] distorted the content of high budget American movies [whose] scripts are simplified to increase appeal to audiences speaking different languages." Action movies translate more readily than smart comedic wordplay. Thus, even if the quantity of creative output increased, its quality could suffer.

Finally, price discrimination via the adaptation right has implementation and transaction costs. To create a derivative work, one must determine who owns the initial work's copyright, contact that party, and negotiate a license. Similarly, the copyright owner must assess the prospective creator's willingness to pay. As Benkler explains, implementation cost has an important drawback: it sets the minimum price at which the copyright holder will supply a license. This re-introduces the deadweight loss that price discrimination tries to eliminate: a consumer may value creating a derivative more than its production cost, but less than its implementation cost, and will not produce the work.

Overall, empirical data and theoretical arguments provide little support for enabling price discrimination as a justification for continuing the adaptation right.

^{193.} See id.

^{194.} Cohen, supra note 85, at 1807.

^{195.} See POSNER, supra note 76, at 284.

^{196.} See EPSTEIN, supra note 179, at 216 (describing alterations in movie plots based on pressure from Wal-Mart, a major DVD retailer); SHONE, supra note 190, at 227–29 (noting that international revenues distort movie plots).

^{197.} Meurer, *supra* note 135, at 145.

^{198.} TYLER COWEN, CREATIVE DESTRUCTION: HOW GLOBALIZATION IS CHANGING THE WORLD'S CULTURES 12 (2002).

^{199.} See 17 U.S.C. §§ 103(a), 106(2) (2000).

^{200.} See Benkler, supra note 158, at 2072–73.

^{201.} Id.

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C. Exploiting Markets Efficiently

1. Theory: Digging Dry Wells

The third economic argument asserts that the derivative right is necessary to exploit a work's markets efficiently. In this view, a single copyright owner best facilitates development of secondary works. 202 If copyright holders can reap profits from all markets for a work, they will assign rights to those markets to maximize profits, enabling resources to move to their highest-value users.²⁰³ The rights holder will limit derivative production to avoid overtaxing demand (consumers may tire of creations that become ubiquitous),²⁰⁴ to prevent uses that harm the original market,²⁰⁵ and to prevent competition among derivatives that diminishes overall returns. 206 Consolidating control "prevents problems such as congestive overexposure and wasteful forms of exploitation",207 and mitigates "congestion externalities."208 For example, the movie studio Lucasfilm admitted it licensed too many products for Star Wars: The Phantom Menace, harming overall merchandising revenue.²⁰⁹ From this perspective, a monopolist best detects signals of consumer demand, allowing it to optimize development to meet demand. ²¹⁰ This rationale tends towards maximalism: it advocates broad copyright entitlements to "perfect[] markets for all potential uses of creative works for which there may be willing buyers."211

This rationale argues control over derivatives promotes efficient timing. With the adaptation right, authors need not delay releasing the initial work to enter derivative markets simultaneously. Without it, creators might delay distribution until they prepared derivatives and might attempt to enter all secondary markets at once to protect secondary revenues. Other derivative creators might free-ride on the initial author's advertising and promotional efforts. Since timing or staging derivative works can affect

^{202.} See generally William W. Fisher III, Theories of Intellectual Property, in New Essays in the Legal and Political Theory of Property 168, 179–84 (Stephen R. Munzer ed., 2001), available at http://cyber.law.harvard.edu/people/tfisher/iptheory.pdf.

^{203.} See Gordon, supra note 100, at 1435. See generally POSNER, supra note 76, at 32–34.

^{204.} See LANDES & POSNER, supra note 11, at 110.

^{205.} See, e.g., Walt Disney Prods. v. Air Pirates, 581 F.2d 751, 757–58 (9th Cir. 1978) (upholding injunction against comic book artists who produced cartoons showing Disney characters smuggling drugs and having sex).

^{206.} See Melanie Warner, How a Meek Comic Book Company Became a Hollywood Superpower, N.Y. TIMES, July 19, 2004, at C7 (noting Marvel increased licensing revenues by reducing the number of authorized merchandisers for its sneaker and candy lines).

^{207.} Gordon, *supra* note 100, at 1454.

^{208.} LANDES & POSNER, supra note 11, at 110.

^{209.} See Space to Sell, SMH.COM.AU, May 9, 2002,

http://www.smh.com.au/articles/2002/05/08/1019441520971.html.

^{210.} See generally Harold Demsetz, Information and Efficiency: Another Viewpoint, 12 J. L. & ECON. 1 (1969); Fisher, supra note 202, at 15.

^{211.} Netanel, *supra* note 58, at 309.

^{212.} See Landes & Posner, supra note 4, at 355.

^{213.} See LANDES & POSNER, supra note 11, at 110.

^{214.} See EINHORN, supra note 136, at 26. I thank Amanda Michel for this point.

overall revenue, having one entity hold rights to all adaptations enables better coordination, maximizing profits. It allows synchronized marketing, advertising, and merchandise release. Control also lets creators tailor output to match demand; absent this right, they might produce and stockpile large numbers of derivatives for consumers who never materialize. The exclusive right mitigates these timing risks, allowing creators to advertise before releasing a work and to select the optimum tradeoff in speed versus cost of production. The exclusive right mitigates these timing risks, allowing creators to advertise before releasing a work and to select the optimum tradeoff in speed versus cost of production.

Similarly, without the right, authors might invest in protective measures to foil competing adaptations (such as digital rights management systems²¹⁸ or technology to block camcorders from recording movies on television)²¹⁹ and might require more restrictive contracts with consumers and distributors.²²⁰

Moreover, if derivative authors did not need the initial creator's permission, they could produce works that would limit her creative development. For example, authors might write new adventures for the Baudelaire children that would prevent Lemony Snicket from creating similar (possibly better) sequels. 222

Finally, control over derivatives may be necessary to prevent parasitic creations which reduce demand for the original or other adaptations. Concerns about parasitic derivatives led Disney to sue underground cartoonists who drew comics showing Mickey Mouse smuggling drugs.²²³ Disney worried the comics would harm Mickey's squeaky-clean image of "innocent delightfulness," decreasing demand for mouse-based products.²²⁴ This worry is particularly pertinent for translations; a bad or malicious translation that is first into a market could poison it. For example, the (official) Chinese translation of Hillary Clinton's biography *Living History* omitted her criticism of that country's human rights practices.²²⁵ Thus, the adaptation right can protect against uses that harm a work's primary and secondary markets. (Works that diminish market demand through criticism or scorn are generally protected by the fair use doctrine.)²²⁶ This justification is conceptually

^{215.} See id.

^{216.} See id.

^{217.} See id. at 57, 60–61.

^{218.} See Dan L. Burk & Julie E. Cohen, Fair Use Infrastructure for Rights Management Systems, 15 HARV. J.L. & TECH. 41, 47–51 (2001).

^{219.} See LASICA, supra note 38, at 117–18 (describing "Cam Jam" technology that blocks recording).

^{220.} See id.

^{221.} See LANDES & POSNER, supra note 11, at 112. This assumes derivative creators could obtain copyright in these works, letting them exclude the original author from the new expression. See id.

^{222.} See, e.g., LEMONY SNICKET, THE BAD BEGINNING (1999).

^{223.} See Walt Disney Prods. v. Air Pirates, 581 F.2d 751 (9th Cir. 1978).

^{224.} *Id.* at 753; *see* Jeet Heer, *Free Mickey!*, BOSTON GLOBE, Sept. 28, 2003, at H2, *available at* http://www.boston.com/news/globe/ideas/articles/2003/09/28/free_mickey/.

^{225.} See Ross Terrill, China Censors a Senator, N.Y. TIMES, Sept. 29, 2003, at A19.

^{226.} See Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 592 (1994).

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similar to the protections trademark law affords against tarnishing well-known marks or brands.²²⁷

The efficient market exploitation argument derives from Edmund Kitch's scholarship on patents. Kitch argued the exclusive right to exploit all prospects for a patent was the most efficient option because, while information might not be depletable, resources to use it are. Every invention has an array of development opportunities, and multiple actors could develop any one of them. This could lead to wasteful duplication of effort from information problems. Kitch noted that firms evaluating prospects, or abandoning efforts to develop a given market, would likely not share their conclusions. Other parties might then invest wastefully in exploring these "dry wells." A single rights holder would prevent duplication and coordinate information exchange.

Kitch focused on opportunities with uncertain economic prospects: he believed exclusive rights over information about such innovations promoted efficient investment in investigation.²³⁴ He lauded the patent system as "tend[ing] to assure efficient allocation of the resources among the prospects at an efficient rate and in an efficient amount . . . [and] information found by one entity is communicated to other firms at an efficient rate."²³⁵ As with patents, exclusive rights over developing a copyrighted work's prospects may permit the most efficient exploration of its potential markets.

2. Analysis: De-Regulation and Discovery

The efficient exploitation argument is both empirically and theoretically weak.

On empirical grounds, data from de-regulation of various industries undermines the position that a single decisionmaker best discovers and meets consumer demand.²³⁶ For example, the landline telephone market was long considered a natural monopoly where a single supplier would most effi-

^{227.} See, e.g., 15 U.S.C. § 1125(c) (2000) (establishing federal trademark protection against tarnishing that dilutes power of famous mark); Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, 604 F.2d 200, 204–05 (2d Cir. 1979) (enjoining distribution of a pornographic film where a participant wore a costume similar to that of the Cowboys cheerleaders).

^{228.} See Edmund W. Kitch, The Nature and Function of the Patent System, 20 J.L. & ECON. 265 (1977).

^{229.} See id. at 276.

^{230.} See id. at 266.

^{231.} See id. at 266, 276. A key difference between patent and copyright is that the first to obtain a patent gains exclusive control over that invention while independent creation is, in theory, permissible in copyright.

^{232.} *Id.* at 276–78.

^{233.} See id.

^{234.} See id. at 283-84.

^{235.} Id. at 266.

^{236.} See generally Mark A. Lemley, Ex Ante versus Ex Post Justifications for Intellectual Property, 71 U. CHI. L. REV. 129, 140 n.36 (2004) (listing empirical studies that disprove the efficient exploitation hypothesis).

ciently serve customers.²³⁷ However, after the break-up of the American Telephone & Telegraph (AT&T) monopoly and the introduction of competition for long-distance service, telephone penetration (the percentage of households with a phone) increased, the price index for telephone service went up at merely half the rate of the overall consumer price index (CPI), and phone service quality improved.²³⁸ In a rough measure of innovation—the introduction of new services—productivity grew after competition was introduced, and both the share of revenue and employment devoted to research and development (which generates innovation) increased.²³⁹ Overall, introducing competition into telephone services created a "telecommunications sector [that] is more dynamic and innovative than it had been under the old monopoly."²⁴⁰

Data from the electrical industry paints a similar picture. One study finds that regulatory requirements to contract with "independent power suppliers, combined with competitive generation procurement programs in the late 1980s, helped to stimulate the technological innovation in" new generating technology.²⁴¹ Bringing competition into the industry's electricity generation segment played a vital role in decreasing its relatively high inefficiency and poor performance.²⁴² As Professors Robert Merges and Richard Nelson note, firms are rarely perfect, profit-maximizing machines in exploiting potential market niches; the cost of inaction from employing monopoly control, rather than competition, may be significant.²⁴³

These and similar empirical data call the efficient exploitation rationale into question. It also faces four theoretical problems.

First, duplication of effort in exploiting secondary markets, which this rationale views as undesirable, may be a necessary byproduct of speeding development and determining the most efficient supplier through competition. Competitive pressures can press producers to introduce products more rapidly than they would under a monopoly. In addition, suppliers may have different skill levels in meeting demand—one producer's judgment that a market is unprofitable may not hold for another. American law tolerates duplicated (and even totally wasted) effort in contexts such as pat-

^{237.} See Eli M. Noam, Assessing the Impacts of Divestiture and Deregulation in

Telecommunications, 59 S. ECON. J. 438, 439 (1993).

^{238.} Id. at 440-41.

^{239.} Id. at 442-43.

^{240.} *Id.* at 446.

^{241.} Paul L. Joskow, Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector, J. ECON. PERSP., Summer 1997, at 119, 125.

^{242.} Id. at 129.

^{243.} Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 872 (1990); *see also* Edward Jay Epstein, *Hollywood's Biggest Blunders*, SLATE, Sept. 19, 2005, http://www.slate.com/id/2126576/ (reviewing economically irrational decisions by Hollywood studios in exploiting market opportunities).

^{244.} See Merges & Nelson, supra note 243, at 884–908 (reviewing examples from patent law in different industries).

^{245.} See id.

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ent races because competition spurs innovation.²⁴⁶ Redundant exploration of derivative markets may be a necessary evil.

Second, competitive markets most effectively locate and aggregate information. A range of suppliers offering different, competing products generates greater information, through consumer demand, that can be assimilated into prices and development efforts. A single supplier is unlikely to discover, or correctly value, all potential derivative markets. As Professor James Boyle notes, "the cybernetic, self-organizing rationality of markets depends precisely on the distributed analytical processing power of market participants who digest information and make choices accordingly." Professor Mark Lemley points out that Kitch's prospect theory unrealistically assumes perfect information held by market participants, rational behavior by the participants, and zero transaction costs in using the information. Markets are superior to monopolies in producing and using information.

Third, information asymmetry and bilateral monopoly barriers prevent licensing from solving the problems of information discovery and innovation. Licensing costs set a floor for negotiations: innovations worth less than these costs will not be produced. Informational asymmetry interferes with entrepreneurs who identify profitable opportunities and seek a license from the copyright holder. The potential licensee must share information about the prospect to begin negotiations, but doing so places her at considerable risk. A canny copyright holder will engage in strategic behavior by exploring the new prospect herself or by auctioning a license for it to other parties. Other, previously unaware bidders may see even greater potential and pay more to exploit the new prospect. This creates a bilateral monopoly problem that undercuts licensing—similar to the difficulty of submitting a script idea to a television network or movie studio for consideration. Revealing the opportunity lets the other party appropriate it, likely without compensation, but negotiations are impossible without sharing the informa-

^{246.} LANDES & POSNER, *supra* note 11, at 300–02.

^{247.} See generally FRIEDRICH AUGUST HAYEK, THE FATAL CONCEIT: THE ERRORS OF SOCIALISM 92–100 (W.W. Bartley, III ed., 1988); *id.* at 99 ("[T]he problem is not how to use *given* knowledge available as a whole, but how to make it possible that knowledge which is not, and cannot be, made available to any one mind, can yet be used, in its fragmentary and dispersed form, by many interacting individuals."); Merges & Nelson, *supra* note 243, at 873.

^{248.} *Id.* at 873–74.

^{249.} Boyle, *supra* note 80, at 2013.

^{250.} Lemley, supra note 236, at 133.

^{251.} See generally id. at 1048-61.

^{252.} *Id.* at 1053–55. International licenses may cost up to 20% of the underlying total value in transaction costs. *Id.* at 1053–54.

^{253.} See id. at 1053-55.

^{254.} See id. at 1058-59.

^{255.} See id

^{256.} See Tamar Lewin, When Does A Creative Idea Become Intellectual Property?, N.Y. TIMES, Mar. 27, 1983, at B1; cf. Kitch, supra note 228, at 277–78 (discussing the bilateral monopoly problem with trade secrets).

tion.²⁵⁷ This reduces licensing's capacity to mitigate informational problems from copyright's monopoly.

Fourth, the risk that copyright owners will inefficiently delay producing initial or derivative works unless they enjoy the adaptation right is either illusory or equally problematic under exclusivity. Many creators do not know whether their works will enjoy derivative markets; they are not even sure about demand for the original. They will not wait to release initial works as doing so delays earning primary market revenue. Waiting so as to produce derivatives incurs expenses that may never be recouped given uncertain demand.

Exclusivity can also cause delay. If some consumers prefer purchasing a derivative work rather than the original—seeing the book-based movie *Running With Scissors* rather than reading the book—but will consume either one now rather than waiting for their preference to become available, copyright holders can maximize demand by delaying derivatives, selling the original now, and offering the more desirable adaptation later.²⁵⁸

Thus, the argument for conferring an exclusive adaptation right to meet market demand efficiently suffers significant empirical and theoretical problems that undermine its strength. Ironically, the efficient exploitation argument, with its focus on market demand, is a "fundamentally anti-market" approach.²⁵⁹

D. Creating Incentives

1. Theory: Happy Meals and Other Rewards

The best-known, strongest economic rationale for the derivative works right posits that it increases incentives to create works. Exclusivity over secondary markets can expand incentives in two ways: making expected returns larger and making them more certain.

First, offering more potential revenue sources via the right raises the expected return on a creator's investment in a work. The opportunity to profit from motion picture screenplays and toys should make writing a novel more attractive. Armed with the adaptation right, Michael Crichton

^{257.} Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS 609, 616 (Richard R. Nelson ed., 1962). This conundrum is commonly known as Arrow's paradox of information. *Id.*

^{258.} See Sterk, supra note 4, at 1216–17.

^{259.} Lemley, *supra* note 236 at 139.

^{260.} See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 593 (1994) ("[T]he licensing of derivatives is an important economic incentive to the creation of originals."); Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417, 450 (1984) ("The purpose of copyright is to create incentives for creative effort."); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975); Stephen Breyer, The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs, 84 HARV. L. REV. 281, 294 (1970) (noting arguments that "a world without copyright would . . . discourage publishers from publishing and authors from writing"); Jessica Litman, Sharing and Stealing, 27 HASTINGS COMM. & ENT. L.J. 1, 13 n.45 (2004) (discussing recent elucidation of rationale in U.S. copyright jurisprudence).

earns revenue not only from copies of the book *Jurassic Park*, but from licensing rights to create a movie, action figures, McDonald's Happy Meals, a children's novel version, and so forth.²⁶¹

When deciding whether to invest in producing a work, economically rational creators assess its expected financial return, including the value of potential derivative works. While authors may have difficulty estimating precisely the value of secondary markets, they can look to the average value of derivatives for that type of creation. Even a small return relative to expected primary market revenues may induce some to produce new expression. Moreover, people tend to overestimate their odds of financial success, particularly where the potential payoff is large. 263

The right also leads creators to produce works intended principally to enter derivative markets, such as, for example, a novel crafted to be attractive for a motion picture screenplay.²⁶⁴ Returns from the movie may exceed book revenues.²⁶⁵ The novel serves to advertise its plot and characters to the movie industry and to test consumer appeal.

Second, derivative markets can make investment in a work less risky—they act as insurance for creators. Adaptations can provide revenue to offset a lack of success in the primary market. Creators can hedge their bets: if a work fares poorly in its initial form, it may succeed in another. While Rex Pickett's novel *Sideways* initially sold poorly, the motion picture studio Fox Searchlight "optioned" it as a screenplay, and the resulting film earned over \$70 million in box office revenues. Secondary market returns can make the difference between profitability and loss. The derivative works right protects creators against producing their opus in the wrong form, and promotes development of works that may have large total value earned from multiple markets, any one of which would not be sufficient to cover production costs. The right diversifies a creator's investment in her work, reducing its financial risk.

^{261.} See, e.g., Paula Span, A Fit of Pre-Hysteria, WASH. POST, June 11, 1993, at G1; Razzie's Complete Jurassic Park Collection, http://www.dansjp3page.com/hosting/bigrazzie/entire.htm (last visited Nov. 17, 2007) (listing an astonishing array of merchandise related to the novel); ALBERT N. GRECO, THE BOOK PUBLISHING INDUSTRY 197 (1997).

^{262.} See LANDES & POSNER, supra note 11, at 110.

^{263.} See ROBERT H. FRANK & PHILIP J. COOK, THE WINNER-TAKE-ALL SOCIETY 7–9 (1995); see also Derek E. Bambauer, Shopping Badly: Cognitive Biases, Communications, and the Fallacy of the Marketplace of Ideas, 77 U. COLO. L. REV. 649, 674–76 (2006) (discussing optimism bias in human cognition).

^{264.} LANDES & POSNER, supra note 11, at 110.

^{265.} See O'Hare, supra note 98, at 413.

^{266.} See generally Demsetz, supra note 210, at 6–9.

^{267.} Some motion pictures, for example, fare poorly when distributed in theaters but sell well when packaged with additional content and distributed as Digital Video Discs (DVDs). The film *Office Space* barely recouped production costs during its in-theater run but earned four times those costs as a DVD. Sharon Waxman, *Swelling Demand For Disks Alters Hollywood's Arithmetic*, N.Y. TIMES, Apr. 20, 2004, at E1.

^{268.} Patrick S. Pemberton, *Author Finds His Life Is No Longer Going Sideways*, MILWAUKEE J. SENTINEL ONLINE, Mar. 21, 2005, http://www.jsonline.com/enter/books/mar05/310801.asp; The Internet Movie Database, Box Office / Business for Sideways (2004), http://imdb.com/title/tt0375063/business (last visited Nov. 17, 2007).

Derivatives can also lead larger entities, such as record labels and book publishers, to assume risk on the creator's behalf. 269 By transferring the uncertain value of the adaptation right, the creator can gain a smaller but more certain payment, reducing her risk.²⁷⁰ These companies balance risk through pooling and cross-subsidization, purchasing many works and redistributing revenue from successful ones to compensate authors whose projects are not hits.²⁷¹ In essence, these entities license rights to create a diversified portfolio of works.²⁷² This transfer benefits consumers. Even works that lose money expand the range of expressive options available, and consumers in small niche markets may place high value on them.²⁷³ Riskspreading appears particularly important for some copyright markets. The recording industry, for example, claims that fewer than 10% of albums earn profits, and these few hits must, therefore, subsidize the other 90%. 274 For every Britney Spears, there are many Carly Hennessys (whose album cost \$2.2 million to promote, but sold merely 378 copies in its first three months of release).²⁷⁵

In exchange for a share or all of a work's profits, the insuring entities generally pay creators a flat amount plus, in some cases, royalties. Authors trade the (small) possibility their work will be a hit for protection against the risk it will flop. The derivative works right can benefit creators by reducing risk and consumers by improving access—making hits "bigger" with secondary revenue funds other works, enabling them to reach the market. With the larger earnings pool from multiple markets, these quasi-insurers can charge lower rates, insure more works, or share more revenue—all effects that benefit authors and encourage production, particularly if creators are risk-averse.

Thus, the derivative works right could encourage production of new expression by increasing revenues and reducing creators' risk of commercial failure.

^{269.} See generally FISHER, supra note 40, at 38–81; GRECO, supra note 261, at 155 (listing sample contract provisions transferring derivative rights from author to publisher with revenue split evenly).

^{270.} See generally ROBERT E. LEE, A COPYRIGHT GUIDE FOR AUTHORS 158–60 (1995) (describing royalty arrangements).

^{271.} See LANDES & POSNER, supra note 11, at 38; Kozinski & Newman, supra note 2, at 525.

^{272.} Another way to view this possibility is to treat artists as investors in a mutual fund that is similar to a joint venture—each artist contributes "stock" in the form of her work and shares in the aggregate returns. This reduces risk by averaging returns. *Cf.* Arthur Snow & Richard Watt, *Risk Sharing and the Distribution of Copyright Collective Income*, in DEVELOPMENTS IN THE ECONOMICS OF COPYRIGHT 23, 32 (Lisa N. Takeyama, Wendy J. Gordon & Ruth Towse eds., 2005).

^{273.} See LANDES & POSNER, supra note 11, at 56.

^{274.} See Susan A. Russell, The Struggle Over Webcasting—Where Is the Stream Carrying Us?, 1 OKLA. J.L. & TECH. 13, *3–4 (2004) (citing Recording Industry Ass'n of Am., Cost of a CD), available at http://www.okjolt.org/pdf/2004okjoltrey13.pdf.

^{275.} LASICA, *supra* note 38, at 218.

^{276.} See, e.g., GRECO, supra note 261, at 148–57 (discussing compensation arrangements between publishers and authors); cf. POLINSKY, supra note 79, at 53–55 (using example of law firm assuming risk of pursuing lawsuits from young lawyers by employing them as associates at set salaries and keeping gains or losses from the cases).

^{277.} See GRECO, supra note 261, at 151 (stating subsidiary rights can be an "important source of additional revenue to the [publishing] house and the author").

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2. Analysis: Lottery Tickets and Low Elasticity of Supply

The incentives argument has mixed theoretical and empirical support at best.

a. Theoretical Objections

Increasing incentives to produce new expression has important theoretical drawbacks. First, greater incentives generate rent-seeking behaviour. Increased rewards may exceed the resulting new works' social value, particularly where there are good substitutes. Thus, new expression may redistribute existing utility rather than creating added value.²⁷⁸

Second, employing the adaptation right to increase incentives creates additional problems. While it can spur production of initial works, it also depresses creation of derivatives by increasing their cost since secondary authors must pay for a license.²⁷⁹ (Copyright's fair use doctrine protects parody, but not satire, from infringement liability.)²⁸⁰ This harm is likely important since most expression builds on prior output.²⁸¹ Later authors must charge more to recoup this cost. The right therefore increases deadweight loss, decreases consumption, and discourages output of secondary works.

The right particularly depresses production of certain derivatives, such as satire. ²⁸² Copyright holders may forgo licensing revenue from such works for two reasons. First, satires and other critical works can decrease demand for the original offering by making it look silly or exposing its flaws. ²⁸³ Would Margaret Mitchell have authorized *The Wind Done Gone?* ²⁸⁴ Unlikely. Second, creators may perceive such uses as a slight, regardless of potential remuneration. ²⁸⁵ While fair use mitigates this problem, the defense does not encompass satire, and its case-by-case nature creates uncertainty and potentially significant litigation costs. ²⁸⁶ Similarly, the right discourages creating works near the borderline of infringement, such as those treating similar themes or building on related public domain works. Creators may

^{278.} See Meurer, supra note 135, at 97.

^{279.} See Landes & Posner, supra note 11, at 58-60 (citing examples from Shakespeare, T.S. Eliot, and Kafka); id. at 67-68 (citing as additional examples works by Thomas Mann, Brahms, and Manet).

^{280. .} See Dr. Seuss Enters. v. Penguin Books USA, Inc., 109 F.3d 1394, 1400-01 (9th Cir. 1997) (distinguishing parody from satire).

^{281.} See, e.g., id. at 52; Fisher, supra note 51, at 1729–30.

^{282.} See Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 581 (1994) (stating that satire requires justification for any borrowing)

^{283.} See id. at 591–92.

^{284.} See SunTrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1275 (11th Cir. 2001) (holding *The Wind Done Gone*, a parody of *Gone with the Wind*, was probably entitled to fair use protection).

285. See Campbell, 510 U.S. at 592.

^{286.} See, e.g., id., 510 U.S. at 581 (stating that "satire can stand on its own two feet and so requires justification for the very act of borrowing"); Dr. Seuss Enters. v. Penguin Books USA, 109 F.3d 1394, 1400–01 (9th Cir. 1997) (noting that since the accused work did not target the copyrighted work for ridicule but instead mocked a famous murder case, the parody fair use exception was unavailing).

fear a court will decide erroneously that their works infringe, and will either seek a license (increasing their costs) or forgo production.²⁸⁷

Finally, authors may alter their products in undesirable ways based on derivative revenues. For example, Meurer argues movie quality suffers because of the right.²⁸⁸ Extra profits obtained from derivatives are often invested in famous actresses and actors, or special effects, rather than increasing access with lower ticket prices or producing more films.²⁸⁹ Merchandising incentives may distort plot and characters, leading studios to craft films for toy purchasers, not moviegoers.²⁹⁰ Derivative revenues may thus reduce product quality without augmenting access or production.

The adaptation right's value in expanding production incentives must be evaluated in light of these concerns.

b. Empirical Analysis

Because derivative revenues are generally small relative to primary market ones, and uncertain in any case, the adaptation right functions poorly in boosting production incentives.

One initial, insoluble problem is determining and implementing the desired level of incentives, which varies with the type of work, with time and technological change, and with the amount of creative output sought. ²⁹¹ Given this challenge, analysis of the derivative right's effects on incentives necessitates considering the size, distribution, and effect on creators of the revenues it generates.

The size of derivative work revenues varies with a work's type and genre. Science fiction novels offer stronger secondary market prospects than sculpture, and action movies provide better merchandising opportunities for toys than romantic comedies. ²⁹² Empirical data on these revenues is difficult to obtain, particularly since copyright holders such as motion picture studios deliberately obfuscate revenue sources. ²⁹³ Available data suggest, though, that derivative revenues are small relative to primary market revenues for many works. ²⁹⁴

Printed books have relatively small secondary revenues, at least for publishers, and likely for authors as well. Sunk costs dominate book production: a novel's major costs flow from creating its expression while reproduc-

^{287.} See Lunney, supra note 83, at 495–96, 513.

^{288.} See Meurer, supra note 135, at 128

^{289.} Id.

^{290.} See id.

^{291.} See generally CONG. BUDGET OFFICE, COPYRIGHT ISSUES IN DIGITAL MEDIA viii—ix (Aug. 2004), http://www.cbo.gov/ftpdocs/57xx/doc5738/08-09-Copyright.pdf.

^{292.} See David Lieberman, Classics Are Back in Licensed Gear, USA TODAY, June 20, 2005, at B4, available at http://www.usatoday.com/money/advertising/2005-06-20-licensing_x.htm.

^{293.} See EPSTEIN, supra note 179, at 111; Edward Jay Epstein, Hollywood's Profits, Demystified, SLATE, Aug. 8, 2005, http://slate.com/id/2124078/.

^{294.} See Epstein, supra note 293.

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tion costs are relatively small.²⁹⁵ The printed book trade tries to locate and hype successful stories since profit margins on additional copies sold are high.²⁹⁶ A publisher's "back list" of existing titles provides most of the company's revenue and profits.²⁹⁷ However, derivative work revenues are low. In 2002, American book publishers earned \$27.2 billion dollars in revenues.²⁹⁸ Of that total, \$22.4 billion came from printed book sales while only \$274 million—or 1%—came from the sale or licensing of rights to content.²⁹⁹

This may be offset by secondary licensing by authors. Authors generally retain derivative works' rights. A guide to copyright law for authors admonishes that the "author should not routinely grant subsidiary rights to the publisher." Data on the size of secondary revenue for authors is not generally available, but (as discussed below), the relatively minimal prospect of such gains effectively makes derivative markets into a lottery ticket, even if the payoff is sizeable.

The motion picture business also enjoys surprisingly small derivative revenues. Commentators generally view movies as utterly dependent upon broad copyright entitlements for survival; economists Stan Liebowitz and Stephen Margolis state that "Movies, among other derivative works, are large, risky investments that would be made more risky in the absence of the exclusivity that copyright law provides." Meurer advocates enabling price discrimination for movies because "such works might need the strong productive incentives created by the high profit" from it. High costs require substantial revenue to break even: a motion picture "greenlighted" (approved for production) by a major studio entailed a commitment of \$130 million in financing in 2003. Movies seem to face the greatest risk from diminishment of secondary market revenues. Without the ability to license action figures, could Lucasfilm produce *Star Wars*? ³⁰⁵

Yet derivative revenues are comparatively small for movies. In 2004, the major American motion picture studios earned \$46 billion in recorded

^{295.} VOGEL, supra note 126, at 237.

^{296.} *Id.* at 241 (noting "profitability will generally rise disproportionately to increasing unit sales"); see also GRECO, supra note 261, at 134 (discussing the effect of mass-production on printing costs).

^{297.} JASON EPSTEIN, BOOK BUSINESS 18 (2001).

^{298.} U.S. CENSUS BUREAU, SERVICE ANNUAL SURVEY: 2002, at 23 (2004), available at http://www.census.gov/prod/2004pubs/sas-02.pdf.

^{299.} Id.

^{300.} See, e.g., LEE, supra note 270, at 155 (noting that "publishers have generally received exclusive licenses from their authors, leaving copyright title with the author"). Lee states publishers adopt this strategy in part to share the risk of defamation or invasion of privacy suits with the author. Id. at 156; see also Richard E. Caves, Contracts Between Art and Commerce, J. ECON. PERSP., Spring 2003, at 73, 78 (stating literary agents help authors retain derivative rights when contracting with publishers).

^{301.} LEE, *supra* note 270, at 160.

^{302.} Stan J. Liebowitz & Stephen Margolis, Seventeen Famous Economists Weigh In On Copyright: The Role of Theory, Empirics, and Network Effects, 18 HARV. J.L. & TECH. 435, 448 (2005).

^{303.} Meurer, *supra* note 135, at 108.

^{304.} EPSTEIN, *supra* note 179, at 139.

^{305.} See id. at 143 (stating that studios consider merchandising prospects before greenlighting a film).

revenues (\$7.4 billion from world box office receipts, \$20.9 billion from video sales worldwide, and \$17.7 billion from licensing films to television networks). Total revenue from licensing entertainment, television, and movie characters for merchandise, by contrast, was only \$2.56 billion that year. (Merchandise licensing for art, at \$170 million, and music, at \$122 million, paled in comparison. Thus, even including entertainment and television characters in the calculation, revenues for derivative works in the form of merchandise comprised at most 5.5% of movie revenues. Studios earn the majority of revenues and profits from licensing movies for viewing on television and from DVD sales; the DVD in particular has added new value to studios' existing "libraries" of content.

Since derivative revenues are small overall for motion pictures, their effect on output would be important only if production were highly responsive to changes in revenue. For movies, this does not appear to be the case.³¹¹

In contrast, derivative revenues may be important for production in other industries, particularly specialized ones such as comic books. Marvel Enterprises, which distributes titles such as *Spiderman*, doubled its licensing revenue from adapted works such as films, toys, and video games every year from 2000 (\$19 million) through 2003 (\$189 million). In 2002 and 2003, Marvel obtained only 21% of net sales from publishing comics; the remainder accrued from licensing (for motion pictures, games, etc.) and from toy sales. Marvel's licensing division generally retains at least 50% of merchandising revenue related to sales from motion pictures starring its characters. Derivatives matter to Marvel.

Marvel plays a significant role in the comic book industry, particularly since the comics market is contracting. In April 1993, publishers shipped 45 million comics each month; today, they release only 5.8 to 6.6 million. Marvel holds 41% market share. The company produces 60 comic book titles monthly and has a library of 4700 characters. Changing the deriva-

^{306.} Epstein, supra note 293.

^{307.} Lieberman, *supra* note 292 (citing data from the International Licensing Industry Merchandisers Association).

^{308.} Id

^{309.} This is a conservative estimate; studios earned roughly \$1.7 billion in retail sales of licensed products in 2002. EPSTEIN, *supra* note 179, at 114.

^{310.} See, e.g., EPSTEIN, supra note 179, at 218; Epstein, supra note 293; Edward Jay Epstein, 200 MPA Consolidated Television Sales Report, http://www.edwardjayepstein.com/TVnumbers.htm (last visited Nov. 17, 2007) (reporting data from the 2004 MPA Consolidated Television Sales Report).

^{311.} See infra notes 338–347 and accompanying text.

^{312.} Marvel Enters., Annual Report (Form 10-K) (Mar. 9, 2004), available at

http://edgar.sec.gov/Archives/edgar/data/933730/000111667905000688/0001116679-05-000688.txt. 313. *Id.*

^{314.} Marvel Enters., Annual Report (Form 10-K) (Mar. 11, 2003), available at

http://edgar.sec.gov/Archives/edgar/data/933730/000093373004000004/0000933730-04-000004.txt.

^{315.} Kimberly Pierceall, *Batman, Fantastic Four's Screen Success Revives Comic-Book Firms*, PRESS-ENTERPRISE, July 24, 2005, at G1, *available at* 2005 WLNR 11659086.

^{316.} Stephen Lynch, *Pulp Affliction—Movies Are Super, But Comics Crawl*, N.Y. Post, June 27, 2004, at 31, *available at* 2004 WLNR 19629397.

^{317.} Melanie Warner, *How a Meek Comic Book Company Became a Hollywood Superpower*, N.Y. TIMES, July 19, 2004, at C7.

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tives entitlement in a way that reduces revenues might have large implications for comic books.

It is unclear, though, how responsive Marvel's output is to changes in revenue or profit. Marvel concentrates its funding of comic strip creators on a small set of highly sought artists; it "generally hires writers and artists on a freelance basis but has exclusive employment contracts with certain key writers and artists." The company thus recruits creators who produce popular strips and rewards top artists with exclusive deals. It is not certain whether reduced derivative revenues would shrink the size of exclusive contracts or diminish the number of freelancers hired, particularly in a declining market segment. Comic books, though, could suffer without the adaptation right.

Other industries may have derivative revenues impervious to changes in copyright law. Consider computer software. Instead of employing copyright to control derivative works, most programs specify permissible adaptation via end user license agreements (EULAs). To install or run the software, users must accept these contracts' terms. EULAs can re-allocate or even override copyright's entitlements; they frequently prohibit users from "reverse-engineering" the software, even though this activity is generally ruled fair use and thus immunized from copyright liability. Software vendors can implement controls more restrictive than copyright law over their products, rendering them less vulnerable to relevant copyright changes. Removing the adaptation right would likely not affect software programming.

Moreover, some software voluntarily forgoes control over derivative works. Most "open source" software (OSS) permits users to adapt its code without charge, provided they make their derivatives available under the same terms. OSS operates as a model for a regime with quite limited derivative rights. Despite this lack of control, OSS enjoys considerable commercial success. For example, as of October 2007, the open source Apache Web server has over 47% market share, while its nearest competitor, Micro-

^{318.} Marvel Enters., Annual Report (Form 10-K), at 13 (Mar. 9, 2004).

^{319.} See, e.g., Microsoft Corp., Microsoft Windows XP Home Edition (Retail) End-User License Agreement for Microsoft Software (June 1, 2004), available at

 $http://www.microsoft.com/windowsxp/home/eula.mspx\ [hereinafter\ MICROSOFT\ AGREEMENT].$

^{320.} *Id.*

^{321.} See Bowers v. Baystate Techs., Inc., 320 F.3d 1317, 1323 (Fed. Cir. 2003) (holding copyright law does not pre-empt contractual agreements and upholding software license prohibiting reverse engineering).

^{322.} See, e.g., MICROSOFT AGREEMENT § 4 (prohibiting reverse-engineering unless applicable law expressly permits it).

^{323.} See, e.g., Sega Enters. v. Accolade, Inc., 977 F.2d 1510, 1514 (9th Cir. 1992) (holding that reverse engineering is a fair use when there is a legitimate need to understand the workings of the device); Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832, 843–44 (Fed. Cir. 1992) (stating "Reverse engineering . . . is a fair use" and explaining the activity).

^{324.} See, e.g., THE FREE SOFTWARE FOUND., GNU GENERAL PUBLIC LICENSE § 2 (June 29, 2007), available at http://www.gnu.org/copyleft/gpl.html.

soft IIS, has 10% less (37%). 325 The Firefox Web browser, introduced in fall 2004, attracted 10.5% market share by November 2006, with a growth rate of 1% every six months. 326 Relinquishing control over derivatives does not necessarily doom production or commercial success.

Beyond the magnitude of revenues for creative industries, their distribution tends to be highly skewed; a small minority of works garners most revenues.³²⁷ Few works enjoy substantial derivative markets—most novels are not optioned as screenplays, and most photographs are not included in wall calendars.³²⁸ This effect is often described as the "long tail," with a few highly successful works and a long list of creations that earn little or no secondary revenue. 329 For example, merchandise revenues are concentrated in highly successful, low-risk options.³³⁰ Since films have a relatively short shelf life, retailers prefer "time-tested" hits such as Superman and The Godfather.³³¹ The first five Star Wars films earned \$3.4 billion in worldwide box office revenues—and \$9 billion from derivatives such as action figures and video games. 332 Revenue in secondary markets tends to make hits bigger, rather than increasing returns for all works. Derivative revenues function like a lottery ticket—an unlikely chance at a large gain.

Given the relatively small derivative revenues in many copyright industries, and their concentration in a few "hits," creators' response to the potential of secondary markets depends upon their elasticity of supply, and their preference for risk.

If indeed the adaptation right offers relatively low pecuniary benefit especially on average—the supply of creative expression must be highly responsive to revenue changes for the right to affect production incentives. Economists Stan Liebowitz and Stephen Margolis note that even a minor

^{325.} Netcraft, October 2007 Web Server Survey,

http://news.netcraft.com/archives/web_server_survey.html (last visited Nov. 17, 2007). This is "the smallest gap between the two since IIS was launched in 1996." Id.

Dan Richman, Microsoft Rolls Out Internet Explorer 7; Redmond Company's Update Takes Aim at Firefox, SEATTLE POST-INTELLIGENCER, Oct. 19, 2006, at E1, available at 2006 WLNR 18235910.

See, e.g., Mark A. Lemley, What's Different About Intellectual Property?, 83 TEX. L. REV. 1097, 1103 (2005) (noting examples from patent data and music); David Throsby, The Production and Consumption of the Arts: A View of Cultural Economics, 32 J. ECON. LITERATURE 1, 19-20 (1994) (citing empirical studies of artists' revenues); Ruth Towse, Copyright and Economic Incentives: An Application to Performers' Rights in the Music Industry, 52 KYKLOS 369, 386 (1999) (providing data from the United Kingdom, Sweden, and Denmark on revenue distribution from public performance of sound recordings); cf. Glenn M. MacDonald, The Economics of Rising Stars, 78 AM. ECON. REV. 155, 166 (1988) (providing economic model to explain how a "few stars in the industry . . . serve a large fraction of the audience and obtain an even larger share of the returns").

See EPSTEIN, supra note 179, at 227 (stating merchandisers only pick films that have proved successful); SHONE, supra note 190, at 289-90 (noting merchandising is limited to highly successful films and that merchandisers are risk-averse).

See Chris Anderson, The Long Tail, WIRED, Oct. 2004,

http://www.wired.com/wired/archive/12.10/tail.html.

See EPSTEIN, supra note 179, at 227 (noting toy manufacturers are highly selective, and only license characters after a film is successful); Deborah Yu, Sales of Spinoff Products Often Reflect a Film's Success, DALLAS MORNING NEWS, Sept. 9, 1993, at 1W, available at 1993 WLNR 4875869.

Lieberman, *supra* note 292.

Krysten Crawford, The Jedi Jackpot, CNNMONEY.COM, Mar. 31, 2005,

http://money.cnn.com/2005/03/31/news/newsmakers/starwars/index.htm.

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revenue change (such as from derivative works) could have significant effects on supply of creative effort—for example, a small decrease in earnings from her novels might force an author to take an additional job that would restrict her writing time. Authors generally earn little from writing. In a survey of 637 members of the Authors Guild and Dramatists Guild in 1993, 24% of respondents earned nothing from their writing in the first half of that year, and 16% earned less than \$1000.³³⁴ (9%, by contrast, earned more than \$50,000.³³⁵) Since many creators enjoy their work, though, their response to changes in those earnings is muted. A survey of 1000 painters, for example, found that 70% had rejected financially lucrative work they did not deem artistically interesting. Similarly, economists Felix Oberholzer-Gee and Koleman Strumpf note that the "financial incentives for creating recorded music are quite weak"—few artists make money from their creative labors, yet music production continues unabated.

Even in the movie industry, with its high production costs and uncertainty about consumer demand, supply does not change much with increasing or decreasing revenues. The number of motion pictures released remained relatively constant over the last twenty-five years even as revenues fluctuated greatly. Harold Vogel's classic compendium *Entertainment Industry Economics* provides data on movies released, studio revenues, and studio profits from 1973 through 1993. These data cover films released by the major American motion picture studios, which account for nearly all movies released in the United States. To analyze elasticity of supply, I examined the total number of released films rated by the Motion Picture Association of America (MPAA), total studio revenues, and studio operating income. (Virtually all films released and shown in theatres are rated by the MPAA; few theatres will show an unrated film). To control for inflation, and to compare revenues and operating income over time in constant dollars, I adjusted revenue and operating income data to 1999 dollars

^{333.} Liebowitz & Margolis, supra note 302, at 439–40.

^{334.} Sarah Lyall, *The Media Business: Second Incomes Vital, Authors Say*, N.Y. TIMES, May 16, 1994, at D7.

^{335.} Id

^{336.} Throsby, *supra* note 327, at 17 (citing survey by Joan Jeffri in 1991).

^{337.} Felix Oberholzer-Gee & Koleman Strumpf, *The Effect of File Sharing on Record Sales: An Empirical Analysis*, 115 J. POL. ECON. 1, 1–2 (2007).

^{338.} See VOGEL, supra note 126, at 50, 54–55.

^{339.} See id.

^{340.} Operating income is income that is not earned from non-operational sources and that does not include expenses such as income taxes. *See*, *e.g.*, ROBERT N. ANTHONY & JAMES S. REECE, ACCOUNTING: TEXT AND CASES 72–75 (8th ed. 1994). It is explained simply as "operating profit before interest and income tax expenses." U.S. Securities and Exchange Commission, *Beginners' Guide to Financial Statements*, http://www.sec.gov/investor/pubs/begfinstmtguide.htm (last visited Nov. 17, 2007)

^{341.} See generally MOTION PICTURE ASS'N OF AM., INC. & NAT'L ASS'N OF THEATRE OWNERS, INC., CLASSIFICATION AND RATING RULES (2007), available at

http://www.natoonline.org/CARA%20Rules%20_ShoWest%202007%20official%20version_.pdf.

at purchasing power parity based on data from the U.S. Bureau of Labor Statistics Consumer Price Index.³⁴²

Next, with statistical assistance, I calculated changes in revenue (at 1, 2, and 3-year intervals), operating income (at 1, 2, and 3-year intervals), and number of released films rated (at 1-year interval). I then calculated Pearson Correlation Coefficients for the change in the number of films released in a given year and the other six variables. (Pearson Correlation Coefficients measure the correlation between two variables in terms of ρ (rho); traditionally, and for the purposes of this analysis, a correlation is statistically significant if the P value of the ρ for the variables is less than 0.05 (5%)).

To illustrate, for 1980, I measured the change in studio revenue from 1979 to 1980, 1978 to 1979, and 1977 to 1978; the change in movie studio operating income for those three time periods; and the change in number of films rated and released from 1979 to 1980. Then, I tested whether the change in number of films from 1979 to 1980 correlated significantly with revenue or operating income changes from any of those three-year periods. (I did this to test whether there might be a delay in the effect of a change in either profits or revenues on films released and rated—for example, a film's production cycle might extend beyond one year, or studios might make decisions regarding production levels more than a year in advance).

Strikingly, none of the correlations for these variables was significant. In fact, the relationship between any of the variables measuring change in revenue or operating income, and the change in films variable, was far from significant in each instance:

Variable (Correlated With Change in Number of Films)	P value (<0.05 significant)
Change in Revenues	0.4963
Change in Operating Income	0.3768
Change in Revenues (2-year)	0.8216
Change in Operating Income (2-year)	0.7772
Change in Revenues (3-year)	0.6079
Change in Operating Income (3-year)	0.6215

^{342.} I used a Web-based tool to automate this conversion. Lawrence H. Officer & Samuel H. Williamson, *Purchasing Power of Money in the United States from 1774 to 2006*, MEASURINGWORTH.COM, Aug. 2007, http://measuringworth.com/calculators/ppowerus/. This tool uses the Consumer Price Index (CPI) provided by the U.S. Bureau of Labor Statistics. *See id. See generally* John J. McCusker, *How Much is That Worth Today?*, ECON. HIST. SERVICES (2003),

http://www.eh.net/hmit/ppowerusd/dollarsource.php.

^{343.} I thank Kara Zivin, Ph.D., for statistical expertise and support.

^{344.} TIMOTHY C. URDAN, STATISTICS IN PLAIN ENGLISH 81–83 (2d ed. 2005).

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Figure 1—Correlation of Changes in Studio Revenue and Operating Income with Changes in Films Rated and Released.³⁴⁵

While these data are somewhat crude, they are the best available publicly for movies, and this analysis strongly suggests that supply of movies is not significantly associated with changes in revenue or operating income earned by movie studios. ³⁴⁶ In short, movie studios do not change the number of films they release when their revenues or profits change—they neither expand production in flush periods nor contract it during hard times. This occurs partly because studios hedge the risks of producing, distributing, and marketing films by sharing expenses and revenues with outside partners. ³⁴⁷

Finally, creators' risk preferences affect the adaptation right's operation in creating incentives to produce new expression. Authors generally struggle to assess accurately how their works will fare in the market and whether they will enjoy any secondary market demand at all.³⁴⁸ In the movie business, for example, decision-makers—actors, directors, and studios—have consistently proved unable to predict accurately audience demand.³⁴⁹ Book publishers face wildly uneven sales patterns due to their inability to forecast demand for the books they distribute; in response to this high level of uncertainty and financial risk, booksellers insist that they be able to return unsold copies for full credit.³⁵⁰ Errors in prediction are significant for books—from 1984 to 1989, sellers returned 23.87% of all books published, with a value of \$7.88 billion.³⁵¹ Even book "marketers know very little about book purchasing patterns," generating persistent risk.³⁵²

Most creations similarly face high uncertainty in whether they will be one of the few works with a market for derivative creations.³⁵³ (Although sequels typically have more certain secondary markets—later *Indiana Jones*

^{345.} See infra Appendices A-C for graphs of the variables.

^{346.} *Cf.* Kai-Lung Hui & I.P.L. Png, *On the Supply of Creative Work: Evidence from the Movies*, AM. ECON. REV., May 2002, at 217, 219–20 (finding little change in supply of movies from the CTEA increase in copyright's duration).

^{347.} See EPSTEIN, supra note 179, at 118–25; id. at 125 (stating that "despite the apparent losses incurred on most movies even when all markets are taken into account, studios remain in business [because] the money that is lost comes from its less powerful partners."); Sharon Waxman, A High-Wire Act at Warner Bros., N.Y. TIMES, Nov. 15, 2004, at C1.

^{348.} See VOGEL, supra note 126, at 163 (noting the large majority of musical recordings and movies are financial failures).

^{349.} See EPSTEIN, supra note 179, at 144–45 (noting the presence of "name" stars and directors does not predict a movie's success); Claudia Eller & John Horn, This Just In: Flops Caused Box Office Slump, L.A. TIMES, Oct. 1, 2005, at A1, available at 2005 WLNR 23323892 (noting that a string of failures "forced moguls and creative executives to admit . . . [t]hey were clueless about what audiences wanted"). See generally Martin Kretschmer, Artists' Earnings and Copyright, FIRST MONDAY, Jan. 2005, http://www.firstmonday.org/issues/issue10 1/kretschmer.

^{350.} GRECO, *supra* note 261, at 27–29; *see* EPSTEIN, *supra* note 297, at 95 (noting that since "it was usually impossible to know in advance whether a book would sell, booksellers could not afford to risk their precious capital on unknown authors without a publisher's indemnity").

^{351.} GRECO, *supra* note 261, at 28.

^{352.} Id. at 211.

^{353.} *See* Sterk, *supra* note 4, at 1215–17 (noting the absence of derivative rights may compensate for inaccurate optimism by creators about whether their work will enjoy derivative markets).

movies were safe bets for merchandise—the adaptation right's incentive effects are largely superfluous; a sequel usually enjoys sufficient potential primary market demand to cause its production.)³⁵⁴ Uncertainty increases creators' financial risk; if they are risk-averse, uncertainty reduces the potential incentive from derivative market revenue.³⁵⁵ For risk-averse creators, the unpredictability of remuneration from derivative works reduces the right's value in burnishing incentives.

In contrast, high uncertainty and a possible large financial windfall can increase incentives for risk-preferring creators. For them, the right acts like a lottery ticket, spurring output.³⁵⁶ Congress seems implicitly to believe creators like lottery tickets, as the Copyright Act permits an author to terminate a copyright assignment after thirty-five years.³⁵⁷ This reduces what an intermediary, such as a publisher, will pay for that assignment, since it lasts only thirty-five years instead of the full copyright term, but permits authors to recoup significant profits if the work assigned turns out to be highly valuable.³⁵⁸ Incentives for risk-preferring authors are affected more by the potential derivative payoff's size than its likelihood. However, since derivative revenues and primary market revenues are strongly correlated,³⁵⁹ creators who win the adaptation lottery have likely already won in the initial market as well. Decreasing their derivative payout therefore may not alter output much, particularly when creators have significant non-pecuniary reasons to produce expression.

The limited empirical data available suggests that the value of the derivative works right in augmenting incentives by increasing financial returns to copyright holders is greatly overstated.³⁶⁰

The right, though, could increase incentives by making financial benefits more certain for creators. Control over secondary markets could reduce risk by diversifying a creator's investment. Even if a work languishes in its initial market, it may enjoy demand in secondary ones. There is anecdotal evidence to support this theory. Writer Philip K. Dick sold the movie rights to his unsuccessful novel, *Do Androids Dream of Electric Sheep*, for \$2,500 in 1977; the subsequent, classic film *Blade Runner* earned over \$34 million in box office revenues. Small as this derivative revenue was for

^{354.} See, e.g., EPSTEIN, supra note 179, at 142 (noting that franchise films, such as the James Bond series, have consistent results).

^{355.} Risk aversion effectively increases creators' discount rate for future revenues.

^{356.} See Lemley, supra note 327 at 1103 (discussing the lottery effect and suggesting it may distort economic behavior).

^{357.} See 17 U.S.C. § 203 (2000).

^{358.} See Sterk, supra note 4, at 1217–20 (stating this feature reduces incentives to risk-neutral or risk-averse authors).

^{359.} See EPSTEIN, supra note 179, at 227 (stating merchandisers only pick films that have proved successful).

^{360.} See Mortimer, supra note 170, at 1307–10.

^{361.} As discussed, this would boost incentives for risk-averse authors but decrease them for risk-preferring ones.

^{362.} Frank Rose, The Second Coming of Philip K. Dick, WIRED, Dec. 2003,

http://www.wired.com/wired/archive/11.12/philip_pr.html; Blade Runner, The Numbers,

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Dick, it made "the difference between a good year and a bad year" financially for him. ³⁶³

Second, creators can transact with a larger entity that functions like an insurance company. These insurers spread risk, both across copyrighted works and across those works' various markets.³⁶⁴

On first inspection, the risk reduction justification looks compelling. For many types of expression, the risk that a given work will not recover its costs is high. Motion pictures, books, and sound recordings are particularly risky. Roughly 70% of movies lose money at the theater box office. Movies fall generally into two categories: a few large successes (such as the *Star Wars* films) that generate considerable box office revenues, and most films, which break even or worse. (Revenues and profitability can be difficult to gauge for movies, however, as studios often use creative accounting techniques for strategic reasons, such as to reduce payouts based on profits.) Thus, Hollywood established the concept of a "tent-pole movie"—one with sufficient success to cover financially less-fortunate films.

Similarly, for books, only 2% of the over 1.2 million titles sold in 2004 had more than 5000 copies purchased. Jason Epstein, longtime editorial director for publisher Random House, calls book publishing a "high-risk, low-margin business", adding that books by anyone other than a famous author suffer "fragmented, idiosyncratic, and unpredictable" sales. January In 1994, five authors (John Grisham, Tom Clancy, Danielle Steel, Michael Crichton, and Stephen King) accounted for 11.5 million copies out of 15.77 million fiction books sold. This pattern is becoming more pronounced. From 1986 to 1996, the portion of all books sold made up by the top thirty best-selling titles almost doubled. In the same period, 63 of the top 100 best-selling books were written by only six authors. Generally, only books with wide print sales obtain derivative opportunities, although there are unusual exceptions such as Dick's *Androids* novel.

http://www.the-numbers.com/movies/1982/0BLRU.html (last visited Nov. 17, 2007).

^{363.} Rose, *supra* note 343.

^{364.} *See* GRECO, *supra* note 261, at 134 (noting price increases to cover "underachieving, unsuccessful, and failed titles"); *id.* at 149 (describing transfer of risk from author to publisher); *see also* EPSTEIN, *supra* note 297, at 96 (stating that publishers inflate retail prices to cover the cost of returns).

^{365.} VOGEL, *supra* note 126, at 163.

^{366.} See id. at 60.

^{367.} See, e.g., Edward Jay Epstein, X-Raying Lara Croft: Risk Management, http://www.edwardjayepstein.com/XrayingLaracroft.htm (last visited Nov. 17, 2007) (describing how Paramount obtained \$94 million in financing for only \$8.7 million for Lara Croft: Tomb Raider, making a box office failure into a fiscal success).

^{368.} EPSTEIN, *supra* note 179, at 135.

^{369.} Tim O'Reilly, Search and Rescue, N.Y. TIMES, Sept. 28, 2005, at A27 (citing Nielsen Bookscan data), available at 2005 WLNR 15264167.

^{370.} EPSTEIN, supra note 297, at 19-20, 34.

^{371.} GRECO, *supra* note 261, at 127.

^{372.} EPSTEIN, *supra* note 297, at 33.

^{373.} Id.

^{374.} See, e.g., GRECO, supra note 251, at 196 (noting that it was only once John Grisham became a "household name . . . his books caught the attention of Hollywood producers, who optioned the books for [future] use").

Record labels lose money on most albums but survive because only 10% of releases need earn a profit to offset these losses (successful albums are enormously profitable) and because production costs are small relative to marketing and distribution expenses, which can be minimized for slow-selling discs.³⁷⁵ In addition, labels retain most revenue from the primary market of album sales (for example, as CDs); artists capture less than 5% of the roughly \$11 billion in annual CD sales.³⁷⁶ The *New York Times* noted that only 5% of Sony's musical artists are financially successful; it is expensive to market these artists, but their revenues offset "the failures of all those other bands."³⁷⁷

These risks are difficult to reduce using conventional methods. Predicting whether a given work will succeed or fail has proven nearly impossible for most industries. Despite the efforts of talent scouts (such as artist and repertoire, or "A&R," specialists), record labels have not been able accurately to predict what music will prove popular. Examples abound: author J.D. Lasica cites Carly Hennessy, whom MCA Records spent \$2.2 million to promote and whose debut album sold 378 copies in its first three months of release in 2001. The 2000, singer Courtney Love cited statistics that of the 32,000 albums released each year, only 250 sell more than 10,000 copies, and less than 30 sell over a million. As noted earlier, movie studios, directors, and moguls are no better at assessing what audiences will want to watch, nor are book publishers able to judge consistently which books will sell.

While the need to reduce creative works' financial risk is significant, the adaptation right performs poorly at best in doing so. First, for most works, success in derivative markets is strongly correlated with success in primary ones. Products unpopular with consumers initially are unlikely to be chosen as starter material for derivative works. This is particularly true for derivatives such as merchandise. Second, insurance through the adaptation right is only available to certain creators. Some genres of expression, such as architectural works, are unlikely to enjoy secondary markets at all. Finally, for most authors, the derivative works right provides little if any risk reduction. Few works find secondary markets, and so few creators

^{375.} VOGEL, *supra* note 126, at 163.

^{376.} LASICA, *supra* note 38, at 193. On the other hand, artists receive roughly 12% of revenues from on-line song sales and 35%-40% of concert revenues. *Id.*

^{377.} Neil Strauss, *Behind the Grammys, Revolt in the Industry*, N.Y. TIMES, Feb. 24, 2002, (Week in Review) at 3, *available at* 2002 WLNR 4043068.

^{378.} LASICA, *supra* note 38, at 218.

^{379.} Courtney Love, *Courtney Love Does the Math*, SALON.COM, June 14, 2000, http://archive.salon.com/tech/feature/2000/06/14/love/print.html (reproducing an an unedited transcript of Courtney Love's speech to the Digital Hollywood online entertainment conference given in New York on May 16, 2000).

^{380.} See LASICA, supra note 37, at 217–18; see also GRECO, supra note 234, at 211–12.

^{381.} See SHONE, supra note 190, at 290 (noting that merchandising opportunities depend on a movie's success and that merchandisers are risk-averse).

^{382.} See Lieberman, supra note 292.

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benefit from risk spreading. The right reduces financial uncertainty only marginally and is consequently of little value as insurance.

Similarly, the role of publishers and distributors as insurers is theoretically appealing but practically limited. Risk transfer from creators, who are likely more risk-averse than large corporations, to aggregators occurs only in some industries. For example, a music composer generally assigns all copyright entitlements in her composition to a music publishing company (record label), in exchange for a share of the resulting song's revenues, a small initial payment, and a contractual promise to obtain a commercial recording and to promote it. Similarly, copyright in a motion picture is generally assigned to a studio for financing to produce and market the movie, and for either flat compensation or a slice of revenues. In contrast, a book's author typically assigns only the rights to reproduce and distribute it, retaining derivative rights for his or her self. Thus, the insurer rationale is only plausible for genres in which the necessary transfer of rights occurs.

These theoretical shortfalls have empirical support. Consider the music industry. Record labels claim to reduce artists' risk by purchasing their copyrights, with uncertain value, for a more certain set payment and potential royalties. In fact, though, labels effectively transfer risk back to the artist by treating advance payments for recordings as loans. Thus, most performers do not earn a profit from their albums—even highly successful artists may not receive royalties. (In addition, the labels employ suspect accounting—the Dixie Chicks' manager claimed that "in 99.99% of the audits [of a record label's accounting for an album], the labels are found to have underpaid the artist.") 387

Accordingly, "even if an artist were to recoup record company advances for marketing and production, the artist may still end up owing money to the producer." Since labels deduct most expenses from advances, and do not pay royalties until an album has sold a large number of copies, copyright allocation in the music industry works more like a bank than an insurance company: payments to artists are, in reality, loans. Although copyright transfer, including the adaptation right, could reduce artists' risk exposure, the labels ensure it does not. To summarize: very few recording artists profit

^{383.} FISHER, *supra* note 40, at 47.

^{384.} See generally id. at 59–70.

^{385.} See generally LEE, supra note 270, at 155–60; Towse, supra note 327, at 374.

^{386.} See, e.g., Love, supra note 379 (citing examples of music group TLC and singer Toni Braxton, each of whom declared bankruptcy based in large part on receiving minimal revenues from their highly successful records); see also VOGEL, supra note 126, at 166–67 (noting "[p]ayout increments are frequently contingent on attainment of" a given volume of sales and describing the many deductions taken from artist royalties).

^{387.} Strauss, *supra* note 377 (quoting the manager, Simon Renshaw, that an auditor stated that in 9,000 audits, only one revealed overpayment by a label to an artist).

^{388.} VOGEL, *supra* note 126, at 167; *see also* LASICA, *supra* note 38, at 194; Steve Albini, The Problem With Music, NegativeWorldWideWebland.com, http://www.negativland.com/albini.html (last visited Nov. 27, 2007) (providing sample accounting for a hit record and a graphic description of the negotiations between a band and a record label).

^{389.} See VOGEL, supra note 126, at 167.

from album sales, even when those sales earn large profits for the record label, and artists must fund most costs of creating, producing, and distributing albums from their royalties.³⁹⁰ For the recording industry, the insurance rationale is weak and perhaps dishonest: record labels claim to spread risk, but transfer much of that risk back to the putatively insured artist.

The derivative works right's role in augmenting incentives to produce creative expression is questionable at best. The rarity and uncertainty of secondary revenues, along with the behavior of potential risk-reducing intermediaries, demonstrates the weakness of this widely accepted economic argument.

V. ELIMINATING THE DERIVATIVE WORKS RIGHT

If the economic case for the derivative works right is weak at best, and creative output would be cheaper and more diverse without it, the right should be eliminated from the default set of copyright's entitlements. For industries where empirical data demonstrate the right's benefits outweigh its costs, Congress should retain the right, but such instances are likely rare. This Part evaluates this change's benefits, describes how to implement reform, examines practical challenges to reform, explores how copyright law would need to shift without the adaptation right, and assesses how this change would affect several key creative markets.

Abolishing the derivative works right would produce at least four key benefits. First, costs of producing derivative works would fall. Their creators would no longer incur the expense of obtaining a license. This reduction, and the legalization of adapting expression, should spur output of derivatives.

Second, the change would increase derivatives' diversity. Lower costs make additional, marginal market niches economically feasible. A derivative targeted at a limited audience could be unprofitable when production requires paying monopoly rent to a copyright owner, but financially viable without that expense. Artists also become free to use information about such opportunities. Anyone who learns about localized consumer tastes and preferences can move immediately to satisfy them. The change encourages arbitrage: creators who perceive demand for a derivative can meet it, without worrying about bargaining problems or infringement liability. An expanded range of derivative works is socially valuable. Consumers with unusual tastes are more likely to find attractive works—or to create them. A rich, flourishing culture has positive externalities that benefit society. 392

Third, creators obtain real, though unquantifiable, utility from a legal system that permits them to interact lawfully with attractive initial expres-

^{390.} *Id.* (noting to recoup an advance and earn royalties on album sales, artists must generally sell "one album for every dollar spent on production and marketing").

^{391.} See KIRZNER, supra note 78, at 43.

^{392.} See generally FISHER, supra note 40, at 26–31.

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sion. Authors enjoy creating and transforming works, regardless of whether the result is commercially viable. Many engage in art as a hobby, without expectation of compensation. Fan fiction's fanfic popularity demonstrates the magnitude of this benefit. One *Harry Potter* fanfic Web site boasts over 44,000 stories from more than 21,000 authors. Fanfic's proliferation proves its value—creators invest time and effort to produce expression they cannot sell. Moreover, producing derivative works can refine and improve an author's talent. J.D. Lasica argues most artists begin as imitators—mimicking Martin Scorsese's moviemaking style, for example—while developing their own style and "voice." Popular works can be potent building blocks as creators learn how to generate desirable expression.

Finally, there is particular value in enabling creators to interact with recently-created expression. Audiences understand and relate to recent works; as creative endeavors age, their depictions, cultural attitudes, and humor become dated and less interesting.³⁹⁵ If a work relies on contemporaneous events—as *All the President's Men* depended on Watergate, and *Wall Street* did on the mergers and acquisitions mania of the 1980s—age may reduce greatly its value in secondary markets. Removing the adaptation right gives creators access to the most attractive, lucrative expression for transformation

Merely removing the derivative works right from the Copyright Act requires a straightforward change. Congress would pass legislation deleting the statutory text granting copyright holders exclusive rights over derivatives. One issue is whether this change would be prospective, applying only to future copyrights, or retrospective, removing control over adaptation from existing copyrights. Economically, retrospective application would be optimal for three reasons. Existing copyrights already impose costs in reduced production that should be eliminated. Production incentives would be unaffected since the material already exists, and creators will already know that the right will not be available in the future. Thus, retroactive effects come at no additional cost. Finally, if existing works should benefit from increased copyright entitlements when an economic calculus supports expanded rights, as proponents of extending copyright's duration argued, decreases should similarly be imposed when such justification falters.

Though retroactive application is appealing, there are solid practical arguments against it. Copyright holders might have a viable claim that this alteration constitutes a "taking" of their property under the Fifth Amend-

^{393.} See Harry Potter Fanfiction Stories, http://www.harrypotterfanfiction.com/ (statistics taken on Nov. 19, 2007).

^{394.} See LASICA, supra note 38, at 15.

^{395.} See VOGEL, supra note 126, at 64-65.

^{396.} This would eliminate 17 U.S.C. § 106(2) (2000).

^{397.} See, e.g., Brief for Motion Picture Ass'n of Am., Inc. as Amicus Curiae Supporting Respondents at 2–3, 8–10, 14–20, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1836658; Brief for Recording Indus. Ass'n of Am., Inc. as Amicus Curiae Supporting Respondents at 14–16, 22–24, 28–30, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1836673.

ment to the U.S. Constitution.³⁹⁸ Retroactive alteration might also be highly disruptive; parties with longer-term contracts licensing derivative works production would suddenly find they no longer had rights to convey. Altering existing copyrights would arouse considerable opposition politically. These concerns suggest reform should apply only to future grants of rights.

Practically, reform confronts at least four challenges. First, the trend in copyright legislation is strongly towards expanding, not reducing, entitlements.³⁹⁹ Second, there is a public choice problem involved; those whose interests suffer under the change are a concentrated group, likely to be stronger partisans than those who benefit from it.⁴⁰⁰ Copyright owners have significant investment in defending their entitlements, even if those privileges are socially wasteful. Potential creators have a more attenuated interest in unfettered use of initial works and are less likely to advocate the change than current holders are to oppose it. Third, opponents can deploy alternative justifications for the derivative works right based on labor-desert theory or personality interests. Finally, eliminating the right might contravene U.S. adherence to international agreements such as the Berne Convention and the World Intellectual Property Organization Copyright Treaty.⁴⁰¹ (Whether the United States currently complies with these obligations remains an open question.)⁴⁰²

However, recent legislation suggests reductions in copyright entitlements may nonetheless be possible. In April 2005, Congress enacted the Family Entertainment and Copyright Act (FECA). Part of FECA reduces copyright protection to shield enterprises producing a specific derivative work—"family-friendly" movie versions—if they do not create a fixed copy of the altered work. The alteration must skip, rather than obfuscate, objectionable portions. Congress decided the value of technologies offered by firms such as ClearPlay, which allow families to watch interesting films without exposure to undesirable content, was greater than any harm to copyright holders from exempting such derivatives.

^{398.} See Shubha Ghosh, Toward a Theory of Regulatory Takings for Intellectual Property: The Path Left Open After College Savings v. Florida Prepaid, 37 SAN DIEGO L. REV. 637 (2000) (proposing that governmental infringement of intellectual property rights should be treated as a regulatory taking).

^{399.} *See, e.g.*, LESSIG, *supra* note 5, at 136.

^{400.} Lunney, *supra* note 83, at 629 n.476.

^{401.} The United States enacted the WIPO Copyright Treaty with the Digital Millennium Copyright Act. For the relevant provisions, see Berne Convention for the Protection of Literary and Artistic Works arts. 2(3), 8, 11(2), 12, 14, Sept. 9, 1886, 25 U.S.T. 1341, 828 U.N.T.S. 221 (revised July 24, 1971), available at http://www.wipo.int/export/sites/www/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf; WIPO Copyright Treaty, arts. 1(4), 5, Dec. 20, 1996, Dec. 20, 1996, S. Treaty Doc. No. 105-17 (1997), 828 U.N.T.S. 3, available at

http://www.wipo.int/export/sites/www/treaties/en/ip/wct/pdf/trtdocs wo033.pdf.

^{402.} For example, American compliance with Article 6*bis* of the Berne Convention, regarding moral rights, is questionable. *See generally* DAVID NIMMER, NIMMER ON COPYRIGHT § 8D.02[D][1] (2006).

^{403.} See Pub. L. No. 109-9, 119 Stat. 218 (2005) (codified as amended in scattered sections of 2 U.S.C.A., 15 U.S.C.A., 17 U.S.C.A., 18 U.S.C.A., 28 U.S.C.A. & 36 U.S.C.A. (West 2007)).

^{404.} Id. at § 202(a).

^{405.} Id

^{406.} See About Clearplay, http://www.clearplay.com/about.aspx (last visited Oct. 17, 2007) (explain-

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change harms incentives for movies. ClearPlay purchases DVDs rather than reproducing them. Movie studios do not sell sanitized films to consumers, except for airline and network television viewing, and thus lose no revenue.) Congress overcame resistance from the motion picture industry, including arguments based on moral rights, and overlooked any risk of inconsistency with international obligations. (It is unclear how movie studios reconcile resistance to sanitized movies on artistic grounds with a willingness to permit editing for lucrative televised airing.) While this alteration is far smaller than removing the adaptation right, it suggests that the challenges outlined above can be surmounted.

However, eliminating the adaptation right would also require Congress to address copyright's other entitlements. The adaptation right overlaps with other rights, including reproduction, public performance, and public display. The movie *Brokeback Mountain* necessarily duplicates characters, plot, and dialogue from Annie Proulx's short story, performs it publicly, and displays it publicly. Without control over derivatives, creators would worry about seeing their novels adapted and shown in movie form. As discussed, copyright law should not confer a veto over adaptation. 409 It should, however, partially address creators' primary fear of derivatives substituting for sales of the original. Without the adaptation right, derivatives could cannibalize directly the initial work's sales, block sequels by its author, and generate problems with translations. Congress would need to make additional legal alterations to mitigate these concerns.

Some derivative works displace readily the work from which they are adapted. This is most pressing for minor alterations such as abridgments, condensations, and edited versions. Many high school students would prefer an abridged version of Tolstoy's *War and Peace* to the original. Similarly, some *Star Wars* fans eagerly opted for the "Phantom Edit," an unauthorized rendering that removed frivolous material such as Jar Jar Binks over the official version of *The Phantom Menace*. Such relatively minor adaptations come closer to reproduction than transformation.

More subtly, even highly transformative derivatives could displace sales of the initial work. Consumers might prefer to read Alice Randall's *The*

ing how Clearplay removes "profanity, violence and nudity" from films).

^{407.} See Arena Welch, Legislators Urge Clean Versions of Films, CHI. SUN-TIMES, Sept. 27, 2006, at 49, available at 2006 WLNR 16722272.

^{408.} See generally Bob Dart, Safe or censored?, ATLANTA J.-CONST., Sept. 27, 2006, at 1A, available at 2006 WLNR 16713074.

^{409.} See generally Heller & Eisenberg, supra note 112.

^{410.} See Mortimer, supra note 170, at 1319 n.20 (noting movie studios try to prevent substitution by avoiding releasing competing movies simultaneously).

^{411.} See 17 U.S.C. § 101 (2000) (defining these as derivative works).

^{412.} See Lou Lumenick & Joseph Gallivan, Cyber "Star Wars" Bounces Binks, N.Y. Post, June 8, 2001, at 5, available at 2001 WLNR 10361451; see also Amy Harmon, "Star Wars" Fan Films Come Tumbling Back to Earth, N.Y. TIMES, Apr. 28, 2002, at B28.

Wind Done Gone rather than Mitchell's *Gone With The Wind*, finding Randall's portrayal more historically accurate and compelling. 413

Substitution from derivatives risks undermining creators' incentives to produce expression. Rather than producing new, transformative works, authors could use the change in copyright law to flood the market with minor variants of an initial work. This would undercut the initial author's right to reproduce her work and would curtail returns from it. Without the adaptation right to prevent this behavior, copyright law must find an alternative to block such substitution.

Removing the right might also impede authors from writing sequels. Creators have long released works forming a single narrative arc in multiple, serial installments, from Charles Dickens's *Pickwick Papers* to Lucas's *Star Wars* movies. Sequels let an author judge demand for her expression before investing effort in further development and permit the audience to consume the work in more manageable pieces. While Rowling may have had the entire story in mind when writing her first book, if *Harry Potter and the Sorcerer's Stone* had failed commercially, she might never have committed the rest of the plot to print.

Without the derivative works right, any subsequent author could build upon an initial work by writing her own sequel, which would be protected by copyright. The initial author's planned sequel might overlap with one of these derivatives. Since the derivative author would own rights to the novel expression in the new work, she could block the original creator from writing a substantially similar version. This problem's impact varies with the form of creative expression—it is prominent for literary, dramatic, and audiovisual works, but has less consequence for architectural designs or musical compositions. After the proposed change, a proliferation of derivative sequels could limit the initial author's ability to develop her characters and plot.

Finally, eliminating the right complicates production of translations. The right to translate a work effectively sets who can obtain revenues from its foreign-language markets. Copyright enabled Samuel Beckett to write *Waiting for Godot*⁴¹⁶ in French and then translate it into English; without the exclusive right to produce translations, someone else could convert the work and sell it in English-language markets for postmodern play scripts. Since

^{413.} See SunTrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1275 n.32 (11th Cir. 2001).

^{414.} Trademark law would prevent some usage by others, and limit confusion by consumers, by blocking the use of titles and perhaps character names. This would reduce the effect of this change. *See* Herbko Int'l, Inc. v. Kappa Books, Inc., 308 F.3d 1156, 1162-63 (Fed. Cir. 2002) (noting title of a single literary work requires secondary meaning with consumers for trademark protection); *see also* Universal City Studios, Inc. v. Nintendo Co., Ltd., 797 F.2d 70, 71 (2d Cir. 1986) (recognizing trademark interest in character of King Kong from films); *In re* Scholastic, 23 U.S.P.Q.2d 1774, 1775 (Trademark Tr. & App. Bd. 1992) (allowing registration of "The Magic School Bus" as title for series of children's books). 415. *Cf.* ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 176 (1974) (describing the zipper problem).

^{416.} SAMUEL BECKETT, WAITING FOR GODOT (1982).

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the translator would own rights to the new version, Beckett would have considerable difficulty selling a later, authorized translation without infringing.

Uncontrolled translations generate two economic problems. First, foreign language markets might be important incentives in some creative industries. Motion picture studios, for example, have shifted their output towards genres that are attractive regardless of language skills, such as action movies. Second, an initial but poor translation could poison a market for better versions by rendering the expression clumsily or by altering the work in unattractive fashion, such as the omission of human rights criticism from the Chinese translation of Senator Clinton's biography. Chinese readers might be offended by Clinton's seeming failure to address this issue, depressing sales. A corrected translation would have to overcome initial, unfavorable impressions. Without the adaptation right, translations could capture—or destroy—foreign language markets.

These problems can be largely mitigated with additional legal changes. Congress should change the statutory definition of "derivative work" to move abridgments, condensations, editorial revisions, and translations under the reproduction right, which initial authors would retain, instead. This reform would address some substitution and translation problems. These derivatives have the primary economic effect of displacing sales of the original. Shifting such creations within copyright recognizes their economic role—as copies—while preserving incentives and preventing parasitic translations.

Substitution can occur more subtly: consumers might see the film Children of Men rather than reading P.D. James's novel; the movie Rent could siphon ticket sales from the Broadway musical. The proposed reforms mitigate this problem by placing derivatives with the greatest power to substitute, such as abridgments, under the initial creator's control, and (as described below) by protecting his or her ability to produce authorized derivative versions. Nonetheless, Congress could assess this concern—demand substitution by consumers—using the well-established guidelines developed by the Federal Trade Commission and the Department of Justice to assess substitution in the context of horizontal mergers. 420 If substitution was significant in a given market or for a type of work, such as movies substituting for plays, Congress should respond by enacting a revenue-sharing arrangement. This system would allocate a fraction of revenues from that form of derivative to the initial author. The percentage shared should correspond to the degree of substitution. (While analyzing substitution creates costs, courts and agencies such as the FTC have established methodologies for

^{417.} See, e.g., SHONE, supra note 190, at 224–29.

^{418.} See Terrill, supra note 225.

^{419.} See 17 U.S.C. § 101 (2000).

^{420.} See U.S. DEP'T OF JUSTICE & FEDERAL TRADE COMM'N, 1992 HORIZONTAL MERGER GUIDELINES (Apr. 2, 1992, rev. Apr. 8, 1997), available at http://www.usdoj.gov/atr/public/guidelines/hmg.pdf.

such assessments, and costs would be incurred only when substitution posed a significant risk to production of initial works.) This approach parallels one proposed by Judge Alex Kozinski and Christopher Newman, where a derivative creator would be liable (in an infringement suit) for the proportion of her work's value attributable to the initial author's expression rather than her own. 421

To protect a creator's ability to release a work in installments by producing sequels, those authors would receive a limited grant of exclusivity for derivatives in the same medium as the initial expression. This right would apply only to genres where sequel problems are significant: literary, dramatic, and audio-visual expression. The initial author would enjoy protection only against transformative works of the same form. Tom Clancy would have exclusive rights to write novels developing The Hunt for Red October but no control over movie versions of the book or merchandise based upon it. Limited exclusivity would be brief-long enough to permit authors to assess demand before launching sequels—but sufficiently short to minimize harm from blocking others from creating valuable derivatives. Authors and industries differ, and setting an optimal exclusivity period is likely an impossible task. The Wachowski brothers produced their *Matrix* movie trilogy in four years (1999-2003), while Sue Grafton's alphabetthemed Kinsey Millhone novels began in 1982 with 'A' is for Alibi and have not yet reached Z. 422 Exclusivity's duration will necessarily be subjective.

Moreover, exclusivity will shape expression produced under it. A series of works that would take longer than the exclusive period to produce may be combined, curtailed, or otherwise altered to enjoy monopoly rents from exclusive production. A five-year exclusive sequel period seems sufficient to assess demand for one's expression and to create follow-on works, while opening attractive works for transformation relatively quickly. Further tuning sequel exclusivity for each creative industry (based on available data) would be desirable.

Giving creators limited exclusivity over sequels risks opportunistic behavior. The period of sole control seeks to protect Rowling's ability to gauge her first *Potter* novel's popularity and then to develop her wizarding world's plot and characters. When Warner Brothers produces the first movie version, though, the studio might assert exclusive rights to develop sequel *Potter* films. This would block other studios from adapting Rowling's next novels, enabling Warner Brothers to free-ride on her future creations. Exclusivity might lead to races to adapt popular works into a form enjoying the sequel right, as the first to copyright such a derivative would obtain sole rights in that medium. Strategic behavior by canny adapters could create rent-seeking problems with little or no offsetting benefit.

^{421.} Kozinski & Newman, *supra* note 2, at 525–27.

^{422.} The latest, S is for SILENCE, debuted in 2005. See SUE GRAFTON, S is for SILENCE (2005).

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The best solution would limit the exclusive sequel period by denying it to works adapted from expression in other media. A new book's creator would receive sole rights to write sequels, but the director who developed a movie from that book would not obtain any special control over future film sequels. This configuration could suffer difficulties at the margins, since creators might seek exclusivity over works partially derivative of expression in another medium. However, costs would be less than under the current copyright system which must police protected derivatives for far longer. While it might prove difficult in some cases to detect whether a work was adapted or original, this should be a minor problem. Fans of *Eragon* want to see the film version of the novel, not a similar but disguised movie. 423

Copyright law should also add rights of attribution and disclaimer. 424 This approach, familiar from moral rights conceptions of copyright, would require a derivative work to acknowledge its artistic debt to the expression it transforms. 425 Attribution and disclaimer offer considerable economic benefits. With the attribution right, a successful derivative would frequently spur sales of the initial work. The impending theatrical debut of *The Chronicles* of Narnia: The Lion, the Witch, and the Wardrobe greatly increased sales of C.S. Lewis's novel. 426 Of the 80 million copies of J.R.R. Tolkien's *The Lord* of the Rings books sold since 1938, about 25 million were purchased between 2001 and 2003—when the popular movie versions were released.⁴²⁷ The movie The Grinch Who Stole Christmas boosted sales of Dr. Seuss's book by 20%, and generated translation into nine new foreign languages. 428 Hip-hop artists often release remixed versions of their recordings, or allow others to remake them, to promote the original albums. 429 Attribution would help demarcate the new derivative's original, protectible expression by allowing comparison to its source material.

The disclaimer obligation would require the derivative to indicate whether the initial creator authorized its production. Disclaimer would preserve an initial author's ability to produce or license authorized adaptations. Customers may prefer derivatives that track more closely the initial author's creative vision; the disclaimer right enables them to identify such follow-on works. ⁴³⁰ *Potter* fans will almost certainly prefer Rowling's final installment

^{423.} See Jacqueline Blais, Hollywood Connection Makes for Best Sellers, USA TODAY, Jan. 11, 2007, at 1D.

^{424.} I am grateful to Tim Wu for suggesting the attribution right approach.

^{425.} See Justin Hughes, The Philosophy of Intellectual Property, 77 GEO. L.J. 287, 343–44 (1988) ("A person may claim property so that others will identify him with the property.").

^{426.} See David Mehegan, 'Namia' Books Getting A Boost From Film, BOSTON GLOBE, Oct. 5, 2005, at E1, available at 2005 WLNR 16135112.

^{427.} *Id*

^{428.} Brief for Dr. Seuss Enters., L.P. et al. as Amicus Curiae Supporting Respondents at *8, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1836641.

^{429.} See Shapiro, supra note 19; cf. e-Consultancy.com, MUSIC: Downloading Increases Album Sales,

http://www.e-consultancy.com/newsfeatures/151756/music-downloading-increases-album-sales.html (last visited Nov. 27, 3007) (citing study by Music Research and Programming).

^{430.} See, e.g., Maria Elena Fernandez, Taking His Craft Back to Space, L.A. TIMES, Sept. 11, 2005,

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to mine. Disclaimer tracks the underlying rationales of protecting source-identifying signals, promoting product quality, and avoiding consumer confusion from trademark doctrine. Derivatives would have to prominently indicate attribution and disclaimer—for example, in a movie's opening credits or on a CD's front cover. Congress could specify methods of attribution and disclaimer for different media, or could incorporate relevant trademark standards. Disclaimer enables initial creators to produce, and market to consumers, authorized derivatives that incorporate their expressive approach, and ensures customers can identify an adapted work's source.

The disclaimer right also addresses trademark issues that could block derivative production. Authors can employ trademark and unfair competition theories to protect expression—particularly distinctive characters—in addition to copyright. Trademark law could thus undo these copyright reforms. Adequate disclaimer, along with changed consumer expectations driven by copyright's changes, should ameliorate trademark-based concerns. If necessary, Congress should specify that trademark law should not block adaptation if disclaimer rules are followed.

A problem specific to recorded music may also arise. Sound recordings are derivative works of their underlying musical compositions. Britney Spears is famous for singing "Oops! . . . I Did It Again," but without the music and lyrics written by Max Martin and Rami, her recording would not exist. An adaptation right could make it more difficult for composers to negotiate with record labels and artists; they would worry their work might be appropriated and transformed without compensation. (Attribution, though, would be required under the reform described above.) Unscrupulous singers could review lyrics and harmony, then record a performance without fear of copyright liability.

at E20, available at 2005 WLNR 23317782 (describing rabid fan support for Joss Whedon's "Firefly" space Western that led him to create the movie version "Serenity").

^{431.} See, e.g., Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 162–64 (1995); Stacey L. Dogan & Mark A. Lemley, Trademarks and Consumer Search Costs on the Internet, 41 HOUS. L. REV. 777, 786–89 (2004); William M. Landes & Richard A. Posner, Trademark Law: An Economic Perspective, 30 J.L. & ECON. 265, 265–75 (1987).

^{432.} See, e.g., WRITERS GUILD OF AM., WEST, SCREEN CREDITS MANUAL § III A.9, available at http://www.wga.org/subpage_writersresources.aspx?id=171 (defining requirements for attribution of "Based on Characters Created by" movie credit).

^{433.} *See, e.g.*, Promatek Indus. Ltd. v. Equitrac Corp., 300 F.3d 808, 811 (7th Cir. 2002) (requiring disclaimer on website); Soltex Polymer Corp. v. Fortex Indus., Inc., 832 F.2d 1325, 1329–30 (2d Cir. 1987) (affirming mandated disclaimer on plastic containers); L.E. Waterman Co. v. Modern Pen Co., 235 U.S. 88, 91–93 (1914) (requiring disclaimer next to mark for pens).

^{434.} *See, e.g.*, Toho Co. v. William Morrow & Co., 33 F. Supp. 2d 1206, 1213 (C.D. Cal. 1998) (protecting Godzilla character under trademark theory and enjoining unauthorized Godzilla book); Danjaq LLC v. Sony Corp., 49 U.S.P.Q.2d 1341, 1344 (C.D. Cal. 1998) (protecting James Bond character as service mark), *aff* d, 165 F.3d 915 (9th Cir. 1998).

^{435.} Initial creators should be empowered to bring both trademark and copyright claims for failure to follow disclaimer rules.

^{436.} See Billboard.com, Britney Spears, Oops!... I Did It Again, http://www.billboard.com/bbcom/discography/index.jsp?pid=290150&aid=424816 (last visited Nov. 20, 2007).

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Two factors mitigate this risk. First, composers can use contract law to protect themselves. Non-disclosure agreements provide some security for lyricists to shop their wares. Second, the derivative works right available to composers is already quite limited. Once an artist has lawfully recorded and released a performance of a composition, other artists can record their own versions (provided they maintain the "basic melody [and] fundamental character" of the composition) for a minimal royalty payment. This compulsory license effectively limits a composer's derivative rights, at least for sound recordings, to selecting the initial performer and negotiating the first adaptation's terms. Given these current constraints, it is unlikely the proposed change will significantly increase transaction costs for producing musical compositions.

Finally, and crucially, any proposed reform must address the overlap in copyright's controls. The derivative works right is often co-extensive with other copyright entitlements, such as the right to prohibit unauthorized reproduction. Even without the adaptation right, Khaled Hosseini can sue me for creating a film version of *The Kite Runner*. The movie necessarily copies protected elements—plot intricacies, dialogue, characters—from the novel. Hosseini could assert public performance and display claims also. Other aspects of copyright law could blunt, if not extinguish, the benefits of removing the derivative works right. The challenge is to enable transformative uses of *The Kite Runner*, while blocking copyists from using minor alterations to evade liability.

Creating a derivative involves using elements of the initial work and adding new expression. He adaptation right is not sufficient to generate new production; adapters need permission—or at least immunity from liability—for using the original. Hosseini's right to sue for copying, performing, and displaying his novel on-screen will prevent auteurs from creating movie versions, even if he loses the derivative right. Yet conferring blanket infringement immunity for derivatives could destroy copyright's other entitlements, and its economic benefits. Copyists would cheat by posing as adapters. Copyright law must confer limited use for derivatives while safeguarding creators from blanket copying. The challenge is to differentiate new expression that builds upon existing work—that transforms it—from that which merely replaces it.

The line between substitution and transformation is difficult to fix. A photographer taking a black-and-white picture of Yosemite's Half Dome, moon in the background, might be creating an original work, paying homage to Ansel Adams—or trying to offer an inexpensive Adams alternative to

^{437.} See 17 U.S.C. § 115 (2000) (establishing compulsory license for making phonorecords of non-dramatic musical compositions previously released publicly).

^{438.} See id. § 115(a)(2).

^{439.} See Litchfield v. Spielberg, 736 F.2d 1352, 1357 (9th Cir. 1984) (stating that a derivative work must have substantial similarity to the original, protected work to infringe).

^{440.} See id. §§ 106(4), 106(5).

^{441.} See id. § 101 (Supp. 2004).

poster stores.⁴⁴² Regardless of her intent, the resulting photo could displace sales of Adams's posters, or could have no market effect at all. Consumers may want Adams's handiwork, even if the new photo is identical. Making the distinction between copying and adaptation based on effect, or on intent, may not help.

To copyright a derivative, the adapter must contribute new, original expression. This contribution can be minimal. Under current law, this minimal threshold is unproblematic: derivatives require the initial author's authorization, and copyright extends only to the added expression, without altering the original copyright. Copyright holders will prevent adaptations that displace their work by denying them licenses. Removing the adaptation right complicates the picture. As the new artist's contribution decreases towards the minimum quantum for protection, it becomes increasingly likely her derivative will substitute for the initial work. Differentiating (permissible) transformation from (prohibited) reproduction becomes difficult.

Congress should reform copyright law to increase the originality threshold for copyright protection for a derivative work. Newly adapted expression surpassing this threshold could obtain a copyright and would be immunized from infringement liability vis-à-vis the initial work. Works with insufficient original expression could not obtain copyright and would be vulnerable to an infringement suit. This change would protect transformative works less likely to substitute for the initial work while simultaneously protecting the initial creator from minimal alterations that undercut her reproduction right.

The challenge lies in resetting the threshold. To do so, copyright law should evaluate how transformative the new adaptation is: the more transformative, the lower the substitution risk. It should draw upon fair use analysis of whether a work is transformative, creating new value, or duplicative, diverting existing value. This analysis occurs primarily through the first and fourth required fair use factors. The first evaluates whether a new work merely "supersedes" the original, or instead reconfigures it—"it asks, in other words, whether and to what extent the new work is 'transformative." The more transformative, the more likely the use will be fair, and the less likely that other, countervailing considerations will be deci-

^{442.} Adams's "Moon and Half Dome" is a poster store staple.

^{443.} *See, e.g.*, Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341, 1343 (9th Cir. 1988) (finding that cutting prints from a book and mounting them on tiles created derivative works).

^{444.} See 17 U.S.C. § 103(b).

^{445.} See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 578–79 (1994); Harper & Row, Publishers v. Nation Enters., 471 U.S. 539, 566–68 (1985) (analyzing substitution of excerpt of biography for authorized use of all or part of the book).

^{446.} See 17 U.S.C. §§ 107(1), 107(4). But see Frank Pasquale, Breaking the Vicious Circularity: Sony's Contribution to the Fair Use Doctrine, 55 CASE W. RES. L. REV. 777, 778–81 (2005) (criticizing fair use's market analysis as often circular).

^{447.} Campbell, 510 U.S. at 579 (quoting Pierre N. Leval, Toward A Fair Use Standard, 103 HARV. L. REV. 1105, 1111 (1990)).

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sive. 448 Fair use's first factor is inherently based on economics; it examines whether demand for the new work diverts demand for the initial one. Fairness increases as substitution decreases. Copyright's derivative work analysis should function similarly.

The fourth factor weighs substitution directly, gauging the new work's effects on the initial one's markets. 449 The markets analyzed include original and derivative ones. 450 The new threshold test should incorporate substitution analysis for the initial work's original market but exclude derivative markets since control over secondary uses has been shown to be undesirable economically.

Thus, the new test should create a sliding scale: the more transformative the derivative, the more copyright law should tolerate market substitution. This counterintuitive result makes sense: if *The Wind Done Gone* displaces sales of Gone With The Wind because readers prefer Randall's retelling, copyright should permit such substitution. However, a version of an Alexander Calder sculpture that merely changes the mobile's colors should be ineligible for copyright and subject to infringement suit since this minor alteration adds little new expression and threatens to substitute for reproductions of the original.⁴⁵¹ This approach should push creators to produce more transformative expression to avoid liability and obtain copyright, increasing the diversity and originality of works available. Derivatives near the threshold may need a license from the initial creator to avoid infringing the reproduction right. This is unobjectionable because these works offer less new, transformative expression and are more likely to merely substitute; copyright should be willing to allow them only at the initial author's forbearance. The new system should offer an exception for authorized derivatives. Since the concern for safeguarding the reproduction right disappears with the initial creator's permission, copyright eligibility should remain at the current, lower level of originality.

This test for determining a derivative's eligibility for copyright and immunity from infringement liability, and the boundary between the derivative work's right and copyright's other entitlements, is elegant and flexible. Like all standards, though, it may suffer from uncertainty and expense in evaluating a given adapted work—in short, the new test may have high implementation costs. Establishing rebuttable presumptions for expression that generally surpasses the threshold can reduce these concerns. One helpful presumption would hold an adaptation in a new medium, with more than

^{448.} Id.

^{449.} See 17 U.S.C. § 107(4); SunTrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1274–76 (11th Cir. 2001). See generally Gregory M. Duhl, Old Lyrics, Knock-Off Videos, and Copycat Comic Books: The Fourth Fair Use Factor in U.S. Copyright Law, 54 SYRACUSE L. REV. 665 (2004).

^{450.} See Campbell, 510 U.S. at 590-94.

^{451.} For a pictoral index of Calder's work, see the Calder Foundation Homepage, www.calder.org (last visited Nov. 20, 2007).

^{452.} *Cf.* Fisher, *supra* note 51, at 1692–95 (criticizing fair use's uncertainty and cost); Kozinski & Newman, *supra* note 2, at 515.

minimal originality, would exceed the threshold. Adapting expression into a new medium typically requires considerable originality—for example, transforming a novel into a motion picture, or a photograph into a sculpture. The originality requirement would prevent copyists from transferring text of the new Potter novel onto a Web page, displacing sales of Rowling's book. Making the presumption rebuttable would allow initial authors to prove that a derivative is a substitute, and not sufficiently innovative, by adducing sufficient proof (the standard for civil litigation—more likely than not—would seem appropriate). In addition, the attribution requirement outlined above would help creators identify derivatives, and assess their market effects, for the threshold test.

Establishing the balance between protecting derivatives and safeguarding copyright's other rights is a difficult, and likely imperfect, exercise. The proposed substitution-based analysis should encourage works that create new value and new markets while preventing mere copies from undermining incentives. This approach builds on the re-alignment of certain derivatives under the reproduction right, the limited sequel period, and the attribution and disclaimer rights. In addition, the medium-shifting safe harbor presumption should reduce the new system's implementation costs while maintaining flexibility. Overall, the new copyright scheme frees transformative derivatives, protects against mere copying, and strikes a productive balance between initial and secondary creators.

VI. CONCLUSION

On economic grounds, the derivative works right is a bad bargain. It blocks production of attractive new expression, reduces diversity of creative works, and increases their cost. Eliminating the right, with minor legal modifications to protect copyright's other entitlements, makes sense, economically.

Yet this analysis is unlikely to alter copyright's scope—not only because of the limited influence of academic articles but because the derivative works right seems to rest on grounds more powerful and less empirical than economics. These rationales surface when creators eschew financial benefit to prevent transformations of their expression they view as unseemly—from a cartoonist refusing to permit merchandising of his characters⁴⁵³ to movie directors objecting to sanitized films⁴⁵⁴ to musical artists who give up sales of popular tracks to avoid "unbundling" the collective work that is an album.⁴⁵⁵ The connection between creator and creation, and the call to recognize artistic labor, is compelling.

^{453.} See, e.g., Eric Harrison, *The Day The Laughter Stopped*, HOUSTON CHRON., Nov. 27, 2005, at 12, available at 2005 WLNR 20561698 (describing battle by Bill Watterson to prevent merchandising of his "Calvin and Hobbes" strip).

^{454.} See, e.g., Clean Flicks of Colo., LLC v. Soderbergh, 433 F. Supp. 2d 1236 (D. Colo. 2006).

^{455.} See, e.g., Jeff Leeds, Labels Halt Downloads to Increase CD Sales, N.Y. TIMES, Mar. 9, 2006, at E1 (quoting Tony Brummel, owner of independent label Victory Records, that a rock album "is a

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But these arguments often appear cloaked in economic language, disguising their appeal and distorting debate. Control over derivative works driven by personality theory or labor-desert concerns could be quite different in scope than a right grounded in economics. It might, for example, include more moral rights, but last only during the author's lifetime. 456 If these rationales suffice to justify the derivative works right, society should articulate them clearly, and with recognition of their economic cost.

If copyright law remains financially focused, though, it should eliminate the derivative works right to realize re-mix culture's promise of cheap, creative, diverse artistic expression.

work of art If you're buying a Picasso . . . you can't just buy the upper right-hand corner."). Cf. 17 U.S.C. § 106(A) (2000) (providing rights of attribution and protection to certain visual

artists during their lifetimes).

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APPENDIX A

Change in Films Rated and Released, Revenue and Operating Income for Major Motion Picture Studios

[INSERT OBJECT TITLED APPENDIX 1 HERE]

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APPENDIX B

Change in Films Rated and Released, Revenue (2 Years Prior), and Operating Income (2 Years Prior) for Major Motion Picture Studios

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APPENDIX C

Change in Films Rated and Released, Revenue (3 Years Prior), and Operating Income (3 Years Prior) for Major Motion Picture Studios

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